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This rule finalizes changes to the
Common Crop Insurance Regulations (7
CFR part 457), Texas Citrus Fruit Crop
Insurance Provisions that were
published by FCIC on January 12, 2016,
as a notice of proposed rulemaking in
the Federal Register at 81 FR 1337–1345.
The public was afforded 60 days to submit comments after the regulation
was published in the Federal Register.
A total of 26 comments were received
from 4 commenters. The commenters
were insurance providers, an insurance
service organization, and a grower
organization.
The public comments received regarding the proposed rule and FCIC’s
responses to the comments are as follows:

General

Comment: A commenter stated they
agree with the proposed changes in the
following sections: Definitions, Unit
Division, Insurance Guarantees,
Coverage Levels, and Prices for
Determining Indemnities, Duties in the
Event of Damage or Loss, and
Settlement of Claim.
Response: FCIC appreciates the
support for these changes.

Comment: Several commenters
recommended changing the term
“insured crop” to “citrus fruit group”
throughout the Crop Provisions. For
example, the commenters stated that
section 2(a) indicates basic units will be
established for each insured crop.
However, since the definition of crop
has been removed from these
provisions, this can easily lead to
confusion as to whether other basics can
be by citrus fruit commodity,
commodity type, or citrus fruit group.
The background information from the
proposed rule indicates the intent is that
separate basic units will be established
for each citrus fruit group because FCIC
proposes to treat each citrus fruit group
as a separate insured crop. Therefore,
the commenter recommended that the
word “crop” be replaced by “citrus fruit
group” which is the defined term in
these Crop Provisions and the intent of
these provisions based on the
background information. This would
then clearly indicate to anyone reading
this provision as to the intent for how
basic units are to be established and
remove any ambiguities that currently
exist by using the generic term “crop”
which is not a defined term.
Response: FCIC agrees that in some
instances it may be clearer to refer to the
“citrus fruit group” in addition to the
“insured crop.” FCIC has made this
change in section 2 (unit division) and
as appropriate throughout the Crop
Provisions in the final rule. In addition
to this change in section 2, FCIC has
revised section 2(c)(2) by changing the
phrase “non-contiguous land” to “if
each optional unit is located on non-
contiguous land.” This change is
intended to provide clarification and is
consistent with language contained in
other crop insurance policies for
perennial crops such as apples and
peaches.

Comment: Several commenters stated
that the proposed definitions of “citrus
fruit commodity,” “citrus fruit group,”
“commodity type” and other related
revisions are part of the Acreage Crop
Reporting Streamlining Initiative
(ACRSI) and are similar to what was
done in the 2014 Florida Citrus Fruit
Crop [Insurance] Provisions proposed
rule and the 2015 Arizona-California
Citrus Crop Insurance Provisions
proposed rule. Some of the concerns
that were expressed in comments to the
Florida Citrus Fruit Proposed Rule were
addressed in the final rule responses, so
these proposed changes are better
understood this time around, though
this is still a “work in progress.” The
chart on page 1339 of the proposed
rule is helpful in showing the expected
groupings of citrus fruit commodities,
commodity types, intended uses, and
citrus fruit groups.

Response: In the proposed rule
background, FCIC continued to address
issues previously raised in the proposed
rules for the Florida Citrus Fruit Crop
Provisions and the Arizona-California
Citrus Crop Provisions, which contained
some similar changes. FCIC appreciates
hearing the ACRSI changes are better
understood and that the background
information from the proposed and final
rules for the citrus crops has contributed
to that increased understanding. FCIC
has made no change to the final rule.

Section 3—Insurance Guarantees,
Coverage Levels, and Prices for
Determining Indemnities

Comment: The last sentence in
section 3(e)(3) states “We will reduce
the yield used to establish your
production guarantee for the subsequent
crop year to reflect any reduction in the productive capacity of the trees or in the yield potential of the insured acreage.”

Several commenters asked what if the event that occurred was something that only affects the crop for the year in question and has no carryover effect on the yield into the next crop year? The word “will” should be changed to “may” so that approved insurance providers have the flexibility to either reduce or not reduce the yield for the subsequent crop year depending on whether the effect of the damage will carry over to the subsequent year. The word “will” implies that the yield must be reduced even if the event that occurred will have no impact on the crop yield for the following year. This language needs to be revised to allow the approved insurance providers to have some flexibility in determining whether the approved APH yield should be reduced for the subsequent year. A commenter noted that FCIC responded to similar comments to the Peach Proposed Rule by saying that approved insurance providers already have that flexibility according to the opening statement (3(c) of the Peach Crop Provisions refers to reducing the yield “as necessary, based on our estimate of the effect”). However, the commenter still has a concern with this language as proposed as the word “may” allows more flexibility to administer this provision. The commenter would like FCIC to confirm that if the event that occurred in the current crop year has been determined to have no yield impact for the subsequent year that approved insurance providers have the ability to not reduce the yield the subsequent crop year even though this provision indicates that it must be reduced by using the word “will.” A commenter noted that the draft version of these provisions prior to being published as a proposed rule did use the word “may” which is how this provision should be worded. The background information also indicates that this provision is similar to the provisions that FCIC recently added to other perennial crop policies such as the Arizona-California Citrus Crop Insurance Provisions. It should be noted that the Arizona-California Citrus Crop Insurance Provisions were published as a final rule and for this exact same policy provision used the word “may” rather than “will.” The commenter emphasized that FCIC should use the same language of “may” that was used in the background of the Arizona-California Citrus Crop Insurance Provisions as this is the correct word to use and it will make the language in these provisions consistent with the language used in the Arizona-California Citrus Crop Insurance Provisions.

Response: As the language indicates, the provision only requires a yield reduction if a circumstance occurs that reduces productive capacity of the trees for the subsequent year. Use of the term “will” in the provision does not require a reduction in the yield if a reduction in productive capacity does not exist or is not expected for the subsequent year. FCIC has made no change to the final rule.

Comment: The provision in section 3(e) is proposed to be moved to section 3(f) with no other changes to the language in this provision. A commenter stated the language in this provision suggests that in the event of damage or changes to the grove, the yield is established by another method (appraisal of the potential of the insured acreage for the crop year). The commenter is concerned that as written, the provision is too vague and allows for different interpretations. The commenter requested FCIC provide further clarification/procedures of how and when this should be done. The commenter stated that it seems more clarification will be provided in the new 3(e), but not for the new 3(f).

Response: FCIC agrees that, relative to current changes, as currently worded this existing provision could be misinterpreted, especially the phrase “another method.” Although the provision only refers generically to the method described in the new paragraph 3(e), FCIC intends to minimize the risk of misinterpretation. This language is no longer needed with the addition of the new paragraph 3(e). Therefore, to prevent potential confusion FCIC is revising the provision in the final rule by removing the duplicative information.

Section 7—Insured Crop

Comment: A commenter stated the provision in section 7(a) is beneficial to that the insured crop will be each citrus fruit group but this still does not change the need to replace the term “crop” with “citrus fruit group” as recommended in various other sections of these Crop Provisions since this is the defined term.

Response: As stated in response to a previous comment, FCIC has revised the final rule by including the term “citrus fruit group” in addition to the term “insured crop” where appropriate.

Comment: Several commenters asked for clarification on what is meant by the term “previous year” in the newly designated section 7(a)(4) [previously section 7(d)] because there is a lag year for fruit production in the APH [Actual Production History]. For example, the commenter asked if “previous year” means the most recent year harvested or does it mean the last year of the database.

Response: The crop year for the Texas Citrus Fruit Crop Provisions spans more than one calendar year. The Crop Provisions require production reporting from two crop years ago for APH purposes because the prior crop year harvest is generally not completed before beginning of the next crop year.

For this same reason, the minimum production requirement contained in the newly designated section 7(a)(4) is not typically assessed from the previous crop year. Therefore, FCIC is revising this provision in the final rule to clarify that the provision refers to the crop year reported in accordance with section 3(g), which is the crop year two years prior to the current crop year.

Section 8—Insurable Acreage

Comment: Several commenters asked for clarification on the provisions in section 8 regarding whether a producer may have different fruit groups interplanted with each other, as any other citrus fruit group would qualify as “another perennial agricultural commodity.”

Response: The provision in section 8 states that a citrus fruit group planted with another perennial agricultural commodity is insurable unless we inspect the acreage and determine it does not meet the requirements contained in your policy. A citrus fruit group would typically qualify as a perennial agricultural commodity, under the “agricultural commodity” definition in the Basic Provisions. Therefore, a citrus fruit group interplanted with another citrus fruit group may be insurable unless an inspection reveals the citrus fruit group for which coverage is sought does not meet the policy terms. FCIC has made no change to the final rule.

Section 9—Insurance Period

Comment: A commenter recommended removing “. . . during the 10-day period . . .” when the application is received between November 11 and November 21 from section 9(a)(1). The requirement that the approved insurance provider inspection must take place within a 10-day period is unnecessary and burdensome.

Response: The purpose of this language is allowing the approved insurance provider adequate time to determine insurability, such as performing an inspection, prior to
insurance attaching if the application is received after November 11. While the provision references inspection authority, it does not necessarily require an inspection to be completed during the 10-day period. Therefore, FCIC disagrees this provision is burdensome. In addition, the proposed rule indicated no intended changes to this provision. However, FCIC wishes to further clarify whether the provision is referring to the 10-day period between November 11 and November 21 or the 10-day period between the time the application is received and when insurance attaches, when those time periods are not the same. Therefore, FCIC has revised the provision in the final rule to clarify the 10-day period raised in the comment refers to the period that begins when the application is received, if it is received after November 11.

Section 10—Causes of Loss

Comment: Several commenters asked for clarification on whether citrus canker (a disease affecting citrus species caused by the bacterium *Xanthomonas axonopodi*) is an insurable or uninsurable peril for Texas Citrus Fruit.  
Response: Citrus canker is insurable under the revised Texas Citrus Fruit Crop Provisions unless excluded through the Special Provisions. FCIC currently does not intend to exclude citrus canker through the Special Provisions. FCIC has made no change to the final rule.

Comment: A commenter stated that producers may be concerned if there is a premium rate increase if citrus greening is added as an insurable cause of loss. Producers may want an option to opt out of this coverage.

Response: As stated in the background section of the proposed rule, FCIC intends to exclude citrus greening from insurability through the Special Provisions. FCIC does not foresee making coverage available for citrus greening. FCIC has made no change to the final rule.

Comment: A commenter stated that producers may be concerned if there is a premium rate increase if citrus greening is added as an insurable cause of loss. Producers may want an option to opt out of this coverage.

Response: As stated in the background section of the proposed rule, FCIC intends to exclude citrus greening from insurability through the Special Provisions. FCIC does not foresee making coverage available for citrus greening. FCIC has made no change to the final rule.

Comment: Several commenters stated that citrus greening is not an insurable cause of loss because the Special Provisions are a part of the policy. Any insect or other plant disease not excluded through the Special Provisions will be insurable as long as the loss of production is not due to damage resulting from insufficient or improper application of control measures as recommended by agricultural experts. Presently, FCIC does not foresee excluding any other disease besides citrus greening. Although loss experience may impact premium rates, FCIC does not expect these current cause of loss changes to have an immediate impact on premium rates. Insects and plant disease were already insurable causes of loss under the Crop Provisions, provided they were linked to an insurable cause of loss under specific terms of the prior policy language. FCIC has made no change to the final rule.

Comment: Several commenters stated that producers do not harvest trees afflicted with citrus greening separately from trees that are not afflicted. Assessing the amount of production lost to citrus greening, an uninsurable cause, may be difficult if production is commingled. The commenters stated FCIC must develop procedures governing how to separate insurable damage from uninsured damage.

Response: The current methods for assessing uninsured damage would apply equally to citrus greening. It is not uncommon for groves or trees within a grove to contain insurable damaged fruit, uninsurable damaged fruit, and undamaged fruit. However, FCIC will assess the impacts of the changes to these Crop Provisions and revise the loss adjustment procedures if necessary. FCIC intends to give approved insurance providers an opportunity to review and provide feedback on the proposed changes to the loss adjustment procedures prior to publication. FCIC has made no change to the final rule.

Comment: Several commenters stated they agree with the comments in the background section made by FCIC regarding citrus greening and agree that citrus greening should be excluded as a cause of loss in the Special Provisions. The proposed provision in section 10(a)(9) also provides FCIC with the flexibility in the future to exclude additional causes of loss for insects or disease that should not be covered.

Response: FCIC appreciates the feedback and support for this proposed change. In addition to providing flexibility for excluding causes of loss, the Special Provisions provide flexibility for providing additional information needed to determine other causes of loss such as excess wind. The proposed definition of “excess wind” was intended to allow additional weather reporting stations to be identified through the Special Provisions to be used to verify excess wind. However, FCIC has determined the proposed wording in the definition of “excess wind” could be misinterpreted to mean that the phrase “operating nearest to the insured acreage at the time of damage,” only applies to non-US National Weather Service stations identified in the Special Provisions. Therefore, FCIC has revised the definition of “excess wind” to clarify that the phrase “operating nearest to the insured acreage at the time of damage,” applies to both U.S. National Weather Service reporting station and any other weather reporting station identified in the Special Provisions.

Section 11—Duties in the Event of Damage or Loss

Comment: Several commenters stated that section 11(a) indicates “we will determine which trees must remain unharvested so that we may inspect them in accordance with FCIC procedures.” This language could be difficult to administer without clear and concise guidance from FCIC procedures. The background information for this section indicates that the FCIC intends to issue crop specific guidance for the approved insurance providers to use to instruct the insured on which trees must remain unharvested. The commenters requested FCIC make sure the procedures are clearly laid out to ensure this new section of the Crop Provisions is not unduly difficult to administer. A commenter requested FCIC to confirm that in addition to the procedures being clear that they will also ensure they will not be unreasonably difficult for approved insurance providers to administer.

Response: As stated in response to a previous comment, FCIC will assess the impacts of the changes to the Crop Provisions and revise the loss adjustment procedures if necessary. FCIC will make every effort to ensure procedures are clear and unduly difficult for approved insurance providers to administer. FCIC intends to give approved insurance providers an opportunity to review and provide feedback on the proposed changes to the loss adjustment procedures prior to publication. FCIC has made no change to the final rule.
Executive Orders 12866 and 13563

Executive Order 12866, “Regulatory Planning and Review,” and Executive Order 13563, “Improving Regulation and Regulatory Review,” direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasized the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

The Office of Management and Budget (OMB) designated this rule as not significant under Executive Order 12866, “Regulatory Planning and Review,” and therefore, OMB has not reviewed this rule.

Paperwork Reduction Act of 1995

Pursuant to the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35, subchapter I), the collections of information in this rule have been approved by OMB under control number 0563–0053.

E-Government Act Compliance

FCIC is committed to complying with the E-Government Act of 2002, to promote the use of the Internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA, Pub. L. 104–4) requires Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments, or the private sector. Agencies generally need to prepare a written statement, including a cost-benefit analysis, for proposed and final rules with Federal mandates that may result in expenditures of $100 million or more in any year for State, local, or Tribal governments, in the aggregate, or to the private sector. UMRA generally requires agencies to consider alternatives and adopt the more cost effective or least burdensome alternative that achieves the objectives of the rule. This rule contains no Federal mandates, as defined in Title II of UMRA, for State, local, and Tribal governments or the private sector. Therefore, this rule is not subject to the requirements of sections 202 and 205 of UMRA.

Executive Order 13132

It has been determined under section 1(a) of Executive Order 13132, Federalism, that this rule does not have sufficient implications to warrant consultation with the States. The provisions contained in this rule will not have a substantial direct effect on States, or on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, except as required by law.

Executive Order 13175

This rule has been reviewed in accordance with the requirements of Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments.” Executive Order 13175 requires Federal agencies to consult and coordinate with tribes on a government-to-government basis on policies that have tribal implications, including regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

FCIC has assessed the impact of this rule on Indian tribes and determined that this rule does not, to our knowledge, have tribal implications that require tribal consultation under Executive Order 13175. If a Tribe requests consultation, FCIC will work with the USDA Office of Tribal Relations to ensure meaningful consultation is provided where changes, additions, and modifications identified in this rule are not expressly mandated by law.

Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601–612), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA, Pub. L. 104–121), generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to the notice and comment rulemaking requirements under the Administrative Procedure Act or any other law, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. FCIC certifies that this regulation will not have a significant economic impact on a substantial number of small entities. Program requirements for the Federal crop insurance program are the same for all producers regardless of the size of their farming operation. For instance, all producers are required to submit an application and acreage report to establish their insurance guarantees and compute premium amounts, and all producers are required to submit a notice of loss and production information to determine the amount of an indemnity payment in the event of an insured cause of crop loss. Whether a producer has 10 acres or 1000 acres, there is no difference in the kind of information collected. To ensure crop insurance is available to small entities, the Federal Crop Insurance Act authorizes FCIC to waive collection of administrative fees from limited resource farmers. FCIC believes this waiver helps to ensure that small entities are given the same opportunities as large entities to manage their risks through the use of crop insurance. A Regulatory Flexibility Analysis has not been prepared since this regulation does not have an impact on small entities, and, therefore, this regulation is exempt from the provisions of the Regulatory Flexibility Act.

Federal Assistance Program

This program is listed in the Catalog of Federal Domestic Assistance under No. 10.450.

Executive Order 12372

This program is not subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials. See 2 CFR part 415, subpart C.

Executive Order 12988

This rule has been reviewed in accordance with Executive Order 12988 on civil justice reform. The provisions of this rule will not have a retroactive effect. The provisions of this rule will preempt State and local laws to the extent such State and local laws are inconsistent herewith. With respect to any direct action taken by FCIC or action by FCIC directing the insurance provider to take specific action under the terms of the crop insurance policy, the administrative appeal provisions published at 7 CFR part 11 must be exhausted before any action against FCIC for judicial review may be brought.

Environmental Evaluation

This action is not expected to have a significant economic impact on the quality of the human environment, health, or safety. Therefore, neither an Environmental Assessment nor an Environmental Impact Statement is needed.
§ 457.119 Texas citrus fruit crop insurance provisions.

1. Definitions

Citrus fruit commodity. Includes the following:
(a) Oranges;
(b) Grapefruit; and
(c) Any other citrus fruit designated as a “citrus fruit commodity” in the actuarial documents.

Citrus fruit group. A designation in the Special Provisions used to identify combinations of citrus fruit commodity types and intended uses within a citrus fruit commodity that may be grouped together for the purposes of electing coverage levels and identifying the insured crop.

Commodity type. A specific subcategory of a citrus fruit commodity having a characteristic or set of characteristics distinguishable from other subcategories of the same citrus fruit commodity.

Excess wind. A natural movement of air that has sustained speeds exceeding 58 miles per hour (50 knots) recorded at the weather reporting station (U.S. National Weather Service reporting station or any other weather reporting station identified in the Special Provisions) operating nearest to the insured acreage at the time of damage.

Intended use. The insured’s expected end use or disposition of the commodity.
at the time the commodity is reported. Insured intended uses will be
specified in the Special Provisions. * * * * *

2. Unit Division

(a) Basic units will be established for each insured crop (citrus fruit group) in accordance with section 1 of the Basic Provisions.

(b) Optional units may be established by either of the following, but not both:

(1) In accordance with section 34(c) of the Basic Provisions, except as provided in section 2(b) of these Crop Provisions; or

(2) If each optional unit is located on non-contiguous land.

3. Insurance Guarantees, Coverage Levels, and Prices for Determining Indemnities

In addition to the requirements of section 3 of the Basic Provisions:

(a) You may select only one price election and coverage level for each insured crop (citrus fruit group designated in the Special Provisions) that you elect to insure.

(b) Second stage production guarantee. The quantity of citrus (in tons) determined by multiplying the yield determined in accordance with section 3(e) of these Crop Provisions by the coverage level percentage you elect.

6. Non-Insured Crop

(a) You may elect to insure a non-insured crop acreage.

(b) Failure to provide required information. In lieu of the provisions in section 3 of the Basic Provisions due to uninsured reasons, we will reduce the yield used to establish your production guarantee for the subsequent crop year to reflect any reduction in the productive capacity of the trees or in the yield potential of the insured acreage.

7. Insured Crop

(a) In accordance with section 8 of the Basic Provisions, the insured crop will be each citrus fruit group you elect to insure and for which a premium rate is provided by the actuarial documents:

(b) For each insured crop (citrus fruit group), administrative fees will be assessed in accordance with section 6 of the Catastrophic Risk Protection Endorsement and section 7 of the Basic Provisions.

8. Insurable Acreage

In lieu of the provisions in section 9 of the Basic Provisions that prohibit insurance attaching to an insured crop interplanted with another agricultural commodity, interplanted acreage is uninsurable, except a citrus fruit group interplanted with another perennial agricultural commodity is insurable unless we inspect the acreage and determine it does not meet the requirements contained in your policy.

9. Insurance Period

(a) * * *

(1) Coverage begins on November 21 of each crop year, except that for the year of application, if your application is received after November 11 but prior to November 21, insurance will attach on the 10th day after your properly completed application is received in our local office, unless we inspect the acreage during the 10-day period that begins when the application is received by us and determine that it does not meet insurability requirements. You must provide any information that we require for the insured crop (citrus fruit group).
group) or to determine the condition of the grove.

* * * * *

10. Causes of Loss

* * * * *

(a) * * *

* * * * *

(9) Insects and plant disease, unless excluded or otherwise restricted through the Special Provisions, provided the loss of production is not due to damage resulting from insufficient or improper application of control measures as recommended by agricultural experts.

(b) In addition to the causes of loss excluded in section 12 of the Basic Provisions, we will not insure against damage or loss of production due to the inability to market the citrus for any reason other than actual physical damage from an insurable cause of loss specified in this section. For example, we will not pay you an indemnity if you are unable to sell your crop.

11. Duties in the Event of Damage or Loss

(a) In accordance with the requirements of section 14 of the Basic Provisions, you must leave representative samples. In lieu of the requirements of section 14(c)(3) of the Basic Provisions, we will determine which trees must remain unharvested so that we may inspect them in accordance with FCIC procedures.

(b) * * *

* * * * *

(2) If you intend to claim an indemnity on any unit, you must notify us at least 15 days prior to the beginning of harvest, or within 24 hours if damage is discovered during harvest, so we may have an opportunity to inspect the unit. You must not sell or dispose of the damaged crop until after we have given you written consent to do so. If you fail to meet the requirements of this section, all such production will be considered undamaged and included as production to count.

12. Settlement of Claim

* * * * *

(b) * * *

(1) Multiplying the insured acreage for each combination of commodity type and intended use by its respective production guarantee;

* * * * *

(e) Any citrus fruit insured with an intended use of fresh that is not marketable as fresh fruit due to insurable causes will be adjusted by multiplying the number of tons of such citrus fruit by the applicable Fresh Fruit Factor contained in the Special Provisions.

* * * * *

Signed in Washington, DC, on June 6, 2016.

Michael Alston,

Acting Manager, Federal Crop Insurance Corporation.

[FR Doc. 2016–13770 Filed 6–10–16; 8:45 am]

BILLING CODE 3410–08–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 31

[Docket No. FAA–2016–5424; Special Conditions No. 31–001–SC]

Special Conditions: Ultramagic, S.A., Mark–32 Burner Series

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.


SUPPLEMENTARY INFORMATION:

Background


Type Certification Basis


c. Equivalent Level of Safety (ELOS) Findings per provision of 14 CFR 21.21(b)(1):

(1) ACE–08–15,1 August 1, 2008, Burners, 14 CFR 31.47(d).

(2) ACE–08–15A,2 November 05, 2013, Burners, 14 CFR 31.47(d), for Model S–70.

1 http://rgl.faa.gov/Regulatory_and_Guidance/

2 http://rgl.faa.gov/Regulatory_and_Guidance/
Library/rgELOS.nsf/0/BE4DB368A87F7A7A8625

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include another model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, the special conditions would also apply to the other model under § 21.101. The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type-certification basis under § 21.101.

Novel or Unusual Design Features


The oxygen augmentation and hydraulic control.

Discussion

Based on the provisions of §§ 21.17 and 21.29 and the U.S.-EASA Technical Implementation Procedures for Airworthiness and Environmental Certification Between the Federal Aviation Administration of the United States of America and the European Aviation Safety Agency of the European Union, the following airworthiness requirements are applicable to this project and will remain active for three years from the date of application and form the Certification Basis:

a. Part 31, amendment 7 (The certification basis complied with according to the Ultramagic part 31 compliance checklist.)

b. ELOS Findings: The FAA notes that it has issued equivalent level of safety findings per provision of 14 CFR 21.21(b)(1), specifically ACE–08–15 3 on August 1, 2008, Burners, § 31.47(d) and then extended the ELOS as ACE–08–15A 4 on November 05, 2013, Burners, § 31.47(d), for the Model S–70. This ELOS has not been applied to the MK–32 and therefore not applicable.

3 Special conditions: The FAA notes that Ultramagic elected to comply with certain provisions of CS–23, amendment 3, that apply to oxygen systems. These provisions are applicable because there is an oxygen augmented igniter system available for the MK–32 burner. The following 14 CFR regulations, except § 23.1445, are harmonized with their CS–23, amendment 3, counterpart regulations and form the basis of this special condition.

4 Citation


Conclusion

This action affects only certain novel or unusual design features on one model series of burners. It is not a rule of general applicability and it affects only the applicant who applied to the FAA for approval of these features on the balloons.

List of Subjects in 14 CFR Part 31

Aircraft, Aviation safety, Signs and symbols.

Citation

The authority citation for these special conditions is as follows:


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Section 23.1445 mentions the only significant regulatory difference, regarding common sources oxygen with passengers. The oxygen system is not utilized for breathing; hence, this Significant Standard Difference (SSD) does not apply. In addition, the FAA notes that Ultramagic offers a hydraulic feature. This kit is a hydraulic system that actuates the burners’ fuel valve. Since part 31 does not have provisions for hydraulic systems, § 23.1435, Hydraulic systems, will provide the basis for the hydraulic system special conditions contained herein. No SSD is associated with this regulation.

Discussion of Comments

Notice of proposed special conditions No. 31–16–01–SC for the Ultramagic, S.A., MK–32 Burner Series was published in the Federal Register on April 5, 2016 (81 FR 19502). No comments were received, and the special conditions are adopted as proposed.

Applicability


Conclusion

This action affects only certain novel or unusual design features on one model series of burners. It is not a rule of general applicability and it affects only the applicant who applied to the FAA for approval of these features on the balloons.

List of Subjects in 14 CFR Part 31

Aircraft, Aviation safety, Signs and symbols.

Citation

The authority citation for these special conditions is as follows:


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The Special Conditions


(a) In addition to the provisions of part 31, amendment 7, the applicant must design the MK–32 Burner to comply with the requirements, as described below, with respect to the igniter oxygen augmentation system and hydraulic burner valve actuation system:

Oxygen Distribution System

(1) Except for flexible lines from oxygen outlets to the dispensing units, or where shown to be otherwise suitable to the installation, nonmetallic tubing must not be used for any oxygen line that is normally pressurized during flight.

(2) Nonmetallic oxygen distribution lines must not be routed where they may be subjected to elevated temperatures, electrical arcing, and released flammable fluids that might result from any probable failure.

Fire Protection for Oxygen Equipment

Oxygen equipment and lines must:

(1) Not be installed in any designated fire zones.

(2) Be protected from heat that may be generated in, or escape from, any designated fire zone.

(3) Be installed so that escaping oxygen cannot come in contact with and cause ignition of grease, fluid, or vapor accumulations that are present in normal operation or that may result from the failure or malfunction of any other system.

Protection of Oxygen Equipment From Rupture

(1) Each element of the oxygen system must have sufficient strength to withstand the maximum pressure and temperature, in combination with any externally applied loads arising from consideration of limit structural loads that may be acting on that part of the system.

(2) Oxygen pressure sources and the lines between the source and the shutoff means must be:

(i) Protected from unsafe temperatures; and

(ii) Located where the probability and hazard of rupture in a crash landing are minimized.

Hydraulic Systems

(1) Design. Each hydraulic system must be designed as follows:

(i) Each hydraulic system and its elements must withstand, without yielding, the structural loads expected in addition to hydraulic loads.

(ii) A means to indicate the pressure in each hydraulic system which supplies two or more primary functions must be provided to the flight crew.

(iii) There must be means to ensure that the pressure, including transient (surge) pressure, in any part of the system will not exceed the safe limit above design operating pressure and to prevent excessive pressure resulting from fluid volumetric changes in all lines which are likely to remain closed long enough for such changes to occur.

(iv) The minimum design burst pressure must be 2.5 times the operating pressure.

(2) Tests. Each system must be substantiated by proof pressure tests. When proof tested, no part of any system may fail, malfunction, or experience a permanent set. The proof load of each system must be at least 1.5 times the maximum operating pressure of that system.

(3) Accumulators. A hydraulic accumulator or reservoir may be installed on the engine side of any firewall, if—

(i) It is an integral part of an engine or propeller system; or

(ii) The reservoir is nonpressurized and the total capacity of all such nonpressurized reservoirs is one quart or less.

(b) Ultramagic, through EASA, will provide the FAA with all Airworthiness Directives issued against the changed type design, if any, and a plan for resolving the unsafe conditions for the FAA type design.

Issued in Kansas City, Missouri, on May 25, 2016.

Pat Mullen,
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–13556 Filed 6–10–16; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 73


RIN 2120–AA66

Amendment of Restricted Areas R–6602A, R–6602B, and R–6602C; Fort Pickett, VA

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action updates the using agency information for restricted areas R–6602A, R–6602B, and R–6602C, Fort Pickett, VA. This is an administrative change to reflect the current organization tasked with using agency responsibilities for the restricted areas. It does not affect the boundaries, designated altitudes, time of designation or activities conducted within the restricted areas.

DATES: Effective date: 0901 UTC, September 15, 2016.


SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA’s authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency’s authority.

This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it updates the using agency for restricted areas R–6602A, R–6602B and R–6602C; Fort Pickett, VA, to reflect the current organization responsible for the restricted areas.

The Rule

This action amends Title 14 Code of Federal Regulations (14 CFR) part 73 by updating the using agency name for restricted areas R–6602A, R–6602B and R–6602C; Fort Pickett, VA, by removing
the words “Commander, Fort Lee, VA,” and adding the words “Virginia National Guard, Commander, Fort Pickett, VA.” The name change reflects the current organization assigned using agency responsibilities for the restricted areas. This is an administrative change that does not affect the boundaries, designated altitudes, or activities conducted within the restricted areas; therefore, notice and public procedure under 5 U.S.C. 553(b) are unnecessary.

Regulatory Notices and Analyses

The FAA has determined that this action only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore: (1) Is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, paragraph 5–6.5.d. This airspace action is an administrative change to the description of restricted areas R–6602A, R–6602B, and R–6602C; Fort Pickett, VA, to update the using agency name. It does not alter the dimensions, altitudes, time of designation, or use of the airspace; therefore, it is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exists that warrant preparation of an environmental assessment.

List of Subjects in 14 CFR Part 73

Airspace, Prohibited areas, Restricted areas.

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 73, as follows:

PART 73—SPECIAL USE AIRSPACE

1. The authority citation for part 73 continues to read as follows:


§ 73.66 [Amended]

2. Section 73.66 is amended as follows:

R–6602A Fort Pickett, VA [Amended]

By removing the words “Using agency. Commander, Fort Lee, VA” and adding in their place “Using agency. Virginia National Guard, Commander, Fort Pickett, VA.”

R–6602B Fort Pickett, VA [Amended]

By removing the words “Using agency. Commander, Fort Lee, VA” and adding in their place “Using agency. Virginia National Guard, Commander, Fort Pickett, VA.”

R–6602C Fort Pickett, VA [Amended]

By removing the words “Using agency. Commander, Fort Lee, VA” and adding in their place “Using agency. Virginia National Guard, Commander, Fort Pickett, VA.”

Issued in Washington, DC, on June 6, 2016.

Leslie M. Swann,
Acting Manager, Airspace Policy Group.
[FR Doc. 2016–13934 Filed 6–10–16; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF JUSTICE

Bureau of Alcohol, Tobacco, Firearms, and Explosives

27 CFR Part 478

[Docket No. ATF 2015R–26; AG Order No. 3681–2016]

RIN 1140–AA50

Recordkeeping Regulations

AGENCY: Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), Department of Justice.

ACTION: Final rule; technical amendments.

SUMMARY: This final rule makes technical amendments to regulations pertaining to certain firearms recordkeeping requirements to provide clarity and enhance uniformity. The technical changes are being made in the wording of three tables to reflect the same wording in the body of the regulations associated with the tables regarding the required description of firearms for recordkeeping purposes.

DATES: This rule is effective June 13, 2016.

FOR FURTHER INFORMATION CONTACT:

Shermaine Kenner, Office of Regulatory Affairs, Enforcement Programs and Services, Bureau of Alcohol, Tobacco, Firearms, and Explosives, U.S. Department of Justice, 99 New York Avenue NE., Washington, DC 20226; telephone: (202) 648–7070 (this is not a toll-free number).

SUPPLEMENTARY INFORMATION:

I. Background

The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) administers regulations published in 27 Code of Federal Regulations (CFR) part 478. ATF has identified three technical amendments needed to provide clarity and uniformity to the recordkeeping requirements prescribed in 27 CFR 478.125(e) and (f)(1) and 478.125a(a)(4) and the tables titles, “Firearms Acquisition and Disposition Record,” “Firearms Collectors Acquisition and Disposition Record,” and “Disposition Record of Personal Firearms,” associated with §§ 478.125(e) and (f)(2), and 478.125a(a)(4) respectively. Specifically, there is a discrepancy between the wording used in the body of the regulations found at §§ 478.125(e) and (f)(1) and 478.125a(a)(4) and the wording used in the tables, listed above, regarding the required description of firearms for recordkeeping purposes.

The regulations at §§ 478.125(e) and (f)(1) and 478.125a(a)(4) prescribe substantive recordkeeping requirements for the receipt and disposition of firearms by certain licensed parties, to include the prescribed format for recording required information. Specifically, licensed parties must record “the name of the manufacturer and importer (if any)” associated with the firearms acquired and disposed of by the licensed party. The regulations at §§ 478.125(e) and (f)(2) and 478.125a(a)(4) include tables that illustrate the format required for recording the receipt and disposition of firearms. ATF has identified a discrepancy between the language used in the body of these regulations, which requires a record of, inter alia, “the name of the manufacturer and importer (if any)” and the language used in the corresponding tables, which calls for the “manufacturer and/or importer.” Therefore, these tables associated with §§ 478.125(e) and (f) and 478.125a(a)(4) are being amended to ensure agreement between the wording in the tables with the wording in the body of the regulations by replacing “Manufacturer and/or importer” with “Manufacturer and importer (if any).”
II. Statutory Orders and Executive Review

A. Executive Order 12866 and Executive Order 13563

This final rule has been drafted and reviewed in accordance with Executive Order 12866, “Regulatory Planning and Review,” section 1(b), The Principles of Regulation, and Executive Order 13563, “Improving Regulation and Regulatory Review,” section 1(b). This rule pertains to agency organization, management, or personnel matters as described by Executive Order 12866, section 3(d)(3) and, therefore, is not a “regulation” or “rule” as defined by that Executive Order.

B. Executive Order 13132

This final rule will not have substantial direct effects on the States, on the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with section 6 of Executive Order 13132, “Federalism,” the Attorney General has determined that this regulation does not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement.

C. Executive Order 12988

This regulation meets the applicable standards set forth in sections 3(a) and 3(b)(2) of Executive Order 12988, “Civil Justice Reform.”

D. Administrative Procedure Act

The revisions to the regulations in this final rule are matters of agency organization, procedure, and practice that will not affect individual rights and obligations. As such, this rule is exempt from the usual requirements of prior notice and comment and a 30-day delay in the effective date. See 5 U.S.C. 553(a)(2), (b)(A), and (d)(3). Moreover, the Department finds good cause for exempting the rule from those requirements. Because this final rule makes technical corrections to improve the clarity of the regulations, the Department finds it unnecessary to publish this rule for public notice and comment. Similarly, because delaying the effective date of this rule would serve no purpose, the Department also finds good cause to make this rule effective upon publication.

E. Regulatory Flexibility Act

The Attorney General, in accordance with the Regulatory Flexibility Act, 5 U.S.C. 605(b), has reviewed this rule and, by approving it, certifies that it will not have a significant economic impact on a substantial number of small entities because it pertains to personnel and administrative matters affecting the Department. Further, a Regulatory Flexibility Analysis is not required for this final rule because the Department was not required to publish a general notice of proposed rulemaking for this matter.

F. Small Business Regulatory Enforcement Fairness Act of 1996

This rule is not a major rule as defined by section 251 of the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 804. This rule will not result in an annual effect on the economy of $100 million or more; a major increase in costs or prices; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets.

G. Unfunded Mandates Reform Act of 1995

This rule will not result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any one year; will not significantly or uniquely affect small governments and does not contain significant intergovernmental mandates. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531–1535.

H. Paperwork Reduction Act of 1995

This final rule does not impose any new reporting or recordkeeping requirements under the Paperwork Reduction Act, 44 U.S.C. 3501–3521.

I. Congressional Review Act

This action pertains to agency organization, procedure, or practice, and does not substantially affect the rights or obligations of non-agency parties and, accordingly, is not a “rule” as that term is used by the Congressional Review Act (Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996). See 5 U.S.C. 804(3). Therefore, the reporting requirement of 5 U.S.C. 801 does not apply.

List of Subjects in 27 CFR Part 478

Administrative practice and procedure, Arms and munitions, Customs duties and inspection, Exports, Imports, Intergovernmental relations, Law enforcement officers, Military personnel, Penalties, Reporting and recordkeeping requirements, Research, Seizures and forfeitures, and Transportation.

Authority and Issuance

Accordingly, for the reasons discussed in the preamble, 27 CFR part 478 is amended as follows:

PART 478—COMMERCE IN FIREARMS AND AMMUNITION

1. The authority citation for 27 CFR part 478 continues to read as follows:


§ 478.125 [Amended]

2. Amend § 478.125:

a. In paragraph (e) by removing the words “Manufacturer and/or Importer” in the associated table and adding in their place the words “Manufacturer and importer (if any)”; and

b. In paragraph (f)(2) by removing the words “Manufacturer and/or importer” in the associated table and adding in their place the words “Manufacturer and importer (if any)”.

§ 478.125a [Amended]

3. Amend § 478.125a in paragraph (a)(4) by removing the words “Manufacturer and/or importer” in the associated table and adding in their place the words “Manufacturer and importer (if any)”.

Dated: June 7, 2016.
Loretta E. Lynch, Attorney General.
[FR Doc. 2016–13878 Filed 6–10–16; 8:45 am]
BILLING CODE 4410–FY–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 100

[Docket Number USCG–2013–0272]
RIN 1625–AA08

Special Local Regulations; Marine Events in the Seventh Coast Guard District

AGENCY: Coast Guard, DHS.
ACTION: Final rule.

SUMMARY: The Coast Guard is updating the regulation that governs recurring special local regulations in the Seventh Coast Guard District. These regulations will apply to all recurring events held on navigable waters of the Seventh District, such as regattas and parades. This update is to ensure that all known
recurring marine events are included in the final regulation and to allow respective Captains of the Port greater ease in enacting or modifying those portions of the regulation which apply to their respective areas.

DATES: This rule is effective July 13, 2016.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to http://www.regulations.gov, type USCG–2013–0272 in the “SEARCH” box and click “SEARCH.” Click on Open Docket Folder on the line associated with this rule.

FOR FURTHER INFORMATION CONTACT: If you have questions about this final rulemaking, call or email Eugene Stratton, Coast Guard District Seven Waterways Management, (305) 415–6750, email Eugene.Stratton@uscg.mil or Lieutenant Commander Brendan Sullivan, Coast Guard District Seven Legal, U.S. Coast Guard; telephone (305) 415–6957, email Brendan.Sullivan@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
DHS Department of Homeland Security
E.O. Executive order
FR Federal Register
NPRM Notice of proposed rulemaking
Pub. L. Public Law
§ Section
U.S.C United States Code
COTP Captain of the Port

II. Background, Purpose, and Legal Basis

On January 25, 2008, 33 CFR 100.701 was published in the Federal Register (73 FR 4461) to provide permanent notice of recurring marine events in the Seventh Coast Guard District. Since that time, it was amended, (March 14, 2012 (77 FR 14962)) to remove several lines in Table 100.701 with incorrect information and to add lines regarding marine event dates, geographic locations, and corresponding regulated areas. The Coast Guard is now revising the table of events contained within this regulation to ensure that it accurately captures all recurring marine events in the Seventh Coast Guard District and to allow respective Captains of the Port greater ease in managing events occurring in their zones.

On January 21, 2016, the Coast Guard published a notice of proposed rulemaking (NPRM) titled Special Local Regulations; Marine Events in the Seventh Coast Guard District; 81 FR 3362. There we stated why we issued the NPRM, and invited comments on our proposed regulatory action related to this fireworks display. During the comment period that ended February 22, 2016, we received zero comments.

III. Legal Authority and Need for Rule

33 U.S.C. 1233 provides the legal basis for the Coast Guard’s authority to establish special local regulations. The purpose of the rule is to provide for the safety of life on the navigable waters of the Seventh Coast Guard District during recurring marine events.

IV. Discussion of Comments, Changes, and the Rule

As noted above, we received no comments on our NPRM published January 21, 2016. The final regulatory text implemented through this rule made two minor changes to the table proposed rule in the NPRM. First, the Gasparilla Boat Parade proposed under the COTP Zone St. Petersburg, 33 CFR 100.701(d)(2), was deleted because it is largely duplicative of the Annual Gasparilla Marine Parade regulation currently implemented under 33 CFR 100.734. Second, language describing the location of the Charleston Harbor Christmas Parade of Boats in 33 CFR 100.734(g)(6) was changed to reflect the renaming of “Shutes Folly” to “Bennis Reach.” No other changes were made to the text proposed in the NPRM.

This rule revises the list of permanent special regulations contained in 33 CFR 100.701 for recurring marine events within the geographic boundary of the Seventh Coast Guard District. In general, the Seventh Coast Guard District is comprised of the land areas and U.S. navigable waters adjacent to South Carolina, Georgia, Florida, and Puerto Rico. For a detailed description of the geographical area of the District and each Coast Guard Sector, please refer to 33 CFR 3.35.

At present, there are many annually recurring marine events within the Seventh Coast Guard District. These events are currently listed in a single table, with no demarcation by which to easily identify specific events. This amendment to the regulation includes breaking the table into seven distinct sections, one for each Captain of the Port (COTP) zone. Each event within each COTP section will be assigned a line number, which will result in each event being easily identifiable based on its location within a table and line thereby making future editing or enforcement of any event a more streamlined process.

Additionally, the Coast Guard seeks to update the regulation to ensure that it accurately reflects all recurring events within the Seventh District, to include marine events which started on a recurring basis since the last revision of this regulation and any marine events which may have been left off of the last revision.

Amendments to this rule will reduce the administrative burden on the Coast Guard by ensuring all recurring events are represented in the table and by minimizing the need to duplicate the rulemaking process for repeat events. Generally, the public will be advised of these events and specific information, including exact dates, specific areas, and description of the regulated area, through Local Notice to Mariners and Broadcast Notice to Mariners. The notices will contain the following information:

(i) Name and sponsoring organization of event;
(ii) Expected number of participants;
(iii) Course of event;
(iv) Regulated area;
(v) Spectator Area, if applicable; and
(vi) Dates and times of event and enforcement of regulations.

The Coast Guard realizes that some large scale events, such as those with many participants or spectators, or those that could severely restrict navigation or pose a significant hazard, may still require separate special local regulations or safety zones that address the specific peculiarities of the event. In those situations, the Coast Guard will create special local regulations or safety zones specifically for the event, and those regulations will supersede the final regulations in this rule. However, the Coast Guard believes that a majority of the events held on the waters of the Seventh Coast Guard District may be adequately regulated by the requirements of this final rule.

Due to the activities involved, the large number of participants and spectators present, and event locations, the Coast Guard has determined that the events listed in this rule could pose a risk to participants or waterway users if normal vessel traffic were to interfere with the event. Possible hazards include risks of participant injury or death resulting from near or actual contact with non-participant vessels transiting through the regulated areas. In order to protect the safety of all waterway users including event participants and spectators, this final rule would establish special local regulations for the time and location of each marine event.

This final rule will prevent vessels from entering, transiting, mooring or anchoring within areas specifically designated as regulated areas during the periods of enforcement unless authorized by the Captain of the Port, or
designated Coast Guard Patrol Commander. A designated “Patrol Commander” includes Coast Guard commissioned, warrant, or petty officers who have been designated by the Captain of the Port to act on their behalf. Patrol Commanders may be augmented by local, State, or Federal officials authorized to act in support of the Coast Guard.

Only event sponsors, designated participants, and official patrol vessels will be allowed to enter regulated areas unless otherwise given permission by the Patrol Commander or the Captain of the Port. Spectators may be confined to a designated spectator area to view events. Spectators may contact the Coast Guard Patrol Commander to request permission to pass through the regulated area. If permission is granted, spectators must pass directly through the regulated area at safe speed and without loitering.

The Coast Guard revises 33 CFR 100.701 by adding 18 new recurring marine events as special local regulations listed in this section. Furthermore, the Coast Guard modifies 14 existing regulated areas and removes 11 regulated areas that are no longer active.

V. Regulatory Analyses

We developed this final rule after considering numerous statutes and executive orders (E.O.s) related to rulemaking. Below we summarize our analyses based on a number of these statutes and E.O.s, and we discuss First Amendment rights of protestors.

A. Regulatory Planning and Review

E.O.s 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. E.O. 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This rule has not been designated a “significant regulatory action,” under E.O. 12866. Accordingly, the rule has not been reviewed by the Office of Management and Budget.

This regulatory action determination is based on the following factors: (1) The regulations will be enforced for short, predefined periods of time; (2) persons and vessels may enter, transit through, anchor in or otherwise access the restricted areas with authorization from the respective Captains of the Port; (3) the Coast guard will provide advance notice of the regulations to the local community by issuing Notice of Enforcements, Broadcast Notice to Mariners, and Patrol Commanders. Moreover, in the majority of cases, vessels will be able to safely transit around restricted areas.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard received no comments from the Small Business Administration on this rulemaking. The Coast Guard certifies under 5 U.S.C. 605(b) that this final rule would not have a significant economic impact on a substantial number of small entities.

While some owners or operators of vessels intending to transit the safety zone may be small entities, for the reasons stated in section IV.A above this final rule would not have a significant economic impact on any vessel owner or operator.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this final rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the FOR FURTHER INFORMATION CONTACT section. The Coast Guard will not retaliate against small entities that question or complain about this final rule or any policy or action of the Coast Guard.

C. Collection of Information

This final rule would not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Governments

A rule has implications for federalism under E.O. 13132. Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this final rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in E.O. 13132.

Also, this final rule does not have tribal implications under E.O. 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. If you believe this final rule has implications for federalism or Indian tribes, please contact the person listed in the FOR FURTHER INFORMATION CONTACT section above.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this final rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

F. Environment

We have analyzed this final rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.1D, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This final rule involves amending and republication of a table of recurring marine events for special regulations issued in conjunction with a regatta or marine parade. The events themselves are permitted by the Coast Guard before this regulation would be utilized and the permitting process involves a thorough environmental review. Normally such actions are categorically excluded from further review under paragraph 34(h) of Figure 2–1 of Commandant Instruction M16475.1D. A preliminary environmental analysis checklist and Categorical Exclusion Determination are available in the docket where indicated under ADDRESSES. We seek any comments or information that may lead to the discovery of a significant environmental impact from this final rule.
G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the FOR FURTHER INFORMATION CONTACT section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

List of Subjects in 33 CFR Part 100

Marine safety, Navigation (water), Reporting and recordkeeping requirements, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 100 as follows:

PART 100—SAFETY OF LIFE ON NAVIGABLE WATERS

1. The authority citation for part 100 continues to read as follows:

2. Amend section 100.701 by revising Table 1 to Sec. 100.701 to read as follows:

§ 100.701 Special Local Regulations; Marine Events in the Seventh Coast Guard District.

* * * * *

<table>
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<tr>
<th>No./date</th>
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<tbody>
<tr>
<td>1. 2nd or 3rd Weekend in June.</td>
<td>Rotary Club of Fort Lauderdale New River Raft Race.</td>
<td>Rotary Club of Fort Lauderdale.</td>
<td>All waters of the New River contained within the following points: Starting at Point 1 in position 26°07′10″ N., 80°08′52″ W.; thence southeast to Point 2 in position 26°07′05″ N., 80°08′34″ W.; thence southwest to Point 3 in position 26°07′04″ N., 80°08′35″ W.; thence northwest to Point 4 in position 26°07′08″ N., 80°08′52″ W.; thence north back to origin.</td>
</tr>
<tr>
<td>2. 2nd or 3rd weekend in April.</td>
<td>Stuart Sailfish Regatta</td>
<td>Stuart Sailfish, Inc</td>
<td>All waters of Indian River located northeast of Ernest Lyons Bridge and south of Joes Cove that are encompassed within a line connecting the following points, with the exception of the spectator area: Starting at Point 1 in position 27°12′47″ N., 80°11′43″ W.; thence southeast to Point 2 in position 27°12′22″ N., 80°11′28″ W.; thence northeast to Point 3 in position 27°12′35″ N., 80°11′00″ W.; thence northwest to Point 4 in position 27°12′47″ N., 80°11′04″ W.; thence northeast to Point 5 in position 27°12′35″ N., 80°11′01″ W.; thence southeast back to origin.</td>
</tr>
<tr>
<td>3. 2nd or 3rd week in April</td>
<td>Ft. Lauderdale Air Show</td>
<td>Lauderdale Air Show LLC</td>
<td>(1) Exclusion area. All waters of the Atlantic Ocean in the vicinity of Fort Lauderdale, Florida that are encompassed within a line connecting the following points: Starting at Point 1 in position 26°10′39″ N., 80°05′47″ W.; thence southeast to Point 2 in position 26°10′32″ N., 80°04′39″ W.; thence southwest to Point 3 in position 26°06′33″ N., 80°05′08″ W.; thence northwest to Point 4 in position 26°06′40″ N., 80°06′15″ W.; thence northeast back to origin. All persons and vessels, except those persons and vessels participating in the event, are prohibited from entering, transiting through, anchoring in, or remaining within the exclusion area.</td>
</tr>
<tr>
<td>4. 2nd or 3rd weekend in April.</td>
<td>Red Bull Candola</td>
<td>Red Bull North America</td>
<td>All waters of the New River between the Esplanade Park and slightly east of the South Andrews Avenue Bascule Bridge encompassed between the following points: Point 1 in position 26°07′09″ N., 80°08′52″ W. and Point 2 in position 26°07′04″ N., 80°08′34″ W.</td>
</tr>
<tr>
<td>5. 2nd or 3rd weekend in May.</td>
<td>Miami Superboat Grand Prix.</td>
<td>Super Boat International Productions, Inc.</td>
<td>All waters of the Atlantic Ocean east of Miami Beach, FL encompassed within a line connecting the following points: Starting at Point 1 in position 25°49′14″ N., 80°07′13″ W.; thence east to Point 2 in position 25°49′13″ N., 80°06′48″ W.; thence southwest to Point 3 in 25°46′00″ N., 80°07′26″ W.; thence west to Point 4 in position 25°46′00″ N., 80°07′51″ W.; thence northeast back to origin.</td>
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<td>No./date</td>
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<tr>
<td>6. 1st or 2nd weekend in June.</td>
<td>West Palm Beach Triathlon.</td>
<td>Game On Sports Marketing Group.</td>
<td>All waters of the Intracoastal Waterway in West Palm Beach, Florida between the Flagler Memorial Bridge to the Royal Palm Way Bridge.</td>
</tr>
<tr>
<td>7. 2nd or 3rd weekend in September.</td>
<td>Publix Escape to Miami Triathlon.</td>
<td>US Road Sports and Entertainment of Florida, LLC.</td>
<td>All waters of Biscayne Bay, east of Margaret Pace Park, Miami, FL encompassed within a line connecting the following points: Starting at Point 1 in position 25°47'40&quot; N., 80°11'07&quot; W.; thence northeast to Point 2 in position 25°48'13&quot; N., 80°10'48&quot; W.; thence southeast to Point 3 in 25°47'59&quot; N., 80°10'34&quot; W.; thence south to Point 4 in position 25°47'52&quot; N., 80°10'34&quot; W.; thence southwest to Point 5 in position 25°47'33&quot; N., 80°11'07&quot; W.; thence north back to origin.</td>
</tr>
<tr>
<td>8. 2nd or 3rd weekend in October.</td>
<td>Ironman 70.3</td>
<td>Miami Tri Events</td>
<td>All waters of Biscayne Bay located east of Bayfront Park and encompassed within a line connecting the following points: Starting at Point 1 in position 25°46'44&quot; N., 080°11'00&quot; W.; thence southeast to Point 2 in position 25°46'24&quot; N., 080°10'44&quot; W.; thence southwest to Point 3 in position 25°46'18&quot; N., 080°11'05&quot; W.; thence north to Point 4 in position 25°46'33&quot; N., 080°11'05&quot; W.; thence northeast back to origin. All coordinates are North American Datum 1983.</td>
</tr>
<tr>
<td>9. 2nd or 3rd week in October.</td>
<td>West Palm Beach World Championship.</td>
<td>Offshore Powerboat Association LLC.</td>
<td>All waters of the Atlantic Ocean east of Jupiter, FL encompassed within a line connecting the following points: Starting at Point 1 in position 26°56'06&quot; N., 80°04'06&quot; W.; thence northeast to Point 2 in position 26°56'11&quot; N., 80°03'38&quot; W.; thence southeast to Point 3 in position 26°53'11&quot; N., 80°02'35&quot; W.; thence southwest to Point 4 in position 26°53'03&quot; N., 80°03'06&quot; W.; thence northwest back to origin.</td>
</tr>
<tr>
<td>10. 1st or 2nd weekend in November.</td>
<td>Red Bull Flugtag</td>
<td>Red Bull North America ...</td>
<td>All waters of Biscayne Bay, Miami, FL between Bayfront Park and the Intercontinental-Miami Hotel encompassed within a line connecting the following points: Starting at Point 1 in position 25°46'32&quot; N., 80°11'06&quot; W.; thence southeast to Point 2 in position 25°46'30&quot; N., 80°11'04&quot; W.; thence south to Point 3 in position 25°46'26&quot; N., 80°11'04&quot; W.; thence southwest to Point 4 in position 25°46'25&quot; N., 80°11'06&quot; W.; thence north back to origin.</td>
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<tr>
<td>11. 1st or 2nd weekend in December.</td>
<td>Boynton &amp; Delray Holiday Boat Parade.</td>
<td>Boynton Beach Community Redevelopment Agency.</td>
<td>All waters within a moving zone that will begin at Boynton Inlet and end at the C–15 Canal, which will include a buffer zone extending 50 yards ahead of the lead parade vessel and 50 yards astern of the last participating vessel and 50 yards on either side of the parade.</td>
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<tr>
<td>12. 1st or 2nd weekend in December.</td>
<td>Palm Beach Holiday Boat Parade.</td>
<td>Marine Industries Association of Palm Beach County.</td>
<td>All waters within a moving zone that will begin at Lake Worth Daymarker 28 in North Palm Beach and end at Loxahatchee River Daymarker 7 east of the Glynn Mayo Highway Bridge in Jupiter, FL, which will include a buffer zone extending 50 yards ahead of the lead parade vessel and 50 yards astern of the last participating vessel and 50 yards on either side of the parade.</td>
</tr>
<tr>
<td>13. 2nd or 3rd weekend in December.</td>
<td>Miami Outboard Club Holiday Boat Parade.</td>
<td>Miami Outboard Club ...</td>
<td>All waters within a moving zone that will transit as follows: the marine parade will begin at the Miami Outboard Club on Watson Island, head north around Palm Island and Hibiscus Island, head east between Di Lido Island, south through Meloy Channel, west through Government Cut to Bicentennial Park, south to the Dodge Island Bridge, south in the Intracoastal Waterway to Claughton Island, circling back to the north in the Intracoastal Waterway to end at the Miami Outboard Club. This will include a buffer zone extending 50 yards ahead of the lead parade vessel and 50 yards astern of the last participating vessel and 50 yards on either side of the parade.</td>
</tr>
<tr>
<td>14. 2nd or 3rd weekend in December.</td>
<td>Seminole Hard Rock Winterfest Holiday Boat Parade.</td>
<td>Winterfest, Inc ...............</td>
<td>All waters within a moving zone that will begin at Cooley’s Landing Marina and end at Lake Santa Barbara, which will include a buffer zone extending 50 yards ahead of the lead parade vessel and 50 yards astern of the last participating vessel and 50 yards on either side of the parade.</td>
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### TABLE TO § 100.701—Continued

<table>
<thead>
<tr>
<th>No./date</th>
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<th>Location</th>
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<tr>
<td>15. 2nd or 3rd weekend in December.</td>
<td>City of Pompano Beach Holiday Boat Parade.</td>
<td>Greater Pompano Beach Chamber of Commerce.</td>
<td>All waters within a moving zone that will begin at Lake Santa Barbara and head north on the Intracoastal Waterway to end at the Hillsboro Bridge, which will include a buffer zone extending 50 yards ahead of the lead parade vessel and 50 yards astern of the last participating vessel and 50 yards on either side of the parade.</td>
</tr>
<tr>
<td>1. 1st Friday, Saturday, and Sunday of February.</td>
<td>CNSJ International Regatta.</td>
<td>Club Nautico de San Juan.</td>
<td>San Juan, Puerto Rico; (1) Outer Harbor Race Area. All waters of Bahia de San Juan within a line connecting the following points: Starting at Point 1 in position 18°28.4′ N., 66°07.6′ W.; then south to Point 2 in position 18°28.1′ N., 66°07.8′ W.; then southeast to Point 3 in position 18°27.8′ N., 66°07.4′ W.; then southeast to point 4 in position 18°27.6′ N., 66°07.3′ W.; then west to point 5 in position 18°27.6′ N., 66°07.8′ W.; then north to point 6 in position 18°28.4′ N., 66°07.8′ W.; then east to the origin. (2) Inner Harbor Race Area; All waters of Bahia de San Juan within a line connecting the following points: Starting at Point 1 in position 18°27.6′ N., 66°07.8′ W.; then east to Point 2 in position 18°27.6′ N., 66°07.1′ W.; then southeast to Point 3 in position 18°27.4′ N., 66°06.9′ W.; then west to point 4 in position 18°27.4′ N., 66°07.7′ W.; then northwest to the origin.</td>
</tr>
<tr>
<td>2. Last Full Weekend of March.</td>
<td>St. Thomas International Regatta.</td>
<td>St. Thomas Yacht Club ...</td>
<td>St. Thomas, U.S. Virgin Islands; All waters of St. Thomas Harbor encompassed within the following points: Starting at Point 1 in position 18°19.9′ N., 64°55.9′ W.; thence east to Point 2 in position 18°19.9′ N., 64°55.8′ W.; thence southeast to Point 3 in position 18°19.6′ N., 64°55.6′ W.; thence south to point 4 in position 18°19.1′ N., 64°55.5′ W.; thence west to point 5 in position 18°19.1′ N., 64°55.6′ W.; thence north to point 6 in position 18°19.6′ N., 64°55.8′ W.; thence northwest back to origin at Harbor, St. Thomas, San Juan.</td>
</tr>
<tr>
<td>3. Last week of April .........</td>
<td>St. Thomas Carnival .......</td>
<td>Virgin Islands Carnival Committee.</td>
<td>St. Thomas, U.S. Virgin Islands; (1) Race Area. All waters of the St. Thomas Harbor located around Hassel Island, St. Thomas, U.S. Virgin Island encompassed within the following points: Starting at Point 1 in position 18°20.2′ N., 64°55.1′ W.; thence west to Point 2 in position 18°20.1′ N., 64°56.1′ W.; thence north to Point 3 in position 18°20.3′ N., 64°56.1′ W.; thence east to Point 4 in position 18°20.3′ N., 64°55.9′ W.; thence west to Point 2 in position 18°20.1′ N., 64°56.1′ W.; thence north to Point 3 in position 18°20.3′ N., 64°56.1′ W.; thence east to Point 4 in position 18°20.3′ N., 64°55.9′ W.; thence southwest to Point 5 in position 18°19.9′ N., 64°56.5′ W.; thence northeast to Point 6 in position 18°20.2′ N., 64°56.3′ W.; thence east back to origin. (2) Jet Ski Race Area. All waters encompassed the following points: Starting at Point 1 in position 18°20.1′ N., 64°55.9′ W.; thence west to Point 2 in position 18°20.1′ N., 64°56.1′ W.; thence north to Point 3 in position 18°20.3′ N., 64°56.1′ W.; thence east to Point 4 in position 18°20.3′ N., 64°55.9′ W.; thence southwest to Point 5 in position 18°19.9′ N., 64°56.5′ W.; thence northeast to Point 6 in position 18°20.3′ N., 64°56.3′ W.; thence east back to origin. (3) Buffer Zone. All waters of the St. Thomas Harbor located around Hassel Island, encompassed within the following points: Starting at Point 1 in position 18°20.3′ N., 64°55.9′ W.; thence southeast to Point 2 in position 18°19.7′ N., 64°55.7′ W.; thence south to Point 3 in position 18°19.3′ N., 64°55.7′ W.; thence southwest to Point 4 in position 18°19.2′ N., 64°56′ W.; thence northeast to Point 5 in position 18°19.9′ N., 64°56.5′ W.; thence northeast to Point 6 in position 18°20.3′ N., 64°56.3′ W.; thence east back to origin. (4) Spectator Area. All waters of the St. Thomas Harbor located east of Hassel Island, encompassed within the following points: Starting at Point 1 in position 18°20.3′ N., 64°55.8′ W.; thence southeast to Point 2 in position 18°19.9′ N., 64°55.7′ W.; thence northeast to Point 3 in position 18°20.2′ N., 64°55.5′ W.; thence northwest back to origin.</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4. 1st Sunday of May</td>
<td>Ironman 70.3 St. Croix</td>
<td>Project St. Croix, Inc</td>
<td>St. Croix (Christiansted Harbor), U.S. Virgin Islands; All waters encompassed within the following points: point 1 on the shoreline at Kings Wharf at position 17°44'51&quot; N., 064°42'16&quot; W., thence north to point 2 at the southwest corner of Protestant Cay in position 17°44'56&quot; N., 064°42'12&quot; W., then east along the shoreline to point 3 at the southeast corner of Protestant Cay in position 17°44'56&quot; N., 064°42'08&quot; W., thence northeast to point 4 at Christiansted Harbor Channel Round Reel Northeast Junction Lighted Buoy RR in position 17°45'24&quot; N., 064°41'45&quot; W., thence southeast to point 5 at Christiansted Schooner Channel Lighted Buoy 5 in position 17°45'18&quot; N., 064°41'43&quot; W., thence southwest to point 6 at Christiansted Harbor Channel Buoy 15 in position 17°44'56&quot; N., 064°41'56&quot; W., thence southwest to point 7 on the shoreline north of Fort Christiansted in position 17°44'51&quot; N., 064°42'05&quot; W., thence west along the shoreline to origin.</td>
</tr>
<tr>
<td>5. July 4th</td>
<td>Fireworks Display</td>
<td>St. John Festival &amp; Cul., Org.</td>
<td>St. John (West of Cruz Bay/Northeast of Steven Cay), U.S. Virgin Islands; All waters from the surface to the bottom for a radius of 200 yards centered around position 18°19'55&quot; N., 064°48'06&quot; W.</td>
</tr>
<tr>
<td>6. 3rd Week of July,</td>
<td>San Juan Harbor Swim</td>
<td>Municipality of Cataño</td>
<td>San Juan Harbor, San Juan, Puerto Rico; All waters encompassed within the following points: point 1: La Puntilla Final, Coast Guard Base at position 18°27'33&quot; N., 066°07'00&quot; W., then south to point 2: Cataño Ferry Pier at position 18°26'36&quot; N., 066°07'00&quot; W., then northeast along the Cataño shoreline to point 3: Punta Cataño at position 18°26'40&quot; N., 066°06'48&quot; W., then northwest to point 4: Pier 1 San Juan at position 18°27'40&quot; N., 066°06'49&quot; W., then back along the shoreline to origin.</td>
</tr>
<tr>
<td>Sunday.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. 1st Sunday of Sept.</td>
<td>Cruce A Nado International.</td>
<td>Cruce a Nado Inc</td>
<td>Ponce Harbor, Bahia de Ponce, San Juan; All waters of Bahia de Ponce encompassed within the following points: Starting at Point 1 in position 17°58.9' N., 66°37.5' W.; thence southwest to Point 2 in position 17°57.5' N., 66°38.2' W.; thence southeast to Point 3 in position 17°57.4' N., 66°37.9' W.; thence northeast to point 4 in position 17°58.7' N., 66°37.3' W.; thence northwest along the northeastern shoreline of Bahia de Ponce to the origin.</td>
</tr>
<tr>
<td>8. 2nd Sunday of Oct.</td>
<td>St. Croix Coral Reef Swim.</td>
<td>The Buccaneer Resort</td>
<td>St. Croix, U.S. Virgin Islands; All waters of Christiansted Harbor within the following points: Starting at Point 1 in position 18°45.7' N., 64°40.6' W.; then northeast to Point 2 in position 18°47.3' N., 64°37.5' W.; then southwest to Point 3 in position 17°46.9' N., 64°37.2' W.; then southwest to point 4 in position 17°45.51' N., 64°39.7' W.; then northwest to the origin.</td>
</tr>
<tr>
<td>9. December 31st</td>
<td>Fireworks St. Thomas, Great Bay.</td>
<td>Mr. Victor Laurenza, Pyrotecnico, New Castle, PA.</td>
<td>St. Thomas (Great Bay area), U.S. Virgin Islands; All waters within a radius of 800 feet centered around position 18°19'14&quot; N., 064°50'18&quot; W.</td>
</tr>
<tr>
<td>10. December—1st week</td>
<td>Christmas Boat Parade</td>
<td>St. Croix Christmas Boat Committee.</td>
<td>St. Croix (Christiansted Harbor), U.S. Virgin Islands; 200 yards off-shore around Protestant Cay beginning in position 17°45'56&quot; N., 064°42'16&quot; W., around the cay and back to the beginning position.</td>
</tr>
<tr>
<td>11. December—2nd week</td>
<td>Christmas Boat Parade</td>
<td>Club Nautico de San Juan.</td>
<td>San Juan, Puerto Rico; Parade route. All waters of San Juan Harbor within a moving zone that will begin at Club Nautico de San Juan, move towards El Morro and then return, to Club Nautico de San Juan; this zone will at all times extend 50 yards in front of the lead vessel, 50 yards behind the last vessel, and 50 yards out from all participating vessels.</td>
</tr>
</tbody>
</table>

(c) COTP Zone Key West; Special Local Regulations

2. January through April, last Monday or Tuesday. Wreckers Cup Races ........ Schooner Wharf Bar ............... Key West Harbor to Sand Key, Florida (Gulf of Mexico side).  
3. 3rd Week of January, Monday–Friday. Yachting Key West Race Week. Premiere Racing, Inc ........ Inside the reef on either side of main ship channel, Key West Harbor Entrance, Key West, Florida.
<table>
<thead>
<tr>
<th>No./date</th>
<th>Event</th>
<th>Sponsor</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. 1st Saturday of February.</td>
<td>The Bogey</td>
<td>Florida Bay Outfitters</td>
<td>Blackwater Sound (entire sound), Key Largo, Florida.</td>
</tr>
<tr>
<td>5. 1st Sunday of February</td>
<td>The Bacall</td>
<td>Florida Bay Outfitters</td>
<td>Blackwater Sound (entire sound), Key Largo, Florida.</td>
</tr>
<tr>
<td>6. 3rd Weekend of April .......</td>
<td>Miami to Key Largo Sailboat Race.</td>
<td>MYC Youth Sailing Foundation, Inc.</td>
<td>Biscayne Bay and Intracoastal Waterway from the Rickenbacker Causeway in Miami, Florida to Key Biscayne to Cape Florida to Soldier Key to Sand Key to Elliot Key to Two Stacks to Card Sound to Bannes Sound to Blackwater Sound in Key Largo, Florida no closer than 500 feet from each vessel.</td>
</tr>
<tr>
<td>7. Last Friday of April ......</td>
<td>Conch Republic Navy Parade and Battle.</td>
<td>Conch Republic</td>
<td>All waters approximately 150 yards offshore from Ocean Key Sunset Pier, Mallory Square and the Hilton Pier within the Key West Harbor in Key West, Florida. Beginning at Smather's Beach in Key West, Florida. The regulated area will move, west to the area offshore of Fort Zach State Park, north through Key West Harbor, east through Fleming Cut, south on Cow Key Channel and west back to origin. The center of the regulated area will at all times remain approximately 50 yards offshore of the island of Key West Florida; extend 50 yards in front of the lead safety vessel preceding the first race participants; extend 50 yards behind the safety vessel trailing the last race participants; and at all times extend 100 yards on either side of the race participants and safety vessels.</td>
</tr>
<tr>
<td>8. 1st Weekend of June .......</td>
<td>Swim around Key West</td>
<td>Florida Keys Community College</td>
<td>All waters between Christmas Tree Island and Coast Guard Station thru Key West Harbor to Mallory Square, approximately 35 yards from shore.</td>
</tr>
<tr>
<td>9. 2nd Week of November .....</td>
<td>Key West World Championship</td>
<td>Super Boat International Productions, Inc.</td>
<td>In the Atlantic Ocean, off the tip of Key West, Florida, on the waters of the Key West Main Ship Channel, Key West Turning Basin, and Key West Harbor Entrance.</td>
</tr>
<tr>
<td>10. 1st Thursday of December</td>
<td>Boot Key Harbor Christmas Boat Parade.</td>
<td>Dockside Marina</td>
<td>Boot Key Harbor (entire harbor), Marathon, Florida.</td>
</tr>
<tr>
<td>11. 2nd Sunday of December</td>
<td>Key Colony Beach Holiday Boat Parade.</td>
<td>Key Colony Beach Community Association</td>
<td>Key Colony Beach, Marathon, Florida, between Vaca Cut Bridge and Long Key Bridge. From Channel Marker 41 on Dusenbury Creek in Blackwater Sound to tip of Stillwright Point in Blackwater Sound, Key Largo, Florida.</td>
</tr>
<tr>
<td>12. 3rd Saturday of December.</td>
<td>Key Largo Boat Parade ...</td>
<td>Key Largo Boat Parade ...</td>
<td>All waters between Christmas Tree Island and Coast Guard Station thru Key West Harbor to Mallory Square, approximately 35 yards from shore.</td>
</tr>
<tr>
<td>13. 3rd Saturday of December.</td>
<td>Key West Lighted Boat Parade.</td>
<td>Schooner Wharf Bar</td>
<td>(d) COTP Zone St. Petersburg; Special Local Regulations</td>
</tr>
</tbody>
</table>

(d) COTP Zone St. Petersburg; Special Local Regulations

<table>
<thead>
<tr>
<th>No./date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1. 3rd Saturday of January</td>
<td>Gasparilla Children’s Parade Air show.</td>
<td>Air Boss and Consulting ..</td>
</tr>
<tr>
<td>2. Last Friday, Saturday, and Sunday of March.</td>
<td>Honda Grand Prix</td>
<td>Honda Motor Company and City of St. Petersburg.</td>
</tr>
<tr>
<td>4. Last Sunday of April ......</td>
<td>St. Anthony’s Triathlon ...</td>
<td>St. Anthony’s Healthcare</td>
</tr>
<tr>
<td>5. July 4 ..........</td>
<td>Freedom Swim</td>
<td>None</td>
</tr>
<tr>
<td>7. 3rd Friday, Saturday, and Sunday of September.</td>
<td>Homosassa Raft Race ...</td>
<td>Citrus 95 FM radio ..</td>
</tr>
<tr>
<td>8. September 30th .............</td>
<td>Clearwater Superboat Race.</td>
<td>Superboat International ..</td>
</tr>
</tbody>
</table>

(1) Race Area; All waters of the Gulf of Mexico near St. Petersburg, Florida, contained within the following points: 27°58.60’ N, 82°50.04’ W, thence to position 27°58.60’ N, 82°50.14’ W, thence to position 28°00.43’ N, 82°50.02’ W, thence to position 28°00.45’ N, 82°50.13’ W, thence back to the start/finish position;
<table>
<thead>
<tr>
<th>No./date</th>
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<th>Sponsor</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. 2nd Friday of May...</td>
<td>Isle of Eight Flags Shrimp Festival</td>
<td>City of Fernandina Beach</td>
<td>Gulf of Mexico, Clearwater Florida.</td>
</tr>
<tr>
<td>11. 3rd Thursday, Friday, and Saturday of November.</td>
<td>Ironman World Championship Triathlon.</td>
<td>City of Clearwater &amp; Ironman North America.</td>
<td>Gulf of Mexico, Clearwater Florida.</td>
</tr>
<tr>
<td>4. 1st weekend of March.</td>
<td>Hydro X Tour.</td>
<td>HZX Racing Promotions.</td>
<td>Lake Dora, Tavares. All waters encompassed within the following points: Starting at Point 1 in position 28°47′59″ N., 81°43′41″ W.; thence south to Point 2 in position 28°47′53″ N., 81°43′41″ W.; thence east to Point 3 in position 28°47′53″ N., 81°43′19″ W.; thence north to Point 4 in position 28°47′59″ N., 81°43′19″ W.; thence west back to origin.</td>
</tr>
<tr>
<td>5. 2nd Full Weekend of March.</td>
<td>TICO Warbird Air Show.</td>
<td>Valiant Air Command</td>
<td>Titusville, Indian River, FL. All waters encompassed within the following points: Starting at the shoreline then due east to Point 1 at position 28°31′25.15″ N., 080°46′32.73″ W., then south to Point 2 located at position 28°30′55.42″ N., 080°46′32.75″ W., then due west to the shoreline.</td>
</tr>
<tr>
<td>11. 3rd weekend of April.</td>
<td>Florida Times Union Redfish Roundup.</td>
<td>The Florida Times-Union</td>
<td>Sister's Creek, Jacksonville, Florida. All waters within a 100 yard radius of Jim King Park and Boat Ramp at Sister's Creek Marina, Sister's Creek.</td>
</tr>
<tr>
<td>12. 2nd Weekend in May.</td>
<td>Saltwater Classic—Port Canaveral.</td>
<td>Cox Events Group</td>
<td>All waters of the Port Canaveral Harbor located in the vicinity of Port Canaveral, Florida encompassed within the following points: Starting at Point 1 in position 28°24′32″ N., 080°37′22″ W., then north to Point 2 28°24′35″ N., 080°37′22″ W., then due east to Point 3 at 28°24′35″ N., 080°36′45″ W., then south to Point 4 at 28°24′32″ N., 080°36′45″ W., then west back to the original point.</td>
</tr>
<tr>
<td>13. 1st Friday of May.</td>
<td>Isle of Eight Flags Shrimp Festival Pirate Landing and Fireworks.</td>
<td>City of Fernandina Beach</td>
<td>All waters within a 500 yard radius around approximate position 30°40′15″ N., 81°28′10″ W.</td>
</tr>
<tr>
<td>No./date</td>
<td>Event</td>
<td>Sponsor</td>
<td>Location</td>
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</tr>
<tr>
<td>1. May, 2nd weekend, Sunday</td>
<td>Blessing of the Fleet—Brunswick</td>
<td>Knights of Columbus—Brunswick</td>
<td>Brunswick River from the start of the East branch of the Brunswick River (East Brunswick River) to the Golden Isles Parkway Bridge.</td>
</tr>
<tr>
<td>2. 3rd full weekend of July</td>
<td>Augusta Southern Nationals Drag Boat Races</td>
<td>Augusta Southern Nationals</td>
<td>Savannah River, Augusta, Georgia, from the US Highway 1 (Fifth Street) Bridge at mile 199.5 to Elliot's Fish Camp at mile 197.</td>
</tr>
<tr>
<td>15. 3rd Friday—Sunday of May</td>
<td>Space Coast Super Boat Grand Prix</td>
<td>Super Boat International Productions, Inc.</td>
<td>Atlantic Ocean in the vicinity of Cocoa Beach, Florida includes all waters encompassed within the following points: Starting at Point 1 in position 29°22′16″ N., 80°36′04″ W.; thence east to Point 2 in position 28°22′15″ N., 80°35′39″ W.; thence south to Point 3 in position 28°19′47″ N., 80°35′55″ W.; thence west to Point 4 in position 28°19′47″ N., 80°36′22″ W.; thence north back to origin.</td>
</tr>
<tr>
<td>16. 4th weekend of May</td>
<td>Memorial Day RiverFest</td>
<td>City of Green Cove Springs</td>
<td>St. Johns River, Green Cove Springs, Florida; All waters within a 500-yard radius around approximate position 29°59′39″ N., 81°40′33″ W. There is a no-wake zone in affect from the St. Augustine City Marina out to the end of the St. Augustine Jetty’s 6 a.m.–8 a.m. and 3 p.m.–5 p.m. during the above days.</td>
</tr>
<tr>
<td>17. Last full week of May (Monday–Friday)</td>
<td>Bluewater Invitational Tournament</td>
<td>Northeast Florida Marlin Association</td>
<td>Lake Dora, Tavares, Florida; All waters encompassed within the following points: Starting at Point 1 in position 28°47′59″ N., 81°43′41″ W.; thence south to Point 2 in position 28°47′53″ N., 81°43′41″ W.; thence east to Point 3 in position 28°47′53″ N., 81°43′19″ W.; thence north to Point 4 in position 28°47′59″ N., 81°43′19″ W.; thence west back to origin.</td>
</tr>
<tr>
<td>18. 2nd weekend of June</td>
<td>Hydro X Tour</td>
<td>H2X Racing Promotions</td>
<td>Lake Dora, Tavares, Florida; All waters encompassed within the following points: Starting at Point 1 in position 29°14′60″ N., 81°00′77″ W.; thence east to Point 2 in position 29°14′78″ N., 80°59′80″ W.; thence south to Point 3 in position 28°13′860″ N., 80°59′76″ W.; thence west to Point 4 in position 29°13′68″ N., 81°00′28″ W.; thence north back to origin.</td>
</tr>
<tr>
<td>19. 1st Saturday of June</td>
<td>Florida Sport Fishing Association Offshore Fishing Tournament</td>
<td>Florida Sport Fishing Association</td>
<td>Port Canaveral, Florida from Sunrise Marina to the end of Port Canaveral Inlet.</td>
</tr>
<tr>
<td>20. 2nd weekend of June (Saturday and Sunday)</td>
<td>Kingfish Challenge</td>
<td>Ancient City Game Fish Association</td>
<td>There is a no-wake zone in affect from the St. Augustine City Marina in St. Augustine, Florida out to the end of the St. Augustine Jetty’s 6 a.m.–8 a.m. and 3 p.m.–5 p.m.</td>
</tr>
<tr>
<td>21. 3rd Friday–Sunday of June</td>
<td>Daytona Beach Grand Prix of the Sea</td>
<td>Powerboat P1–USA</td>
<td>All waters of the Atlantic Ocean East of Cocoa Beach, Florida encompassed within the following points: Starting at Point 1 in position 29°14′60″ N., 81°00′77″ W.; thence east to Point 2 in position 29°14′78″ N., 80°59′80″ W.; thence south to Point 3 in position 28°13′860″ N., 80°59′76″ W.; thence west to Point 4 in position 29°13′68″ N., 81°00′28″ W.; thence north back to origin.</td>
</tr>
<tr>
<td>22. 3rd Saturday of July</td>
<td>Halifax Rowing Association Summer Regatta</td>
<td>Halifax Rowing Association</td>
<td>Halifax River, Daytona, Florida, south of Memorial Bridge—East Side.</td>
</tr>
<tr>
<td>23. 3rd week of July</td>
<td>Greater Jacksonville Kingfish Tournament</td>
<td>Jacksonville Marine Charities, Inc.</td>
<td>Jacksonville, Florida; All waters of the St. Johns River, from lighted buoy 10 (LLNR 2190) in approximate position 30°24′22″ N., 80°24′59″ W. to Lighted Buoy 25 (LLNR 7305).</td>
</tr>
<tr>
<td>24. Last weekend of September</td>
<td>Jacksonville Dragon Boat Festival</td>
<td>In the Pink Boutique, Inc</td>
<td>St. John’s River, Jacksonville, Florida. In front of the Landings, between the Acosta &amp; Main Street Bridges From approximate position 30°19′26″ N., 81°39′47″ W. to approximate position 30°19′26″ N., 81°39′32″ W.</td>
</tr>
<tr>
<td>25. 2nd week of October</td>
<td>First Coast Head Race</td>
<td>Stanton Rowing Foundation</td>
<td>St. Johns River and Arlington River, Jacksonville, Florida, starting near the Arlington Marina and ending on the Arlington River near the Atlantic Blvd. Bridge.</td>
</tr>
<tr>
<td>26. 1st weekend of November</td>
<td>Hydro X Tour</td>
<td>H2X Racing Promotions</td>
<td>Lake Dora, Tavares, Florida; All waters encompassed within the following points: Starting at Point 1 in position 28°47′59″ N., 81°43′41″ W.; thence south to Point 2 in position 28°47′53″ N., 81°43′41″ W.; thence east to Point 3 in position 28°47′53″ N., 81°43′19″ W.; thence north to Point 4 in position 28°47′59″ N., 81°43′19″ W.; thence west back to origin.</td>
</tr>
<tr>
<td>27. 3rd Weekend of November</td>
<td>Tavares Fall Thunder Regatta</td>
<td>Classic Race Boat Association</td>
<td>Lake Dora, Florida, waters 500 yards seaward of Wooten Park.</td>
</tr>
<tr>
<td>29. 2nd Saturday of December</td>
<td>Christmas Boat Parade (Daytona Beach/Halifax River)</td>
<td>Halifax River Yacht Club</td>
<td>Daytona Beach, Florida; Halifax River from Seabreeze Bridge to Halifax Harbor Marina.</td>
</tr>
</tbody>
</table>

(f) COTP Zone Savannah; Special Local Regulations

TABLE TO § 100.701—Continued
<table>
<thead>
<tr>
<th>No./date</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3. Last weekend of September.</td>
<td>Ironman 70.3</td>
<td>Ironman</td>
<td>All waters of the Savannah River encompassed within the following points: Starting at Point 1 in position 33°28′44″ N., 81°57′53″ W.; thence northeast to Point 2 in position 33°28′50″ N., 81°57′50″ W.; thence southeast to Point 3 in position 33°27′51″ N., 81°55′36″ W.; thence southwest to Point 4 in position 33°27′47″ N., 81°55′43″ W.; thence northwest back to origin.</td>
</tr>
<tr>
<td>4. 1st Saturday after Thanksgiving Day in November.</td>
<td>Savannah Harbor Boat Parade of Lights and Fireworks.</td>
<td>Westin Resort, Savannah</td>
<td>Savannah River, Savannah Riverfront, Georgia; Thalmage bridge to a line drawn at 146 degrees true from Dayboard 62.</td>
</tr>
<tr>
<td>5. 2nd Saturday of November.</td>
<td>Head of the South Regatta.</td>
<td>Augusta Rowing Club</td>
<td>Savannah River, Augusta, Georgia; All waters within a moving zone, beginning at Daniel Island Pier in approximate position 32°51′20″ N., 079°54′06″ W., South along the coast of Daniel Island, across the Wando River to Hobcaw Yacht Club, in approximate position 32°49′20″ N., 079°53′49″ W., South along the coast of Mt. Pleasant, S.C., to Charleston Harbor Resort Marina, in approximate position 32°47′20″ N., 079°54′39″ W. There will be a temporary Channel Closer from 0730 to 0815 on June 01, 2013 between Wando River Terminal Buoy 3 (LLNR 3305), and Wando River Terminal Buoy 5 (LLNR 3315). The zone will at all times extend 75 yards in front of the lead safety vessel preceding the first race participants; 75 yards behind the safety vessel trailing the last race participants; and at all times extending 100 yards on either side of the race participants and safety vessels.</td>
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### (g) COTP Zone Charleston; Special Local Regulations

<table>
<thead>
<tr>
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<th>Location</th>
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</thead>
<tbody>
<tr>
<td>1. 2nd and 3rd weekend of April.</td>
<td>Charleston Race Week</td>
<td>Sperry Top-Sider</td>
<td>Charleston Harbor and Atlantic Ocean, South Carolina; All waters encompassed within an 800 yard radius of position 32°46′39″ N., 79°55′10″ W., All waters encompassed within a 900 yard radius of position 32°45′48″ N., 79°54′46″ W., All waters encompassed within a 900 yard radius of position 32°45′44″ N., 79°53′32″ W.</td>
</tr>
<tr>
<td>2. 1st week of May</td>
<td>Low Country Splash</td>
<td>Logan Rutledge</td>
<td>Wando River, Cooper River, Charleston Harbor, South Carolina, including the waters of the Wando River, Cooper River, and Charleston Harbor from Daniel Island Pier, in approximate position 32°51′20″ N., 079°54′06″ W., south along the coast of Daniel Island, across the Wando River to Hobcaw Yacht Club, in approximate position 32°49′20″ N., 079°53′49″ W., south along the coast of Mt. Pleasant, South Carolina, to Charleston Harbor Resort Marina, in approximate position 32°47′20″ N., 079°54′39″ W., and extending out 150 yards from shore.</td>
</tr>
<tr>
<td>3. 2nd week of June</td>
<td>Beaufort Water Festival</td>
<td>City of Beaufort</td>
<td>Atlantic Intracoastal Waterway, Buckspoint, South Carolina; All waters of the Atlantic Intracoastal Waterway encompassed within the following points; starting at point 1 in position 33°39′11.5″ N., 079°05′36.8″ W.; thence west to point 2 in position 33°39′12.2″ N., 079°05′47.8″ W.; thence south to point 3 in position 33°38′39.5″ N., 079°05′37.4″ W.; thence east to point 4 in position 33°38′42.3″ N., 079°05′30.6″ W.; thence north back to origin.</td>
</tr>
<tr>
<td>4. 3rd week of September</td>
<td>Swim Around Charleston</td>
<td>Kathleen Wilson</td>
<td>Wando River, main shipping channel of Charleston Harbor, Ashley River, Charleston, South Carolina; A moving zone around all waters within a 75-yard radius around Swim Around Charleston participant vessels that are officially associated with the swim. The Swim Around Charleston swimming race consists of a 10-mile course that starts at Remley’s Point on the Wando River in approximate position 32°48′49″ N., 79°54′27″ W., crosses the main shipping channel of Charleston Harbor, and finishes at the General William B. Westmoreland Bridge on the Ashley River in approximate position 32°50′14″ N., 80°01′23″ W.</td>
</tr>
<tr>
<td>5. 2nd week of November</td>
<td>Head of the South</td>
<td>Augusta Rowing Club</td>
<td>Upper Savannah River mile marker 199 to mile marker 196, Georgia.</td>
</tr>
</tbody>
</table>
DEPARTMENT OF HOMELAND SECURITY
Coast Guard
33 CFR Part 165
[Docket No. USCG–2016–0432]
Safety Zone; Southern California Annual Fireworks for the San Diego Captain of the Port Zone
AGENCY: Coast Guard, DHS.
ACTION: Notice of enforcement of regulation.
SUMMARY: The Coast Guard will enforce the regulations in 33 CFR 165.1123 for a safety zone for the Sea World Fireworks on the waters of Mission Bay, CA in 33 CFR 165.1123, Table 1, Item 7 of that section, from 8:30 p.m. through 10:30 p.m. on specific evenings from Memorial Day to Labor Day. This action is being taken to provide for the safety of life on navigable waterways during the fireworks events. Our regulation for southern California annual fireworks events for the San Diego Captain of the Port Zone identifies the regulated area for the events. Under the provisions of 33 CFR 165.1123, a vessel may not enter the regulated area, unless it receives permission from the Captain of the Port, or his designated representative. Spectator vessels may safely transit outside the regulated area but may not anchor, block, loiter, or impede the transit of participants or official patrol vessels. The Coast Guard may be assisted by other Federal, State, or Local law enforcement agencies in enforcing this regulation.

This document is issued under authority of 33 CFR 165.1123 and 5 U.S.C. 552(a). In addition to this document in the Federal Register, the Coast Guard will provide the maritime community with advance notification of this enforcement period via the Local Notice to Mariners and local advertising by the event sponsor. If the Captain of the Port or his designated representative determines that the regulated area need not be enforced for the full duration stated on this document, he or she may use a Broadcast Notice to Mariners or other communications coordinated with the event sponsor to grant general permission to enter the regulated area.


E.M. Cooper,
Commander, U.S. Coast Guard, Acting Captain of the Port San Diego.

SUPPLEMENTARY INFORMATION:

If you have questions on this rule, call or email MST1 Jennifer Haggins, Marine Safety Unit Pittsburgh, U.S. Coast Guard, at telephone 412–221–0807, email Jennifer.L.Haggins@uscg.mil.

DEPARTMENT OF HOMELAND SECURITY
Coast Guard
33 CFR Part 165
[Docket Number USCG–2016–0424]
RIN 1625–AA00
Safety Zone; Ohio River Mile 25.2 to Mile 25.6, Beaver, PA
AGENCY: Coast Guard, DHS.
ACTION: Temporary final rule.
SUMMARY: The Coast Guard is establishing a temporary safety zone for navigable waters of the Ohio River from mile 25.2–25.6. The safety zone is needed to protect personnel, vessels, and the marine environment from potential hazards created from a barge-based fireworks display. Entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port Pittsburgh.

DATES: This rule is effective on July 2, 2016 from 8:30 p.m. until 10:30 p.m.
ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to http://www.regulations.gov, type USCG–2016–0424 in the “SEARCH” box and click “SEARCH.” Click on Open Docket Folder on the line associated with this rule.

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call or email MST1 Jennifer Haggins, Marine Safety Unit Pittsburgh, U.S. Coast Guard, at telephone 412–221–0807, email Jennifer.L.Haggins@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations
CFR Code of Federal Regulations
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
§ Section

II. Background Information and Regulatory History
The Coast Guard is issuing this temporary rule without prior notice and opportunity to comment pursuant to authority under section 4(a) of the
Amendment rights of protestors. Executive orders, and we discuss First based on a number of these statutes and Executive orders related to rulemaking. 

COTP or a designated representative. Without obtaining permission from the permitted to enter the safety zone display. No vessel or person will be displayed. No vessel or person will be 

mile 25.2 to mile 25.6. The duration of July 2, 2016 from 8:30 p.m. until 10:30 

IV. Discussion of the Rule 

This rule establishes a safety zone on July 2, 2016 from 8:30 p.m. until 10:30 p.m. The safety zone will cover all navigable waters on the Ohio River from mile 25.2 to mile 25.6. The duration of the safety zone is intended to protect personnel, vessels, and the marine environment from potential hazards created from a barge-based fireworks display. 

IV. Discussion of the Rule 

This rule establishes a safety zone on July 2, 2016 from 8:30 p.m. until 10:30 p.m. The safety zone will cover all navigable waters on the Ohio River from mile 25.2 to mile 25.6. The duration of the safety zone is intended to protect personnel, vessels, and the marine environment from potential hazards created from a barge-based fireworks display. No vessel or person will be permitted to enter the safety zone without obtaining permission from the COTP or a designated representative. 

V. Regulatory Analyses 

We developed this rule after considering numerous statutes and Executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes and Executive orders, and we discuss First Amendment rights of protestors. 

A. Regulatory Planning and Review 

Executive Orders 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This rule has not been designated a “significant regulatory action,” under Executive Order 12866. Accordingly, it has not been reviewed by the Office of Management and Budget. This regulatory action determination is based on the size, location, and duration of the safety zone. This safety zone impacts a small portion of the waterway and for a limited duration of two hours. Vessel traffic will be informed about the safety zone through local notices to mariners. Moreover, the Coast Guard will issue broadcast notices to mariners via VHF-FM marine channel 16 about the zone and the rule allows vessels to seek permission to transit the zone. 

B. Impact on Small Entities 

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities. While some owners or operators of vessels intending to transit the safety zone may be small entities, for the reasons stated in section V.A above, this rule will not have a significant economic impact on any vessel owner or operator. 

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the FOR FURTHER INFORMATION CONTACT section.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency’s responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard. 

C. Collection of Information 

This rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). 

D. Federalism and Indian Tribal Governments 

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Also, this rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. If you believe this rule has implications for federalism or Indian tribes, please contact the person listed in the FOR FURTHER INFORMATION CONTACT section above. 

E. Unfunded Mandates Reform Act 

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such expenditure, we do discuss the effects of this rule elsewhere in this preamble. 

F. Environment 

We have analyzed this rule under Department of Homeland Security Management Directive 023–01 and
Commandant Instruction M16475.1D, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have determined that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This rule involves a safety zone lasting two hours that will prohibit entry on the Ohio River between mile 25.2 and mile 25.6, during the barge-based firework event. It is categorically excluded from further review under paragraph 34 (g) of Figure 2–1 of the Commandant Instruction. An environmental analysis checklist supporting this determination and a Categorical Exclusion Determination are available in the docket where indicated under ADDRESSES. We seek any comments or information that may lead to the discovery of a significant environmental impact from this rule.

G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the FOR FURTHER INFORMATION CONTACT section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places or vessels.

List of Subjects in 33 CFR Part 165

Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

§ 165.109. Safety zone, Ohio River, Beaver, PA.

This rule will be enforced, from 8:30 p.m. until 10:30 p.m. on July 2, 2016; and in the case of inclement weather enforcement will be from 5:30 p.m. to 1 a.m. on July 3, 2016.

FOR FURTHER INFORMATION CONTACT: If you have questions about this notice of enforcement, call or email Ensign Sarah Reid, U.S. Coast Guard Sector Hampton Roads (WWM); telephone 757–668–5582, email Sarah.C.Reid@uscg.mil.

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce the safety zone in 33 CFR 165.506 from 5:30 p.m. until 1 a.m. on July 2, 2016, for the Urbanna Creek, VA fireworks display. This action is being taken to provide for the safety of life on navigable waterways during this event. Our regulation for Recurring Marine Events within the Fifth Coast Guard District, § 165.506, specifies the location of the regulated area for this safety zone as a circular shaped area that includes all waters of Urbanna Creek within a 350 foot radius of the fireworks launch site at latitude 37°38′09″ N., longitude 076°34′03″ W., located on land near the east shoreline of Urbanna Creek and south of Bailey Point. As specified in § 165.506(d), during the enforcement period, no vessel may enter, remain in, or transit through the safety zone without approval from the Captain of the Hampton Roads (COTP) or a COTP designated representative. The Coast Guard may be assisted by other Federal, state or local law enforcement agencies in enforcing this regulation. If the Captain of the Port or his designated on-scene Patrol Commander determines that the regulated area need not be enforced for the full duration stated in this notice, he or she may use a Broadcast Notice to Mariners to grant general permission to enter the regulated area.

This notice of enforcement is issued under authority of 33 CFR 165.506(d) and 5 U.S.C. 552(a). In addition to this notice of enforcement in the Federal Register, the Coast Guard plans to provide notification of this enforcement period via the Local Notice to Mariners, marine information broadcasts, local radio stations and area newspapers.

Dated: May 24, 2016.

Christopher S. Keane,
Captain, U.S. Coast Guard, Captain of the Port, Hampton Roads, VA.

BILLING CODE 9110–04–P
ENVIRONMENTAL PROTECTION AGENCY

RIN 2060–AS94

National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking direct final action to amend the National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production (Secondary Aluminum NESHAP). This direct final rule amends the final rule that was published in the Federal Register on September 18, 2015, by correcting inadvertent errors, clarifying rule requirements for initial performance tests and submittal of malfunction reports, providing an additional option for new round top furnaces to account for unmeasured emissions during compliance testing, and clarifying what constitutes a change in furnace operating mode. The direct final rule also updates Web site addresses for the EPA’s Electronic Reporting Tool (ERT) and the Compliance and Emissions Data Reporting Interface (CEDRI). These amendments will help to improve compliance and implementation of the rule.

DATES: This rule is effective on September 12, 2016 without further notice, unless the EPA receives adverse comment by July 28, 2016. If the EPA receives adverse comment, we will publish a timely withdrawal in the Federal Register informing the public that some or all of this direct final rule will not take effect. Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by June 20, 2016 we will hold a public hearing on June 28, 2016 on the EPA campus at 109 T.W. Alexander Drive, Research Triangle Park, North Carolina.

ADDRESSES: Comments. Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2010–0544, at http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Ms. Rochelle Boyd, Sector Policies and Programs Division (D243–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–1390; fax number: (919) 541–3207; and email address: boyd.rochelle@epa.gov.

SUPPLEMENTARY INFORMATION:

Organization of This Document. The information in this preamble is organized as follows:

I. General Information
A. Why is the EPA publishing a direct final rule?
B. Does this direct final rule apply to me?
C. What should I consider as I prepare my comments for the EPA?

II. What are the amendments made by this direct final rule?

III. Statutory and Executive Order Reviews
A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
B. Paperwork Reduction Act (PRA)
C. Regulatory Flexibility Act (RFA)
D. Unfunded Mandates Reform Act (UMRA)
E. Executive Order 13132: Federalism
F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
H. Executive Order 12898: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
I. National Technology Transfer and Advancement Act (NTTAA)
J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations
K. Congressional Review Act (CRA)

I. General Information
A. Why is the EPA publishing a direct final rule?

The EPA is publishing this direct final rule without a prior proposed rule because we view this as a noncontroversial action and anticipate no adverse comment. However, in the “Proposed Rules” section of this Federal Register, we are publishing a separate document that will serve as the proposed rule to amend the Secondary Aluminum NESHAP. If adverse comments are received on this direct final rule, we will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. For further information about commenting on this rule, see the ADDRESSES section of this document.

If the EPA receives adverse comment on all or a distinct portion of this direct final rule, we will publish a timely withdrawal in the Federal Register informing the public that some or all of this direct final rule will not take effect. We would address all public comments in any subsequent final rule based on the proposed rule.

B. Does this direct final rule apply to me?

Categories and entities potentially regulated by this direct final rule include:

<table>
<thead>
<tr>
<th>Category</th>
<th>NAICS code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Aluminum Production Facilities.</td>
<td>331312</td>
</tr>
<tr>
<td>Secondary Aluminum Production Facilities.</td>
<td>331314</td>
</tr>
<tr>
<td>Aluminum Sheet, Plate, and Foil Manufacturing Facilities.</td>
<td>331315</td>
</tr>
<tr>
<td>Aluminum Extruded Product Manufacturing Facilities.</td>
<td>331316</td>
</tr>
<tr>
<td>Other Aluminum Rolling and Drawing Facilities.</td>
<td>331319</td>
</tr>
<tr>
<td>Aluminum Die Casting Facilities.</td>
<td>331521</td>
</tr>
<tr>
<td>Aluminum Foundry Facilities ...</td>
<td>331524</td>
</tr>
</tbody>
</table>

1 North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this direct final rule. To determine whether your facility is affected, you should examine the applicability criteria in 40 CFR 63.1500. If you have any questions regarding the applicability of any aspect of this action to a particular entity, consult either the air permitting authority for the entity or your EPA Regional representative as listed in 40 CFR 63.13.
C. What should I consider as I prepare my comments for the EPA?

Do not submit information containing CBI to the EPA through http://www.regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, a copy of the comments that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404–02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA–HQ–OAR–2010–0544.

II. What are the amendments made by this direct final rule?

This direct final rule amends the table in Appendix A titled “Appendix A to Subpart RRR of Part 63—General Provisions Applicability to Subpart RRR.” As published in the Federal Register on September 18, 2015, the table consisted of three columns labeled “Citation,” “Applies to RRR,” and “Comment.” The EPA had intended to include a fourth column labeled “Requirement,” but this column was inadvertently omitted from the September 18, 2015, publication in the Federal Register. We are revising the table by adding a column labeled “Requirement,” which contains a brief description of the cited General Provision and republishing the entire table with appropriate updated information and clarifications. This amendment will provide additional information to the public on the content of the General Provision citations.

In response to stakeholder feedback, this direct final rule also amends 40 CFR 63.1512(e)(5) to extend to new round top furnaces a compliance testing option to account for unmeasured emissions during compliance testing that is already available to uncontrolled group 1 furnaces. With this amendment, new round top furnaces will now have the option of assuming an 80-percent capture efficiency for the furnace exhaust during testing. We are adding 40 CFR 63.1516(b)(4) of the reporting requirements to clarify that malfunction reports required by 40 CFR 63.1516(d) must be submitted as part of the semiannual excess emissions/summary reports required by 40 CFR 63.1516(b). With respect to reconstructed sources, we are revising 40 CFR 63.1511(b) to clarify that under this provision reconstructed sources will be treated like new sources. In addition to correcting several minor typographical errors, we are correcting the inadvertent deletion of 40 CFR 63.1510(e)(1) and (2) from the regulatory text. These provisions relate to equipment accuracy and calibration and were previously codified when the Secondary Aluminum NESHAP was originally promulgated in 2000. The September 18, 2015, action mistakenly removed these provisions. This rulemaking replaces these provisions in the regulatory text to ensure that the regulated community has a clear understanding of the applicable compliance requirements.

III. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at http://www2.epa.gov/laws-regulations/laws-and-executive-orders.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulation (40 CFR part 63, subpart RRR), and has assigned OMB control number 2060–0433. This action does not change the information collection requirements.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action does not create any new requirements or burdens and no costs are associated with this direct final action.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments.

The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. There are no secondary aluminum production facilities owned or operated by tribal governments. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.
The EPA believes the human health or environmental risk addressed by this section will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income, or indigenous populations. This action does not affect the level of protection provided to human health or the environment. The final amendments are either clarifications or corrections of compliance alternatives that will neither increase or decrease environmental protection.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: May 27, 2016.

Gina McCarthy,
Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency is amending title 40, chapter I, part 63 of the Code of Federal Regulations (CFR) as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

§ 63.1501 Monitoring requirements.

The owner or operator of an existing affected source must submit the OM&M plan to the permitting authority for major sources, or the Administrator for area sources no later than the compliance date established by §63.1501. The owner or operator of any new affected source must submit the OM&M plan to the permitting authority for major sources, or the Administrator for area sources within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501 if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority for major sources, or the Administrator for area sources, unless and until the plan is revised in accordance with the following procedures. If the permitting authority for major sources, or the Administrator for area sources determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and re-submit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority for major sources, or the Administrator for area sources. Each plan must contain the following information:

(e) * * * * *

(1) The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

(b) Operation, maintenance, and monitoring (OM&M) plan. The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written OM&M plan. The owner or operator of an existing affected source must submit the OM&M plan to the permitting authority for major sources, or the Administrator for area sources no later than the compliance date established by §63.1501. The owner or operator of any new affected source must submit the OM&M plan to the permitting authority for major sources, or the Administrator for area sources within 90 days after a successful initial performance test under §63.1511(b), or within 90 days after the compliance date established by §63.1501 if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority for major sources, or the Administrator for area sources, unless and until the plan is revised in accordance with the following procedures. If the permitting authority for major sources, or the Administrator for area sources determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and re-submit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority for major sources, or the Administrator for area sources. Each plan must contain the following information:

(e) * * * * *

(1) The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

(2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

3. Section 63.1511 is amended by revising paragraph (b) introductory text and paragraph (i) heading to read as follows:

§ 63.1511 Performance test/compliance demonstration general requirements.

(b) Initial performance test. Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). The owner or operator of any affected source constructed before February 14, 2012, for which an initial performance test is required to demonstrate compliance must conduct this initial performance test no later than the date for compliance established by §63.1501. The owner or operator of any affected source constructed or reconstructed after February 14, 2012, for which an initial performance test is required must conduct this initial performance test within 180 days after the date for compliance established by §63.1501. Except for the date by which the performance test must be conducted, the owner or operator must conduct each performance test in accordance with the requirements and procedures set forth in §63.7(c). Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of §63.1505(b)(1) are not required to conduct a performance test.

(i) Testing of commonly-ducted units not within a secondary aluminum processing unit. * * * * *

4. Section 63.1512 is amended by revising paragraph (e)(4) introductory text, paragraph (e)(4)(v), and paragraph (e)(5) to read as follows:

§ 63.1512 Performance test/compliance demonstration requirements and procedures.

(e) * * * * *

(4) When testing an existing uncontrolled furnace, the owner or operator must comply with the requirements of either paragraphs...
(e)(4)(i), (ii), or (iii) of this section at the next required performance test required by § 63.1511(e).

(v) Round top furnaces constructed before February 14, 2012, and reconstructed round top furnaces are exempt from the requirements of paragraphs (e)(4)(i), (ii), and (iii) of this section. Round top furnaces must be operated to minimize unmeasured emissions according to paragraph (e)(7) of this section.

(5) When testing a new uncontrolled furnace, other than a new round top furnace, constructed after February 14, 2012, the owner or operator must comply with the requirements of paragraph (e)(5)(i) or (ii) of this section at the next required performance test required by § 63.1511(e). When testing a new round top furnace constructed after February 14, 2012, the owner or operator must comply with the requirements of either paragraphs (e)(5)(i), (ii), or (iii) of this section at the next required performance test required by § 63.1511(e).

(i) Install hooding that meets ACGIH Guidelines (incorporated by reference, see § 63.14), or

(ii) At least 180 days prior to testing, petition the permitting authority for major sources, or the Administrator for area sources, that such hoods are impractical under the provisions of paragraph (e)(6) of this section and propose testing procedures that will minimize unmeasured emissions during the performance test according to the paragraph (e)(7) of this section, or

(iii) Assume an 80-percent capture efficiency for the furnace exhaust (i.e., multiply emissions measured at the furnace exhaust outlet by 1.25). If the source fails to demonstrate compliance using the 80-percent capture efficiency assumption, the owner or operator must re-test with a hood that meets the ACGIH Guidelines within 180 days, or petition the permitting authority for major sources, or the Administrator for area sources, within 180 days that such hoods are impractical under the provisions of paragraph (e)(6) of this section and propose testing procedures that will minimize unmeasured emissions during the performance test according to paragraph (e)(7) of this section.

(iv) The 80-percent capture efficiency assumption is not applicable in the event of testing conducted under an approved petition submitted pursuant to paragraphs (e)(5)(ii) or (iii) of this section.

§ 63.1513 Equations for determining compliance.

5. Section 63.1513 is amended by revising paragraph (f)(2) to read as follows:

§ 63.1514 Change of furnace classification.

5. Section 63.1514 is amended by revising paragraphs (e) heading and (e)(1) to read as follows:

§ 63.1515 Notifications.

5. Section 63.1515 is amended by revising paragraph (b) introductory text to read as follows:

§ 63.1516 Reports.

5. Section 63.1516 is amended by revising paragraph (b)(3)(i)(A), adding paragraph (b)(4), and revising paragraph (d) to read as follows:

§ 63.1513 Equations for determining compliance.

5. Section 63.1514 is amended by revising paragraphs (e)(4)(i), (ii), or (iii) of this section at the next required performance test required by § 63.1511(e).

(f)(2) For periods of startup and shutdown, divide your measured emissions in lb/hr or µg/hr or ng/hr by the feed/charge rate in tons/hr or Mg/hr from your most recent performance test associated with a production rate greater than zero, or the rated capacity of the affected source if no prior performance test data are available.

6. Section 63.1514 is amended by revising paragraphs (e) heading and (e)(1) to read as follows:

§ 63.1514 Change of furnace classification.

5. Section 63.1514 is amended by revising paragraphs (e) heading and (e)(1) to read as follows:

§ 63.1515 Notifications.

5. Section 63.1514 is amended by revising paragraphs (e) heading and (e)(1) to read as follows:

§ 63.1516 Reports.

5. Section 63.1516 is amended by revising paragraph (b)(3)(i)(A), adding paragraph (b)(4), and revising paragraph (d) to read as follows:

§ 63.1516 Notifications.

5. Section 63.1516 is amended by revising paragraph (b)(3)(i)(A), adding paragraph (b)(4), and revising paragraph (d) to read as follows:

§ 63.1516 Reports.

5. Section 63.1516 is amended by revising paragraph (b)(3)(i)(A), adding paragraph (b)(4), and revising paragraph (d) to read as follows:

§ 63.1516 Reports.

5. Section 63.1516 is amended by revising paragraph (b)(3)(i)(A), adding paragraph (b)(4), and revising paragraph (d) to read as follows:

§ 63.1516 Reports.

5. Section 63.1516 is amended by revising paragraph (b)(3)(i)(A), adding paragraph (b)(4), and revising paragraph (d) to read as follows:
simultaneously with the semiannual excess emissions/summary report required by paragraph (b) of this section.

(d) If there was a malfunction during the reporting period, the owner or operator must submit a report that includes the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken for each malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must include a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions, including, but not limited to, product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1506(a)(5).

§ 63.1517 Records.

* * * * *

(b) * * *

(18) * * *

(ii) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

* * * * *

9. Section 63.1517 is amended by revising paragraph (b)(18)(ii) to read as follows:

* * * * *

10. Table 1 to Subpart RRR of part 63 is revised to read as follows:

BILLING CODE 6560–50–P
Table 1 to Subpart RRR of Part 63—Emission Standards for New and Existing Affected Sources

<table>
<thead>
<tr>
<th>Affected source/ Emission unit</th>
<th>Pollutant</th>
<th>Limit</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>All new and existing affected sources and emission units that are controlled with a PM add-on control device and that choose to monitor with a continuous opacity monitor (COM); and all new and existing aluminum scrap shredders that choose to monitor with a COM or to monitor visible emissions</td>
<td>Opacity</td>
<td>10</td>
<td>percent</td>
</tr>
<tr>
<td>New and existing aluminum scrap shredder</td>
<td>PM</td>
<td>0.01</td>
<td>gr/dscf</td>
</tr>
<tr>
<td>New and existing thermal chip dryer</td>
<td>THC</td>
<td>0.80</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>D/F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.50</td>
<td>µg TEQ/Mg of feed</td>
</tr>
<tr>
<td>New and existing scrap dryer/delacquering kiln/decoating kiln</td>
<td>PM</td>
<td>0.08</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>HCl</td>
<td>0.80</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>THC</td>
<td>0.06</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>D/F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.25</td>
<td>µg TEQ/Mg of feed</td>
</tr>
<tr>
<td>Or</td>
<td>PM</td>
<td>0.30</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>HCl</td>
<td>1.50</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>THC</td>
<td>0.20</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>D/F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.0</td>
<td>µg TEQ/Mg of feed</td>
</tr>
<tr>
<td>New and existing sweat furnace</td>
<td>D/F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.80</td>
<td>ng TEQ/dscm</td>
</tr>
<tr>
<td></td>
<td>11% O&lt;sub&gt;2&lt;/sub&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New and existing dross-only furnace</td>
<td>PM</td>
<td>0.30</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td>New and existing in-line fluxer&lt;sup&gt;c&lt;/sup&gt;</td>
<td>HCl</td>
<td>0.04</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>0.01</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td>New and existing in-line fluxer with no reactive fluxing</td>
<td>No Limit</td>
<td>Work practice: no reactive fluxing</td>
<td></td>
</tr>
<tr>
<td>New and existing rotary dross cooler</td>
<td>PM</td>
<td>0.04</td>
<td>gr/dscf</td>
</tr>
<tr>
<td>New and existing clean furnace (Group 2)</td>
<td>No Limit</td>
<td>Work practices: clean charge only and no reactive fluxing</td>
<td></td>
</tr>
<tr>
<td>New and existing group 1 melting/holding furnace (processing only clean charge)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>PM</td>
<td>0.80</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>H&lt;sub&gt;F&lt;/sub&gt;</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>HCl</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>10</td>
<td>percent of the HCl upstream of the add-on control device</td>
</tr>
<tr>
<td>New and existing group 1 furnace&lt;sup&gt;c&lt;/sup&gt;</td>
<td>PM</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>H&lt;sub&gt;F&lt;/sub&gt;</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>HCl</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td>Affected source/ Emission unit</td>
<td>Pollutant</td>
<td>Limit</td>
<td>Units</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>New and existing group 1 furnace with clean charge only&lt;sup&gt;a&lt;/sup&gt;</td>
<td>D/F&lt;sup&gt;b&lt;/sup&gt;</td>
<td>15.0</td>
<td>µg TEQ/Mg of feed</td>
</tr>
<tr>
<td>New and existing secondary aluminum processing unit&lt;sup&gt;c,d&lt;/sup&gt; (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or any combination of new group 1 furnaces and new in-line fluxers)</td>
<td>PM</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>HF&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>HCl</td>
<td>0.40</td>
<td>lb/ton of feed</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>10</td>
<td>percent of the HCl upstream of an add-on control device</td>
</tr>
<tr>
<td></td>
<td>D/F&lt;sup&gt;b&lt;/sup&gt;</td>
<td>No Limit</td>
<td>Clean charge only</td>
</tr>
</tbody>
</table>

**Equation definitions:**

- $L_{i,PM} = \frac{\sum_{i=1}^{n} (L_{i,PM} \times T_i)}{\sum_{i=1}^{n} (T_i)}$ (Eq. 1)
- $L_{i,HCl/HF} = \frac{\sum_{i=1}^{n} (L_{i,HCl/HF} \times T_i)}{\sum_{i=1}^{n} (T_i)}$ (Eq. 2)
- $L_{i,D/F} = \frac{\sum_{i=1}^{n} (L_{i,D/F} \times T_i)}{\sum_{i=1}^{n} (T_i)}$ (Eq. 3)

<sup>a</sup> D/F limit applies to a unit at a major or area source.

<sup>b</sup> Sweat furnaces equipped with afterburners meeting the specifications of § 63.1505(f)(1) are not required to conduct a performance test.

<sup>c</sup> These limits are also used to calculate the limits applicable to secondary aluminum processing units.

<sup>d</sup> In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

<sup>e</sup> In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl and HF limit. Controlled group 1 furnaces cannot be included in the HF emissions calculation because they are not subject to HF limits.

<sup>f</sup> Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

<sup>g</sup> HF limits apply only to uncontrolled group 1 furnaces.
11. Table 2 to Subpart RRR of part 63 is amended by revising the entry “Group 1 furnace without add-on air pollution controls (including those that are part of a secondary aluminum processing unit)” to read as follows:

<table>
<thead>
<tr>
<th>Affected source/emission unit</th>
<th>Monitor type/operation/process</th>
<th>Operating requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 furnace without add-on air pollution controls (including those that are part of a secondary aluminum processing unit).</td>
<td>Reactive flux injection rate ..........</td>
<td>Maintain the total reactive chlorine flux injection rate and total reactive fluorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.</td>
</tr>
</tbody>
</table>

12. Table 3 to Subpart RRR of part 63 is amended by:

a. Revising the entry “In-line fluxer with lime-injected fabric filter;”

b. Revising the entry “Group 1 furnace with lime-injected fabric filter;” and

c. Revising footnote d to Table 3.

The revisions read as follows:

<table>
<thead>
<tr>
<th>Affected source/emission unit</th>
<th>Monitor type/operation/process</th>
<th>Operating requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-line fluxer with lime-injected fabric filter.</td>
<td>Bag leak detector or ....................</td>
<td>Install and operate in accordance with manufacturer’s operating instructions.</td>
</tr>
<tr>
<td></td>
<td>COM ............................................</td>
<td>Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.</td>
</tr>
<tr>
<td></td>
<td>Reactive flux injection rate ..........</td>
<td>Weight measurement device accuracy of ±1%; calibrate according to manufacturer’s specifications or at least once every 6 months; record time, weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive chlorine flux injection rate and the total reactive fluorine flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per §63.1510(j)(5). For solid flux added intermittently, record the amount added for each operating cycle or time period used in the performance test.</td>
</tr>
<tr>
<td>Group 1 furnace with lime-injected fabric filter.</td>
<td>Bag leak detector or ....................</td>
<td>Install and operate in accordance with manufacturer’s operating instructions.</td>
</tr>
<tr>
<td></td>
<td>COM ............................................</td>
<td>Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.</td>
</tr>
<tr>
<td></td>
<td>Lime injection rate .......................</td>
<td>For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hours to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. Verify monthly that the lime injection rate is no less than 90 percent of the rate used during the compliance demonstration test.</td>
</tr>
<tr>
<td></td>
<td>Reactive flux injection rate ..........</td>
<td>Weight measurement device accuracy of ±1%; calibrate every 3 months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive chlorine flux injection rate and the total reactive fluorine flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per §63.1510(j)(5). For solid flux added intermittently, record the amount added for each operating cycle or time period used in the performance test.</td>
</tr>
</tbody>
</table>

b Permitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive; or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.
The frequency of volumetric flow rate measurements may be decreased to once every 5 years if daily differential pressure measures, daily fan RPM, or daily fan motor amp measurements are made in accordance with §63.1510(d)(iii). The frequency of annual verification of a permanent total enclosure may be decreased to once every 5 years if negative pressure measurements in the enclosure are made daily in accordance with §63.1510(d)(iv). In lieu of volumetric flow rate measurements or verification of permanent total enclosure, sweat furnaces may demonstrate annually negative air flow into the sweat furnace opening in accordance with §63.1510(d)(3).

### APPENDIX A TO SUBPART RRR OF PART 63—GENERAL PROVISIONS

**Citation**

<p>| §63.1(a)(1)–(4) | General Applicability | Yes. | Applies to RRR | Comment |
| §63.1(a)(5) | | No | [Reserved]. |
| §63.1(a)(6) | | Yes. | [Reserved]. |
| §63.1(a)(7)–(9) | | No | [Reserved]. |
| §63.1(a)(10)–(12) | | Yes. | [Reserved]. |
| §63.1(b) | Initial Applicability Determination | Yes | EPA retains approval authority. |
| §63.1(c)(1) | Applicability After Standard Established | Yes |
| §63.1(c)(2) | | Yes | §63.1500(e) exempts area sources subject to this subpart from the obligation to obtain Title V operating permits. |
| §63.1(c)(3)–(4) | | No | [Reserved]. |
| §63.1(c)(5) | | Yes. |
| §63.1(c)(6) | | No | [Reserved]. |
| §63.1(e) | Applicability of Permit Program | Yes |
| §63.2 | Definitions | Yes | Additional definitions in §63.1503. |
| §63.3 | Units and Abbreviations | Yes |
| §63.4(a)(1)–(2) | Prohibited Activities | Yes. |
| §63.4(a)(3)–(5) | | No | [Reserved]. |
| §63.4(b) | | Yes. |
| §63.4(c) | Fragmentation | Yes |
| §63.4(a) | | Yes |
| §63.5(a) | Applicability of Preconstruction Review and Notification | Yes. |
| §63.5(b)(1) | Requirements for Existing, Newly Constructed Sources and Reconstructed Sources | Yes |
| §63.5(b)(2) | | No | [Reserved]. |
| §63.5(b)(3)–(4) | | Yes. |
| §63.5(b)(5) | | No | [Reserved]. |
| §63.5(b)(6) | | Yes. |
| §63.5(c) | Application for Approval of Construction or Reconstruction | Yes |
| §63.5(d) | Approval of Construction or Reconstruction | Yes. |
| §63.5(e) | Approval of Construction or Reconstruction Based on Prior State Preconstruction Review | Yes |
| §63.5(f) | | Yes. |
| §63.6(a) | Applicability for Compliance with Standards and Maintenance Requirements | Yes |
| §63.6(b)(1)–(5) | Compliance Dates for New and Reconstructed Sources | Yes | §63.1501 specifies dates. |
| §63.6(b)(6) | | No | [Reserved]. |
| §63.6(b)(7) | | Yes. |
| §63.6(c)(1) | Compliance Dates for Existing Sources | Yes | §63.1501 specifies dates. |
| §63.6(c)(2) | | Yes. |
| §63.6(c)(3)–(4) | | No | [Reserved]. |
| §63.6(c)(5) | | Yes. |
| §63.6(d) | Operation and Maintenance Requirements | No |
| §63.6(e)(1)(i) | | | See §63.1506(a)(5) for general duty requirement. Any other cross reference to §63.6(e)(1)(i) in any other general provision referenced shall be treated as a cross reference to §63.1506(a)(5). |</p>
<table>
<thead>
<tr>
<th>Citation</th>
<th>Requirement</th>
<th>Applies to RRR</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.6(e)(1)(ii)</td>
<td>Applicability for Monitoring Requirements</td>
<td>No.</td>
<td>[Reserved].</td>
</tr>
<tr>
<td>§ 63.6(e)(2)</td>
<td>Quality Assurance Program</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(e)(3)</td>
<td>Performance Testing Facilities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(f)(1)</td>
<td>Startup, Shutdown, and Malfunction Plan</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(f)(2)</td>
<td>Compliance with Nonopacity Emission Standards</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(g)</td>
<td>Use of an Alternative Nonopacity Emission Standard</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(h)(1)</td>
<td>Applicability for Compliance with Opacity and Visible Emission Standards</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(h)(2)</td>
<td>Methods for Determining Compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(h)(3)</td>
<td>Application and Performance Test Dates</td>
<td>No. [Reserved].</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(h)(4)–(9)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(i)(1)–(14)</td>
<td>Extension of Compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(i)(15)</td>
<td></td>
<td>No. [Reserved].</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(i)(16)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.6(j)</td>
<td>Exemption from Compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(a)</td>
<td>Applicability and Performance Test Dates</td>
<td>Yes.</td>
<td>Except § 63.1511 establishes dates for initial performance tests.</td>
</tr>
<tr>
<td>§ 63.7(b)</td>
<td>Notification of Performance Test Dates</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(c)</td>
<td>Quality Assurance Program</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(d)</td>
<td>Performance Testing Facilities</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(e)(1)</td>
<td>Conduct of Performance Tests</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(e)(2)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(e)(3)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(f)</td>
<td>Use of an Alternative Test Method</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(g)(1)–(3)</td>
<td>Data Analysis, Recordkeeping, and Reporting</td>
<td>Yes.</td>
<td>Except for § 63.7(g)(2), which is reserved.</td>
</tr>
<tr>
<td>§ 63.7(h)(1)–(5)</td>
<td>Waiver of Performance Tests</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.7(i)(1)–(14)</td>
<td>Extension of Compliance</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(a)(1)</td>
<td>Applicability and Performance Test Dates</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(a)(2)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(a)(3)</td>
<td></td>
<td>Yes. [Reserved].</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(a)(4)</td>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(b)</td>
<td>Conduct of Monitoring</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(1)(i)</td>
<td>Operation and Maintenance of Continuous Monitoring Systems (CMS)</td>
<td>No.</td>
<td>See § 63.1506(a)(5) for general duty requirement.</td>
</tr>
<tr>
<td>§ 63.8(c)(1)(ii)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(1)(iii)</td>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(c)(2)–(8)</td>
<td>Quality Control Program</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(d)(1)–(2)</td>
<td></td>
<td>Yes. except for last sentence, which refers to an SSM plan. SSM plans are not required.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(d)(3)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(e)</td>
<td>Performance Evaluation of CMS System</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(f)(1)–(5)</td>
<td>Use of an Alternative Monitoring Method</td>
<td>No.</td>
<td>§ 63.1501(w) includes provisions for monitoring alternatives.</td>
</tr>
<tr>
<td>§ 63.8(f)(6)</td>
<td>Alternative to the Relative Accuracy Test</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(g)(1)</td>
<td>Reduction of Monitoring Data</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(g)(2)</td>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§ 63.8(g)(3)–(5)</td>
<td></td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(a)</td>
<td>Applicability and General Information for Notification Requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(b)(1)–(5)</td>
<td>Initial Notifications</td>
<td>Yes.</td>
<td>Except § 63.9(b)(3) is reserved.</td>
</tr>
<tr>
<td>§ 63.9(c)</td>
<td>Request for Compliance Extension</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(d)</td>
<td>Notification that Source is Subject to Special Compliance Requirements</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(e)</td>
<td>Notification of Performance Test Dates</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(f)</td>
<td>Notification ofOpacity and Visible Emission Observations</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§ 63.9(g)</td>
<td>Additional Notification Requirement for Sources with CMS</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>Citation</td>
<td>Requirement</td>
<td>Applies to RRR</td>
<td>Comment</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>----------------</td>
<td>---------</td>
</tr>
<tr>
<td>§63.9(h)(1)–(3)</td>
<td>Notification of Compliance Status</td>
<td>Yes</td>
<td>§63.1515 establishes dates notification of compliance status reports.</td>
</tr>
<tr>
<td>§63.9(h)(4)</td>
<td>Adjustment of Deadlines for Required Communication.</td>
<td>No</td>
<td>[Reserved].</td>
</tr>
<tr>
<td>§63.9(h)(5)–(6)</td>
<td>Change in Information Already Provided.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Applicability and General Information for Recordkeeping and Reporting Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>General Recordkeeping Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Recordkeeping Requirement for Applicability Determinations.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>General Reporting Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(i), (ii), (iv), (v)</td>
<td>Reporting Results of Performance Tests.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(2)(iii), (vi)–(xiv)</td>
<td>Reporting Results of Opacity or Visible Emission Observations.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Additional Recordkeeping Requirements for Sources with CMS.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(2)–(4)</td>
<td>Reporting Results of Performance Tests.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(5)</td>
<td>Progress Reports.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(6)</td>
<td>Periodic Startup, Shutdown, and Malfunction Reports.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(7)–(8)</td>
<td>Additional Reporting Requirements for Sources with CMS.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(9)</td>
<td>Excess Emissions and CMS Performance Report and Summary Report.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(10)–(13)</td>
<td>Continuous Opacity Monitoring System (COMS) Data Produced During a Performance Test.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(c)(14)</td>
<td>Waiver of Recordkeeping or Reporting Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>Control Device and Work Practice Requirements.</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>General Reporting Requirements.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.11(a)–(c)</td>
<td>State Authority and Delegations.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.12(a)–(c)</td>
<td>Incorporations by Reference.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.13</td>
<td>Availability of Information and Confidentiality.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>§63.14</td>
<td>Performance Track Provisions.</td>
<td>No.</td>
<td></td>
</tr>
</tbody>
</table>

ACGIH Guidelines, ASTM D7520–13, and Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update.
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

Alcohols, C>14, Ethoxylated; Exemption From the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation amends an exemption from the requirement of a tolerance for residues of α-alkyl-ω-hydroxypropyloxypolyoxyethylene and/or or polyoxyethylene polymers where the alkyl chain contains a minimum of six carbons, and α-alkyl-ω-hydroxypropyloxypolyoxyethylene and/or polyoxyethylene polymers where the alkyl chain contains a minimum of six carbons and a minimum number average molecular weight of 1,100 (herein referred to as “AAAs” (alkyl alcohol alkoxylates)) to include alcohols, C14-16, ethoxylated, Chemical Abstract Service Registry Number (CAS Reg. No.) 251553–55–6 when used as an inert ingredient (surfactant) in pesticide formulations. Baker Petrolite LLC submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act (FFDCA), requesting an amendment to the regulation eliminating the need to require a tolerance. This regulation amends an exemption from the requirement of a tolerance for residues of a group of substances known as AAAs. The exemptions narratively describe the subject chemical as alcohols, C14-16, ethoxylated.

DATES: This regulation is effective June 13, 2016. Objections and requests for hearings must be received on or before August 12, 2016, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the SUPPLEMENTARY INFORMATION).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2015–0858, is available at http://www.regulations.gov or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Blvdg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at http://www.epa.gov/dockets.

FOR FURTHER INFORMATION CONTACT: Susan Lewis, Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7000; email address: RDFRNotices@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111110).
- Animal production (NAICS code 112110).
- Food manufacturing (NAICS code 311610).
- Pesticide manufacturing (NAICS code 32532).

B. How can I get electronic access to other related information?


C. How can I file an objection or hearing request?

Under FFDCA section 408(g), 21 U.S.C. 346a, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA–HQ–OPP–2015–0858 in the subject line on the first page of your submission. All objections and requests for a hearing must be in writing, and must be received by the Hearing Clerk on or before August 12, 2016. Addresses for mail and hand delivery of objections and hearing requests are provided in 40 CFR 178.25(b).

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing (excluding any Confidential Business Information (CBI)) for inclusion in the public docket. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit the non-CBI copy of your objection or hearing request, identified by docket ID number EPA–HQ–OPP–2015–0858, by one of the following methods:

- Federal eRulemaking Portal: http://www.regulations.gov. Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.
- Hand Delivery: To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at http://www.epa.gov/dockets/contacts.html. Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at http://www.epa.gov/dockets.

II. Petition for Exemption

In the Federal Register of August 5, 2009 (74 FR 38935) (FRL–8430–1), EPA issued a document pursuant to FFDCA section 408, 21 U.S.C. 346a, announcing the filing of a pesticide petition (PP 9E7534) by The Joint Inerts Task Force (JITF), Cluster Support Team Number 1 (CST1), c/o CropLife America, 1156 15th Street NW., Suite 400, Washington, DC 20005. The petition requested that 40 CFR 180.910, 40 CFR 180.930, 40 CFR 180.940(a), and 40 CFR 180.960 be amended by establishing exemptions from the requirement of a tolerance for residues of a group of substances known as AAAs. The exemptions narratively describe the subject chemical as α-alkyl-ω-hydroxypropyloxypolyoxyethylene and/or polyoxyethylene polymers where the alkyl chain contains a minimum of six carbons and specify the individual chemicals covered by the exemptions by a listing of CAS Reg. Nos. The current petition seeks to expand these exemptions by adding an additional chemical, alcohols, C14-16, ethoxylated, identified by CAS Reg. No. 251553–55–6.

In the Federal Register of March 16, 2016 (81 FR 14032) (FRL–9942–86), EPA issued a notice pursuant to section 408 of FFDCA, 21 U.S.C. 346a, announcing the filing of a pesticide petition (NN–10862) by Baker Petrolite LLC (12645 W. Airport Blvd., Sugar Land, TX 77478). The petition requested
that 40 CFR 180.910, 180.930, 180.940(a), and 180.960 be amended by modifying the exemption from the requirement of a tolerance for residues of AAAs by adding residues of alcohols, C<sub>14</sub>-ethoxylated which meets the chemical identity α-alcohol-α-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons. In cases where the minimum number average molecular weight is 1,100 or more, the request is to include the alcohols, C<sub>14</sub>-ethoxylated under 40 CFR 180.960. For lower the molecular weights the request is to amend the existing exemption from the requirement of a tolerance under 40 CFR 180.910, 180.930, and 180.940(a).

Based upon review of the data supporting the petition, EPA has confirmed that the requested CAS Reg. No. is acceptable for consideration under the currently approved descriptor. This determination is based on the Agency’s risk assessment which can be found at http://www.regulations.gov in document ‘IN–10544. Requesting to Amend the Exemption from the Requirement of a Tolerance for α-alcohol-κ-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons, and α-alcohol- κ-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons and a minimum number average molecular weight (in amu) 1,100, under 40 CFR 180.910, 180.930, 180.940(a) or 180.960.”’ in docket ID number EPA–HQ–OPP–2013–2010.

III. Inert Ingredient Definition

Inert ingredients are all ingredients that are not active ingredients as defined in 40 CFR 153.125 and include, but are not limited to, the following types of ingredients (except when they have a pesticidal efficiency of their own): Solvents such as alcohols and hydrocarbons; surfactants such as polyoxyethylene polymers and fatty acids; carriers such as clay and diatomaceous earth; thickeners such as carrageenan and modified cellulose; wetting, spreading, and dispersing agents; propellants in aerosol dispensers; microencapsulating agents; and emulsifiers. The term “inert” is not intended to imply nontoxicity; the ingredient may or may not be chemically active. Generally, EPA has exempted inert ingredients from the requirement of a tolerance based on the low toxicity of the individual inert ingredients.

IV. Aggregate Risk Assessment and Determination of Safety

Section 408(c)(2)(A)(i) of FFDCA allows EPA to establish an exemption from the requirement for a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is “safe.” Section 408(b)(2)(A)(ii) of FFDCA defines “safe” to mean that “there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.” This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Section 408(b)(2)(C) of FFDCA requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to “ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue...”

EPA establishes exemptions from the requirement of a tolerance only in those cases where it can be clearly demonstrated that the risks from aggregate exposure to pesticide chemical residues under reasonably foreseeable circumstances will pose no appreciable risks to human health. In order to determine the risks from aggregate exposure to pesticide inert ingredients, the Agency considers the toxicity of the inert in conjunction with possible exposure to residues of the inert ingredient through food, drinking water, and through other exposures that occur as a result of pesticide use in residential settings. If EPA is able to determine that a finite tolerance is not necessary to ensure that there is a reasonable certainty that no harm will result from aggregate exposure to the inert ingredient, an exemption from the requirement of a tolerance may be established.

Consistent with FFDCA section 408(c)(2)(A), and the factors specified in FFDCA section 408(c)(2)(B), EPA has reviewed the available scientific data and other relevant information in support of this action. EPA has sufficient data to assess the hazards of and to make a determination on aggregate exposure for AAAs including exposure resulting from the exemption established by this action. EPA’s assessment of exposures and risks associated with AAAs follows.

The Agency agrees with the petitioner that alcohols, C<sub>14</sub>, ethoxylated, CAS Reg. No. 251553–55–6, is an AAA having a molecular structure conforming to the chemical description given in the tolerance exemption expression, i.e., α-alkyl-α-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons and which do not contain additional structural elements that are not included within the tolerance exemption expression description. In 2009, in establishing the exemption for the AAAs, EPA assessed their safety generally using worst case exposure assumptions. (August 5, 2009 (74 FR 38935)). EPA concluded that that assessment showed that exempting the AAAs from the requirement for a tolerance would be safe. Inclusion of additional chemicals described above in the risk assessment for the AAAs would in no way alter that prior risk assessment given the generic findings on toxicity and the worst case exposure assumptions used in that risk assessment. Accordingly, based on the findings in that earlier rule, EPA has determined that there is a reasonable certainty that no harm to any population subgroup, including infants and children, will result from aggregate exposure to AAAs, by including the additional chemicals described above, under reasonably foreseeable circumstances. Therefore, the amendment of an exemption from the requirement of a tolerance under 40 CFR 180.910, 180.930, 180.940(a), and 180.960, for residues of AAAs to include the chemical described above is safe under FFDCA section 408.

V. Other Considerations

A. Analytical Enforcement Methodology

An analytical method is not required for enforcement purposes since the Agency is establishing an exemption from the requirement of a tolerance without any numerical limitation.

B. International Residue Limits

In making its tolerance decisions, EPA seeks to harmonize U.S. tolerances with international standards whenever possible, consistent with U.S. food safety standards-setting and agricultural practices. EPA considers the international maximum residue limits (MRLs) established by the Codex Alimentarius Commission (Codex), as required by FFDCA section 408(b)(4). The Codex Alimentarius is a joint United Nations Food and Agriculture Organization/World Health Organization food standards-setting organization in trade agreements to
which the United States is a party. EPA may establish a tolerance that is different from a Codex MRL; however, FFDCA section 408(b)(4) requires that EPA explain the reasons for departing from the Codex level. The Codex not established a MRL for AAAs.

C. Response to Comments

No comments have been received.

VI. Conclusions

Therefore, the exemptions from the requirement of a tolerance under 40 CFR 180.910, 180.930, 180.940(a), and 180.960 for α-alkyl-α-hydroxypropyloxypoly(oxypropylene) and/or poly(oxyethylene) polymers when used as an inert ingredient as a surfactant in pesticide formulations applied to growing crops, animals, or food contact surfaces are amended to add the CAS Reg. No. 251553–55–6 to the description of AAAs.

VII. Statutory and Executive Order Reviews

This final rule establishes a tolerance under section 408(d) of FFDCA in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled Regulatory Planning and Review (58 FR 51735, October 4, 1993). Because this final rule has been exempted from review under Executive Order 12866, this final rule is not subject to Executive Order 13211, entitled Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997). This final rule does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 et seq., nor does it require any special considerations under Executive Order 12898, entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, February 16, 1994).

Since tolerances and exemptions that are established on the basis of a petition under section 408(d) of FFDCA, such as the tolerance in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 et seq.) do not apply. This final rule directly regulates growers, food processors, food handlers, and food retailers, not States or tribes, nor does this action alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of section 408(n)(4) of FFDCA. As such, the Agency has determined that this action will not have a substantial direct effect on States or tribal governments, on the relationship between the national government and the States or tribal governments, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian tribes. Thus, the Agency has determined that Executive Order 13132, entitled Federalism (64 FR 43255, August 10, 1999) and Executive Order 13175, entitled Consultation and Coordination with Indian Tribal Governments (65 FR 67249, November 9, 2000) do not apply to this final rule. In addition, this final rule does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Pub. L. 104–4). This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272 note).

VIII. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801 et seq.), EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pesticidal preparations, Tolerances.
38099

Federal Register / Vol. 81, No. 113 / Monday, June 13, 2016 / Rules and Regulations
Inert ingredients

Limits

Uses

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a-alkyl-w-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains
a minimum of six carbons (CAS Reg. Nos.: 9002–92–0; 9004–95–9; 9004–98–2; 9005–00–9; 9035–
85–2; 9038–29–3; 9038–43–1; 9040–05–5; 9043–30–5; 9087–53–0; 25190–05–0; 24938–91–8;
25231–21–4; 251553–55–6; 26183–52–8; 26468–86–0; 26636–39–5; 27252–75–1; 27306–79–2;
31726–34–8; 34398–01–1; 34398–05–5; 37251–67–5; 37311–00–5; 37311–01–6; 37311–02–7;
37311–04–9; 39587–22–9; 50861–66–0; 52232–09–4; 52292–17–8; 52609–19–5; 57679–21–7;
59112–62–8; 60828–78–6; 61702–78–1; 61725–89–1; 61791–13–7; 61791–20–6; 61791–28–4;
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64366–70–7; 64415–24–3; 64415–25–4; 64425–86–1; 65104–72–5; 65150–81–4; 66455–14–9:
66455–15–0; 67254–71–1; 67763–08–0; 68002–96–0; 68002–97–1; 68131–39–5; 68131–40–8;
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69011–36–5; 69013–18–9; 69013–19–0; 69227–20–9; 69227–21–0; 69227–22–1; 69364–63–2;
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74499–34–6; 78330–19–5; 78330–20–8; 78330–21–9; 78330–23–1; 79771–03–2; 84133–50–6;
85422–93–1; 97043–91–9; 97953–22–5; 102782–43–4; 103331–86–8; 103657–84–7; 103657–85–8;
103818–93–5; 103819–03–0; 106232–83–1; 111905–54–5; 116810–31–2; 116810–32–3; 116810–
33–4; 120313–48–6; 120944–68–5; 121617–09–2; 126646–02–4; 126950–62–7; 127036–24–2;
139626–71–4; 152231–44–2; 154518–36–2; 157627–86–6; 157627–88–8; 157707–41–0; 157707–
43–2; 159653–49–3; 160875–66–1; 160901–20–2; 160901–09–7; 160901–19–9; 161025–21–4;
161025–22–5; 166736–08–9; 169107–21–5; 172588–43–1; 176022–76–7; 196823–11–7; 287935–
46–0; 288260–45–7; 303176–75–2; 954108–36–2)

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Surfactants, related adjuvants of surfactants.

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Inert ingredients

Limits

Uses

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25231–21–4; 251553–55–6; 26183–52–8; 26468–86–0; 26636–39–5; 27252–75–1; 27306–79–2;
31726–34–8; 34398–01–1; 34398–05–5; 37251–67–5; 37311–00–5; 37311–01–6; 37311–02–7;
37311–04–9; 39587–22–9; 50861–66–0; 52232–09–4; 52292–17–8; 52609–19–5; 57679–21–7;
59112–62–8; 60828–78–6; 61702–78–1; 61725–89–1; 61791–13–7; 61791–20–6; 61791–28–4;
61804–34–0; 61827–42–7; 61827–84–7; 62648–50–4; 63303–01–5; 63658–45–7; 63793–60–2;
64366–70–7; 64415–24–3; 64415–25–4; 64425–86–1; 65104–72–5; 65150–81–4; 66455–14–9:
66455–15–0; 67254–71–1; 67763–08–0; 68002–96–0; 68002–97–1; 68131–39–5; 68131–40–8;
68154–96–1; 68154–97–2; 68154–98–3; 68155–01–1; 68213–23–0; 68213–24–1; 68238–81–3;
68439–49–6; 68439–50–9; 68439–51–0; 68439–53–2; 68439–54–3; 68458–88–8; 68526–94–3;
68526–95–4; 68551–12–2; 68551–13–3; 68551–14–4; 68603–20–3; 68603–25–8; 68920–66–1;
69013–18–9; 69013–19–0; 69227–20–9; 69227–21–0; 69227–22–1; 69364–63–2; 70750–27–5;
78330–19–5; 78330–20–8; 78330–21–9; 78330–23–1; 79771–03–2; 84133–50–6; 85422–93–1;
97043–91–9; 97953–22–5; 102782–43–4; 103331–86–8; 103657–84–7; 103657–85–8; 103818–93–5;
103819–03–0; 106232–83–1; 111905–54–5; 116810–31–2; 116810–32–3; 116810–33–4; 120313–
48–6; 120944–68–5; 121617–09–2; 126646–02–4; 126950–62–7; 127036–24–2; 139626–71–4;
152231–44–2; 154518–36–2; 157627–86–6; 157627–88–8; 157707–41–0; 157707–43–2; 159653–
49–3; 160875–66–1; 160901–20–2; 160901–09–7; 160901–19–9; 161025–21–4; 161025–22–5;
166736–08–9; 169107–21–5; 172588–43–1; 176022–76–7; 196823–11–7; 287935–46–0; 288260–
45–7; 303176–75–2; 954108–36–2).

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*
Surfactants, related adjuvants of surfactants.

3. In § 180.930, the table is amended
by revising the following inert
ingredients to read as follows:

mstockstill on DSK3G9T082PROD with RULES

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VerDate Sep<11>2014

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16:33 Jun 10, 2016

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§ 180.930 Inert ingredients applied to
animals; exemptions from the requirement
of a tolerance.

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Fmt 4700

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Sfmt 4700

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13JNR1

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4. In § 180.940, the table is amended by revising the following entry to the table in paragraph (a):

![Table](https://example.com/table.png)

5. In § 180.960, the table is amended by revising the following entry to read as follows:

![Table](https://example.com/table.png)
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180


D-glucurono-6-deoxy-L-manno-D-glucan, Acetate, Calcium Magnesium Potassium Sodium Salt (Diutan Gum); Exemption From the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule establishes an exemption from the requirement of a tolerance for residues of D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) Chemical Abstract Service Registration Number ((CAS Reg. No.) 595585–15–2) when used as an inert ingredient stabilizer/suspension agent applied to crops pre- and post-harvest and to food contact surfaces. Keller and Heckman on behalf of CP Kelco U.S., Inc submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act (FFDCA), requesting establishment of an exemption from the requirement of a tolerance. This regulation eliminates the need to establish a maximum permissible level for residues of D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum).

DATES: This regulation is effective June 13, 2016. Objections and requests for hearings must be received on or before August 12, 2016, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the SUPPLEMENTARY INFORMATION).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2015–0350, is available at http://www.regulations.gov or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Blvd., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at http://www.epa.gov/dockets.

FOR FURTHER INFORMATION CONTACT: Susan Lewis, Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: RDFRNotices@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

B. How can I get electronic access to other related information?


II. Petition for Exemption

comments of substance received in response to the notice of filing.

III. Inert Ingredient Definition

Inert ingredients are all ingredients that are not active ingredients as defined in 40 CFR 153.125 and include, but are not limited to, the following types of ingredients (except when they have a pesticidal efficacy of their own):

- Solvents such as alcohols and hydrocarbons; surfactants such as polyoxyethylene polymers and fatty acids; carriers such as clay and diatomaceous earth; thickeners such as carrageenan and modified cellulose; wetting, spreading, and dispersing agents; propellants in aerosol dispensers; microencapsulating agents; and emulsifiers. The term “inert” is not intended to imply nontoxicity; the ingredient may or may not be chemically active. Generally, EPA has exempted inert ingredients from the requirement of a tolerance based on the low toxicity of the individual inert ingredients.

IV. Aggregate Risk Assessment and Determination of Safety

Section 408(c)(2)(A)(i) of FFDCA allows EPA to establish an exemption from the requirement for a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is “safe.” Section 408(b)(2)(A)(ii) of FFDCA defines “safe” to mean that “there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.” This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Section 408(b)(2)(C) of FFDCA requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to “ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue. . . .” EPA establishes exemptions from the requirement of a tolerance only in those cases where it can be clearly demonstrated that the risks from aggregate exposure to pesticide chemical residues under reasonably foreseeable circumstances will pose no appreciable risks to human health. In order to determine the risks from aggregate exposure to pesticide inert ingredients, the Agency considers the toxicity of the inert in conjunction with possible exposure to residues of the inert ingredient through food, drinking water, and through other exposures that occur as a result of pesticide use in residential settings. If EPA is able to determine that a finite tolerance is not necessary to ensure that there is a reasonable certainty that no harm will result from aggregate exposure to the inert ingredient, an exemption from the requirement of a tolerance may be established.

Consistent with FFDCA section 408(c)(2)(A), and the factors specified in FFDCA section 408(c)(2)(B), EPA has reviewed the available scientific data and other relevant information in support of this action. EPA has sufficient data to assess the hazards of and to make a determination on aggregate exposure for D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) including exposure resulting from the exemption established by this action. EPA’s assessment of exposures and risks associated with D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) follows.

A. Toxicological Profile

EPA has evaluated the available toxicity data and considered their validity, completeness, and reliability as well as the relationship of the results of the studies to human risk. EPA has also considered available information concerning the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children. Specific information on the studies received and the nature of the adverse effects caused by D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) as well as the no-observed-adverse-effect-level (NOAEL) and the lowest-observed-adverse-effect-level (LOAEL) from the toxicity studies are discussed in this unit.

D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) exhibits low levels of acute toxicity. The oral lethal dose (LD)50 in the rat is greater than 5 grams/kilograms (g/kg) (5,000 milligrams/kilograms (mg/kg)). The inhalation lethal concentration (LC)50 in the rat is > 0.316 milligram/Liter (mg/L) (~81.9 mg/kg). It is minimally irritating to the rabbit eye. It is not an irritant to the rabbit skin and it was not a skin sensitizer in Dunkin-Hartley guinea pigs.

In a 28-day repeat dose oral toxicity (OECD Test Guideline 407) study there were no treatment-related adverse toxicological effects at doses up to 1,000 mg/kg/day. The NOAEL is 1,000 mg/kg/day.

The reverse gene mutation assay with Salmonella typhimurium and Escherichia coli and a chromosome aberration test with human lymphocytes show that the compound is neither mutagenic nor clastogenic, respectively.

In a metabolism study in male and female rats the compound was absorbed, metabolized and excreted rapidly. The major route of excretion was the feces. There was no bioaccumulation.

No toxicological point of departure (toxicological endpoint) was identified due to the low levels of toxicity exhibited and due to the very large molecular weight and lack of systemic absorption.

B. Toxicological Points of Departure/Levels of Concern

Once a pesticide’s toxicological profile is determined, EPA identifies toxicological points of departure (POD) and levels of concern to use in evaluating the risk posed by human exposure to the pesticide. For hazards that have a threshold below which there is no appreciable risk, the toxicological POD is used as the basis for derivation of reference values for risk assessment. PODs are developed based on a careful analysis of the doses in each toxicological study to determine the dose at which no adverse effects are observed (the NOAEL) and the lowest dose at which adverse effects of concern are identified (the LOAEL). Uncertainty/safety factors are used in conjunction with the POD to calculate a safe exposure level—generally referred to as a population-adjusted dose (PAD) or a reference dose (RfD)—and a safe margin of exposure (MOE). For non-threshold risks, the Agency assumes that any amount of exposure will lead to some degree of risk. Thus, the Agency estimates risk in terms of the probability of an occurrence of the adverse effect expected in a lifetime. For more information on the general principles EPA uses in risk characterization and a complete description of the risk assessment process, see http://www.epa.gov/pesticides/factsheets/riskassess.htm.

No toxicological point of departure (toxicological endpoint) was identified due to the low levels of acute and subchronic toxicity exhibited and due to the very large molecular weight and lack of systemic absorption.

C. Exposure Assessment

1. Dietary exposure from food and feed uses. In evaluating dietary exposure to D-glucurono-6-deoxy-L-
manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum), EPA considered exposure under the proposed exemption from the requirement of a tolerance. EPA assessed dietary exposures from D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum). Because no hazard endpoint of concern was identified for acute and chronic dietary assessment (food and drinking water), a quantitative dietary exposure risk assessment was not conducted.

2. Dietary exposure from drinking water. Residues of D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) might be found in drinking water. However, since no toxicological concern was identified for dietary risk assessment (food and drinking water), a quantitative dietary was not conducted.

3. From non-dietary exposure. The term “residential exposure” is used in this document to refer to non-occupational, non-dietary exposure (e.g., textiles (clothing and diapers), carpets, swimming pools, and hard surface disinfection on walls, floors, tables).

D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) could be used in products that could result in short- or intermediate-term residential exposures. However, based on the lack of toxicity, a quantitative exposure assessment from residential exposures was not performed.

4. Cumulative effects from substances with a common mechanism of toxicity. Section 408(b)(2)(D)(v) of FFDCA requires that, when considering whether to establish, modify, or revoke a tolerance, the Agency consider “available information” concerning the cumulative effects of a particular pesticide’s residues and “other substances that have a common mechanism of toxicity.”

EPA has not found D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) to share a common mechanism of toxicity with any other substances, and D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has assumed that D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) does not have a common mechanism of toxicity with other substances. For information regarding EPA’s efforts to determine which chemicals have a common mechanism of toxicity and to evaluate the cumulative effects of such chemicals, see EPA’s Web site at http://www.epa.gov/pesticides/cumulative.

D. Safety Factor for Infants and Children

Section 408(b)(2)(C) of FFDCA provides that EPA shall apply an additional tenfold (10X) margin of safety for infants and children in the case of threshold effects to account for prenatal and postnatal toxicity and the completeness of the database on toxicity and exposure unless EPA determines based on reliable data that a different margin of safety will be safe for infants and children. This additional margin of safety is commonly referred to as the Food Quality Protection Act Safety Factor (FQPA SF). In applying this provision, EPA either retains the default value of 10X, or uses a different additional safety factor when reliable data available to EPA support the choice of a different factor.

Based on an assessment of D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum), EPA concluded that there are no toxicological endpoints of concern for the U.S. population, including infants and children. As part of its qualitative assessment, the Agency did not use safety factors for assessing risk and no additional safety factor is needed for assessing risk to infants and children.

E. Aggregate Risks and Determination of Safety

EPA determines whether acute and chronic dietary pesticide exposures are safe by comparing aggregate exposure estimates to the acute PAD (aPAD) and chronic PAD (cPAD). For linear cancer risks, EPA calculates the lifetime probability of acquiring cancer given the estimated aggregate exposure. Short-, intermediate-, and chronic-term risks are evaluated by comparing the estimated aggregate food, water, and residential exposure to the appropriate POEDs to ensure that an adequate MOE exists.

Based on the lack of any toxicological endpoints of concern, EPA concludes that there is a reasonable certainty that no harm will result to the general population or to infants and children from aggregate exposure to residues of D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum).

V. Analytical Enforcement Methodology

An analytical method is not required for enforcement purposes since the Agency is establishing an exemption from the requirement of a tolerance without any numerical limitation.

VI. Conclusions

Therefore, an exemption from the requirement of a tolerance is established under 40 CFR 180.910 and 40 CFR 180.940(a) for D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) (CAS Reg. No. 595585–15–2) when used as an inert ingredient (stabilizer/suspension agent) in pesticide formulations applied to growing crops pre- and post-harvest and to food contact surfaces.

VII. Statutory and Executive Order Reviews

This action establishes an exemption from the requirement of a tolerance under FFDCA section 408(d) in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled “Regulatory Planning and Review” (58 FR 51735, October 4, 1993). Because this action has been exempted from review under Executive Order 12866, this action is not subject to Executive Order 13211, entitled “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997). This action does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA) (44 U.S.C. 3501 et seq.), nor does it require any special considerations under Executive Order 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (59 FR 7629, February 16, 1994).

Since tolerances and exemptions that are established on the basis of a petition under FFDCA section 408(d), such as the exemption in this final rule, do not require the issuance of a proposed rule, the requirements of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 et seq.), do not apply.
This action directly regulates growers, food processors, food handlers, and food retailers, not States or tribes, nor does this action alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4). As such, the Agency has determined that this action will not have a substantial direct effect on States or tribal governments, on the relationship between the national government and the States or tribal governments, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian tribes. Thus, the Agency has determined that Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999) and Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000) do not apply to this action. In addition, this action does not impose any enforceable duty or contain any unfunded mandate as described under Title II of the Unfunded Mandates Reform Act (UMRA) (2 U.S.C. 1501 et seq.).

This action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note).

VIII. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801 et seq.), EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 180

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: June 1, 2016.

Susan Lewis,
Director, Registration Division, Office of Pesticide Programs.

Therefore, 40 CFR chapter I is amended as follows:

PART 180—[AMENDED]

1. The authority citation for part 180 continues to read as follows:


2. In §180.910 add alphabetically the inert ingredients to the table to read as follows:

§180.910 Inert ingredients used pre- and post-harvest; exemptions from the requirement of a tolerance.

* * * *

<table>
<thead>
<tr>
<th>Inert ingredients</th>
<th>Limits</th>
<th>Uses</th>
</tr>
</thead>
</table>

3. In §180.940(a) add alphabetically the inert ingredients to the table to read as follows:

§180.940 Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food contact surface sanitizing solutions).

(a) *

<table>
<thead>
<tr>
<th>Pesticide chemical</th>
<th>CAS Registration No.</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum).</td>
<td>(CAS No. 595585–15–2)</td>
<td>None.</td>
</tr>
</tbody>
</table>

[FR Doc. 2016–13805 Filed 6–10–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 370


RIN 2050–AG85

Hazardous Chemical Reporting: Community Right-to-Know; Revisions to Hazard Categories and Minor Corrections

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; technical amendment.

SUMMARY: The Environmental Protection Agency (EPA or the Agency) is amending its hazardous chemical reporting regulations due to the changes in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS). OSHA’s HCS was recently revised to conform to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Under the revised HCS, chemical manufacturers and importers are...
required to evaluate their chemicals according to the new criteria adopted from GHS to ensure that they are classified and labeled appropriately. Manufacturers and importers are also required to develop standardized Safety Data Sheets (formerly known as “Material Safety Data Sheets”) and distribute them to downstream users of their chemicals. These changes in HCS affect the reporting requirements under sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA). Based on the new classification criteria that OSHA adopted, EPA is revising the existing hazard categories for hazardous chemical inventory form reporting under EPCRA Section 312 and for list reporting under section 311. In this action, EPA is also making a few minor corrections in the hazardous chemical reporting regulations.

DATES: Effective Date: This final rule is effective June 13, 2016.
Compliance Date: The compliance date is January 1, 2018.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–SFUND–2010–0763. All documents in the docket are listed on the http://www.regulations.gov Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through http://www.regulations.gov or in hard copy at the Superfund Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Superfund Docket is (202) 566–0270.

FOR FURTHER INFORMATION CONTACT: Sicy Jacob, Office of Emergency Management, Mail Code 5104A, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington DC 20004; telephone number: (202) 564–8019; email address: jacob.sicy@epa.gov. Also contact the Superfund, TRI, EPCRA, RMP and Oil Information Center at (800) 424–9346 or (703) 412–9810 (in the Washington, DC metropolitan area). The Telecommunications Device for the Deaf (TDD) number is (800) 553–7672 or (703) 412–3323 (in the Washington, DC metropolitan area.) You may wish to visit the Office of Emergency Management (OEM) Internet site at http://www.epa.gov/emergencies.

SUPPLEMENTARY INFORMATION:

I. Background
EPA is amending its hazardous chemical reporting regulations at 40 CFR part 370 to conform to the revisions of OSHA’s HCS due its adoption of the GHS classification and labeling of chemicals. The Occupational and Safety and Health Administration published a final rule to revise the HCS on March 26, 2012 (77 FR 17574), codified in 29 CFR 1910.1200. Among the recent HCS modifications, the classification of chemicals adopted from GHS affect the reporting requirements under EPCRA Sections 311 and 312. OSHA’s HCS adopted certain terms used in GHS provisions, such as “Safety Data Sheet (SDS)” instead of the term “Material Safety Data Sheet (MSDS).” EPCRA Sections 311 and 312 and the implementing regulations use the term “Material Safety Data Sheet (MSDS).” In this action, EPA is also revising the regulations to use both terms and their acronyms as they have the same meaning. This action is also making some minor corrections in the regulations at 40 CFR part 370. EPA anticipates that closer correlation with the OSHA HCS and GHS will provide greater clarification to the regulated community and facilitate emergency planning.

II. Revisions to Hazard Categories
Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and its implementing regulations at 40 CFR part 370 apply to the owners and operators of facilities required to prepare or have a MSDS for any hazardous chemical defined under OSHA and its implementing regulations. EPCRA Section 311(e) defines the term “hazardous chemical” to be the same meaning as it is given in 29 CFR 1910.1200(e), except for certain substances exempted in EPCRA Section 311(e).

Section 311 of EPCRA requires facilities to submit MSDSs of hazardous chemicals or a list of hazardous chemicals grouped into categories of physical and health hazards as defined in OSHA’s HCS to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC) and the local fire department with jurisdiction over the facility. Section 312 of EPCRA requires these facilities to submit an emergency and hazardous chemical inventory form to the SERC, LEPC, and the local fire department, annually by March 1. The inventory form provides the physical or health hazard of each hazardous chemical as well as the locations and quantities present at the facility during the previous calendar year. There are two reporting tiers, Tier I and Tier II. Tier I inventory forms provide only general information on hazardous chemicals. Tier II inventory forms provide specific information on each hazardous chemical, which is used by many LEPCs for developing or modifying their local emergency response plans. Currently, all states require facilities to submit the federal Tier II form or the form developed by the states, including electronic reporting and submission. The regulations including the information required on the Tier I and Tier II inventory forms were first promulgated in 1987 and are codified in 40 CFR part 370.

As stated earlier in this document, the statute specifies that the list reporting under section 311 and the inventory reporting under section 312 should be based on the physical and health hazards established under OSHA regulations. Sections 311 and 312 also provide that EPA may modify the physical and health hazards set forth under the Occupational Safety and Health Act and regulations promulgated under that Act. Accordingly, in 1987, EPA modified OSHA’s 23 physical and health hazards into five hazard categories (three physical and two health hazard categories) for facilities to use for reporting under sections 311 and 312. These categories are defined currently in the regulations at 40 CFR 370.66. Facilities have been using these five hazard categories since 1987 to report under sections 311 and 312. Prior to the adoption of the GHS, OSHA’s HCS was performance-oriented. It established requirements for hazard determination but did not provide the specific language to convey the information or a format in which to provide to the users of the chemicals. This meant that chemical producers were able to use whatever language or format they chose to provide the necessary information. With the adoption of GHS provisions, OSHA’s HCS 2012 final rule established consistent and standardized hazard communication to the users of the chemicals, to anyone exposed to the chemicals, and to emergency responders.

GHS is a standardized approach for classifying chemicals by their health, physical and environmental effects and communicating this information to
downstream users by using consistent signal words, pictograms, hazard statements, etc., on labels and SDSs. GHS establishes a set of criteria and provisions that regulatory authorities, such as OSHA, can incorporate into their existing regulations or standards, or use to develop a new system. Regulatory authorities are not required to adopt all of the criteria that are defined in GHS, only those that are appropriate to their specific regulations. Accordingly, OSHA adopted the classification criteria and provisions that are appropriate to its existing standards for hazard communication for labeling and SDSs. The revised HCS provisions also include developing SDSs using the standardized 16-section format with consistent headings adopted from GHS.

The definitions of hazards in GHS are more specific, detailed criteria than they were in OSHA’s HCS prior to the 2012 revisions. Under the HCS, each hazard is considered to be a hazard class and the classes are then generally subdivided into categories of hazard. For example, under the original HCS, a chemical is either a potential carcinogen or it is not. Under the revised HCS, this is further divided according to the degree of severity of the hazard. That is, carcinogenicity has two hazard categories. Category 1 includes known or presumed human carcinogens, while Category 2 includes suspected human carcinogens. Category 1 is also subdivided into Category 1A and 1B. Such detailed criteria provides more accurate hazard determinations and more consistency among various suppliers of the same chemical. EPA believes that such detailed criteria will be valuable to emergency planners and responders. OSHA also revised the definition of the term “hazardous chemical.” Prior to March 26, 2012, OSHA’s HCS defined the term “hazardous chemical” as any chemical which is a physical or health hazard. OSHA has revised the definition of the term “hazardous chemical” to add the term “classified” and to list specifically certain hazards already covered by HCS but not addressed in GHS at the time of the March 2012 final rule. The revised definition of “hazardous chemical” is any chemical which is classified as a physical or health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified. OSHA added the three hazards, simple asphyxiant, combustible dust and pyrophoric gas, to the definition of “hazardous chemical” to ensure that the regulated community would understand that these are still covered under the revised HCS. The definition of hazardous chemical also includes the term “hazard not otherwise classified” (HNOC) for those chemicals that do not fit into any of the hazard classes adopted from GHS.

Although the physical and health hazards in OSHA’s HCS prior to the 2012 revisions are the same as the revised hazards, the descriptions are slightly different. See the following table for descriptions of physical hazard class before and after adopting GHS provisions.

<table>
<thead>
<tr>
<th>Physical hazards (prior to GHS adoption)</th>
<th>Physical hazards (after adoption, revised in 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustible liquid</td>
<td>Flammable (gases, aerosols, liquids, or solids).</td>
</tr>
<tr>
<td>Compressed Gas</td>
<td>Gas under pressure.</td>
</tr>
<tr>
<td>Explosive</td>
<td>Explosive.</td>
</tr>
<tr>
<td>Pyrophoric</td>
<td>Self-heating.</td>
</tr>
<tr>
<td>Oxidizer</td>
<td>Pyrophoric (liquid or solid).</td>
</tr>
<tr>
<td>Organic Peroxide</td>
<td>Oxidizer (liquid, solid or gas).</td>
</tr>
<tr>
<td>Unstable (Reactive)</td>
<td>Organic peroxide.</td>
</tr>
<tr>
<td>Water-Reactive</td>
<td>In contact with water emits flammable gas.</td>
</tr>
<tr>
<td></td>
<td>Corrosive to metal.</td>
</tr>
<tr>
<td></td>
<td>Hazard Not Otherwise Classified (HNOC).</td>
</tr>
</tbody>
</table>

The following table lists OSHA HCS health hazard class prior to and after adoption of GHS provisions.

<table>
<thead>
<tr>
<th>Health hazards (prior to GHS adoption)</th>
<th>Health hazards (after adoption, revised in 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogens</td>
<td>Carcinogenicity.</td>
</tr>
<tr>
<td>Toxic or highly toxic agents</td>
<td>Acute toxicity (any route of exposure).</td>
</tr>
<tr>
<td>Reproductive toxins</td>
<td>Reproductive toxicity.</td>
</tr>
<tr>
<td>Irritants; Corrosives</td>
<td>Skin Corrosion or Irritation.</td>
</tr>
<tr>
<td>Sensitizers</td>
<td>Respiratory or Skin Sensitization.</td>
</tr>
<tr>
<td>Agents which damage the lungs, skin, eyes, or mucous membranes</td>
<td>Serious eye damage or eye irritation.</td>
</tr>
<tr>
<td>Hepatotoxins</td>
<td>Specific target organ toxicity (single or repeated exposure).</td>
</tr>
<tr>
<td>Nephrotoxins</td>
<td>Germ cell mutagenicity.</td>
</tr>
<tr>
<td>Neurotoxins</td>
<td>Aspiration Hazard.</td>
</tr>
<tr>
<td>Agents which act on the hematopoietic system</td>
<td>Hazard Not Otherwise Classified (HNOC).</td>
</tr>
</tbody>
</table>

In addition to the hazards listed in the previous tables, OSHA specifically added the following hazards in the March 2012 final rule, simple asphyxiant, combustible dust, pyrophoric gas, and hazard not otherwise classified, to the definition of hazardous chemical as mentioned earlier in this document.

Hazardous chemical reporting under EPCRA sections 311 and 312 requires facilities to report the physical and health hazards of chemicals as established under OSHA and its regulations. EPCRA provides that EPA may modify the OSHA categories as necessary.

Currently, the definition of the term “hazard category” in the regulations at 40 CFR 370.66 is the consolidation of OSHA’s 23 original hazard categories.
The four hazards that are specifically listed in the definition of "hazardous chemical" in the revised HCS are listed in the table as either a physical or health hazard. The hazard, HNOC (hazard not otherwise classified), would be both a physical and health hazard, as listed in the previous table.

Sections 311 and 312 use the term "hazard category," so EPA will continue to use the term "hazard category" in the definition section in 40 CFR 370.66 but will replace the five hazard categories with those hazards listed in the previous table. This technical amendment would also delete any reference to the consolidated five hazard categories in the regulations, specifically in sections 370.41 and 370.42(s)(5). The hazard categories on both inventory forms (Tier I and Tier II) and the instructions to these forms would be replaced with the list of physical and health hazards as identified in the previous table. As mentioned earlier, the revised HCS requires chemical producers to provide detailed criteria of each hazard on the MSDS (or SDS) as adopted from GHS. So, in addition to the hazards listed in the previous table, facilities complying with sections 311 and 312 may report the detailed criteria for each hazard as provided on the SDS, which would be beneficial for emergency planners and responders.

EPA will be modifying Tier 2 Submit, the software developed for reporting under section 312, to include the new physical and health hazards as well as the four specifically listed hazards that EPA adopted from OSHA's revised HCS. For states that have their own reporting software for section 312, EPA is providing flexibility to allow states to modify their software by January 1, 2018. Facilities are required to comply with reporting the new physical and health hazards on their Tier II inventory form for reporting year 2017, by March 1, 2018. In the meantime, EPA encourages facilities to provide the most accurate information available on potential hazards of each chemical at their facility to the SERC, LEPC, and the local fire department with jurisdiction over the facility.

Some states may already have amended their regulations to include the new hazards, consistent with the revised HCS, which EPA is finalizing in this action. Facilities should contact their state for any additional reporting and submission requirements.

III. Other Revisions to 40 CFR Part 370

As mentioned previously, the OSHA HCS adopted some terms used in the GHS provisions, such as, "Safety Data Sheet (SDS)" instead of the term, "Material Safety Data Sheet (MSDS)." Although EPCRA Sections 311 and 312 refer to the term, "Material Safety Data Sheet," the implementing regulations would be revised to use both terms in 40 CFR part 370. The term "Safety Data Sheet (SDS)" is now more commonly used by all stakeholders.

In this action, EPA is correcting a typographical error in 40 CFR 370.30(a) and revising EPA's Web site address in the regulated community as they would only need to copy the chemical hazard information from the MSDS (or SDS) and implementing agencies could more easily compare the hazard information provided on each MSDS (or SDS) with the information provided on the list of hazardous chemicals and the inventory form.

Therefore, EPA has decided to replace the existing five hazard categories (Fire, Sudden Release of Pressure, Reactive, Immediate (Acute) health hazard, Delayed (Chronic) health hazard) in 40 CFR part 370 with each specific hazard class listed in the revised OSHA HCS as well as the four hazards that GHS did not address (simple asphyxiant, combustible dust, pyrophoric gas, and hazard not otherwise classified). The following table lists the physical and health hazards that EPA is adopting from the revised HCS.
40 CFR 370.40(a), 370.64(a), and 370.64(b).

In this action, EPA is also revising the definition section, 40 CFR 370.66, by replacing the list of “hazard category” by the specific physical and health hazards listed in the revised HCS. The term “Safety Data Sheet (SDS)” will be added to the definition section in alphabetical order.

IV. Authority Under the Administrative Procedure Act

Section 553 of the Administrative Procedure Act (APA), 5 U.S.C. 553(b)(3)(B), provides that, “when an Agency for good cause finds . . . that notice and public procedure thereon are impracticable, unnecessary or contrary to the public interest,” the Agency may issue a final rule without providing notice and an opportunity for public comment. EPA has determined that there is good cause for making this technical amendment final without prior notice and opportunity for comment, because this final rule simply adopts the hazard classes established in OSHA’s revised HCS as directed by EPCRA Sections 311 and 312. The burden for facilities associated with reclassifying their chemicals into the new criteria that OSHA HCS adopted from GHS is already accounted for in the OSHA HCS March 2012 final rule. Facilities required to comply with EPCRA Sections 311 and 312 would simply need to copy the hazards found on each MSDS (or SDS) of the hazardous chemical, to comply with the inventory reporting under EPCRA Section 312, and for the list of chemicals submitted under section 311. There is no additional burden incurred for facilities due to this technical amendment to 40 CFR part 370. The burden for developing an MSDS (or SDS) is already considered under the OSHA HCS. EPA finds that this constitutes good cause under 5 U.S.C. 553(b)(3)(B).

V. Do any of the statutory and Executive Order reviews apply to this action?

This final rule simply adopts the hazard categories set forth in OSHA HCS for reporting on the inventory form and the list of hazardous chemicals as directed by sections 311 and 312 of EPCRA. It does not impose any new burden on the regulated community or the implementing agencies.

Under Executive Order 12866 (58 FR 51735, October 4, 1993) and Executive Order 13563 (76 FR 3021, January 21, 2011), this action is not a “significant regulatory action” and is therefore not subject to OMB review. Because this action is not subject to notice and comment requirements under the Administrative Procedure Act or any other statute, it is not subject to the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) or Sections 202 and 205 of the Unfunded Mandates Reform Act (2 U.S.C. 1531–1538). In addition, this action does not significantly or uniquely affect small governments. This action does not create new binding legal requirements that substantially and directly affect Tribes under Executive Order 13175 (65 FR 77249, November 9, 2000). This action does not have significant Federalism implications under Executive Order 13132 (64 FR 43255, August 10, 1999). Because this final rule has been exerpted from review under Executive Order 12866, this final rule is not subject to Executive Order 13211, entitled Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997). This final rule does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 et seq., nor does it require any special considerations under Executive Order 12998, entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, February 16, 1994). This action does not involve technical standards; thus, the requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply.

VI. Congressional Review Act

This action is subject to the Congressional Review Act (CRA), and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. The CRA allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and comment rulemaking procedures are impracticable, unnecessary or contrary to the public interest (5 U.S.C. 808(2)). The EPA has made a good cause finding for this rule as discussed in section IV of this document, including the basis for that finding.

List of Subjects in 40 CFR Part 370

Environmental protection, Extremely hazardous substances, GHS, Hazard categories, Hazard class, Hazardous chemicals, OSHA HCS, Tier II Inventory Form.

Dated: May 26, 2016.

Mathy Stanislaus, Assistant Administrator, Office of Land and Emergency Management.

For the reasons stated in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 370—HAZARDOUS CHEMICAL REPORTING: COMMUNITY RIGHT-TO-KNOW

1. The authority citation for part 370 continues to read as follows:


2. In 40 CFR part 370, after the text “MSDS”, add the words “(or SDS)” in the following places:

a. Section 370.10(b)(1), two times;

b. Section 370.12(a) and (b);

c. Section 370.13 introductory text;

d. Section 370.14(a)(1) two times; (a)(2), two times; and (b), three times;

e. Section 370.20, two times;

f. Undesignated center heading before § 370.30;

g. Section 370.30(a)(1), (a)(2) and (b) two times;

h. Section 370.31, five times;

i. Section 370.32, two times;

j. Section 370.33, four times;

k. Section 370.60, section heading and four times;

l. Section 370.62, three times;

m. Section 370.63(b);

n. Section 370.64(a); and

o. Section 370.66 definition of “Material Safety Data Sheet or MSDS”).

In addition to the amendments set forth above:

§ 370.1 [Amended]

3. In § 370.1, paragraph (a), after the text “(MSDS)”, add the words “(or Safety Data Sheet (SDS))”.

§ 370.10 [Amended]

4. In § 370.10, paragraph (a) introductory text, after the text “(MSDS)”, add the words “(or Safety Data Sheet (SDS))”.

§ 370.14 [Amended]

5. In § 370.14, paragraphs (a)(1) and (2), after the text “MSDS”, add the words “(or SDS)”, four times.
§ 370.30 [Amended]

6. Amend § 370.30 by:
   a. In paragraph (a), removing the text “§ 1A370.10”, and adding “§ 370.10” in its place; and
   b. Revising paragraph (a)(2).

The revised text reads as follows:

§ 370.30 What information must I provide and what format must I use?

(a) * * *

[2] Submitting a list of all hazardous chemicals present at your facility at or above the applicable threshold levels. The hazardous chemicals on your list must be grouped by the specific health and physical hazards as defined in § 370.66. The list must contain the chemical or common name of each hazardous chemical as provided on the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS).

(b) * * *

§ 370.40 [Amended]


8. Amend § 370.41 by revising the introductory text to read as follows:

§ 370.41 What is Tier I inventory information?

Tier I information provides State and local officials and the public with information on the general types and locations of hazardous chemicals present at your facility during the previous calendar year. The Tier I information is the minimum information that you must provide to be in compliance with the inventory reporting requirements of this part. If you are reporting Tier I information, you must report aggregate information on hazardous chemicals by hazard categories. The hazard categories (physical and health hazards) are defined in § 370.66. Tier I inventory form includes the following data elements:

9. Amend § 370.42 by revising paragraphs (s)(1), (3), and (5) to read as follows:

§ 370.42 What is Tier II inventory information?

* * *

(s) For each hazardous chemical that you are required to report, you must:

(1) Pure Chemical: Provide the chemical name (or the common name of the chemical) as provided on the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) and provide the Chemical Abstract Service (CAS) registry number of the chemical provided on the MSDS (or SDS).

Note to Paragraph (s)(1): If you are withholding the name in accordance with trade secret criteria, you must provide the generic class or category that is structurally descriptive of the chemical and indicate that the name is withheld because of trade secrecy. Trade secret criteria are addressed in § 370.64(a).

(3) Mixture. If you are reporting a mixture, enter the mixture name, product name or trade name as provided on the Material Safety Data Sheet (MSDS) (or Safety Data Sheet (SDS)) and provide the Chemical Abstract Service (CAS) registry number of the mixture provided on the MSDS (or SDS). If there is no CAS number provided or it is not known, check the box “Not Available.”

(5) Pure Chemical or Mixture: Indicate which hazard categories (or hazard classes) apply to the chemical or the mixture. The hazard categories (or physical and health hazards) are defined in § 370.66.

§ 370.64 [Amended]

10. Amend § 370.64 by removing “http://www.epa.gov/emergencies” and adding “http://www.epa.gov/epcra” in its place, two times.

11. Amend § 370.66 by revising the definition “Hazard category”, and adding in alphabetical order the definition “Safety Data Sheet or SDS” to read as follows:

§ 370.66 How are key words in this part defined?

* * *

Hazard category is divided into two categories, health and physical hazards.

(1) Health hazard means a chemical which poses one of the following hazardous effects: Carcinogenicity; acute toxicity (any route of exposure); aspiration hazard; reproductive toxicity; germ cell mutagenicity; skin corrosion or irritation; respiratory or skin sensitization; specific target organ toxicity (single or repeated exposure); simple asphyxiant; and hazard not otherwise classified (HNOC).

(2) Physical hazard means a chemical which poses one of the following hazardous effects: Flammable (gases, aerosols, liquids or solids); gas under pressure; explosive; self-heating; pyrophoric (liquid or solid); pyrophoric gas; oxidizer (liquid, solid or gas); organic peroxide; self-reactive; in contact with water emits flammable gas; combustible dust; corrosive to metal; and hazard not otherwise classified (HNOC).

Safety Data Sheet or SDS means the sheet required to be developed under 29 CFR 1910.1200(g). This term means the same as the term “material safety data sheet or MSDS” defined in this section.

* * *

[FR Doc. 2016–13582 Filed 6–10–16; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL MARITIME COMMISSION

46 CFR Part 535

[Docket No. 16–09]

RIN 3072–AC65

Optional Method of Filing Ocean Common Carrier and Marine Terminal Operator Agreements Subject to the Shipping Act of 1984

AGENCY: Federal Maritime Commission.

ACTION: Confirmation of effective date of direct final rule.

SUMMARY: The Federal Maritime Commission (Commission) is publishing this document to confirm the effective date of the direct final rule published on April 27, 2016.

DATES: The direct final rule published on April 27, 2016 (81 FR 24703) will become effective on June 13, 2016.

FOR FURTHER INFORMATION CONTACT: Karen V. Gregory, Secretary, Federal Maritime Commission, 800 North Capitol Street NW., Washington, DC 20573–0001. Phone: (202) 523–5725. Email: secretary@fmc.gov.

SUPPLEMENTARY INFORMATION: On April 27, 2016 (81 FR 24703), the Commission published a direct final rule (DFR) amending 46 CFR part 535 relating to the filing of Ocean Common Carrier and Marine Terminal Operator Agreements Subject to the Shipping Act of 1984 to provide for optional filing of these agreements through a new electronic filing system. The Commission indicated that if it did not receive any significant adverse comments by May 27, 2016, the DFR would go into effect on June 13, 2016.

The Commission received only one comment that was not a significant adverse comment, but rather in support of the amendments. The commenter stated that the amendments are a “win-win” and will make the filing process of agreements and amendments more efficient, expeditious, and effective. The Commission agrees with the commenter that the optional filing system will facilitate more efficient filing, review, and publication of these agreements.
Therefore, because the Commission received no significant adverse comments, the amendments to 46 CFR part 535 will become effective on June 13, 2016.

By the Commission.
Rachel E. Dickon,
Assistant Secretary.

[FR Doc. 2016–13889 Filed 6–10–16; 8:45 am]
BILLING CODE 6731–AA–P

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

50 CFR Part 622

[Notice: Docket No. 140818679–5356–02]
RIN 0648–XE674

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Reef Fish Fishery of the Gulf of Mexico: Extension of the 2016 Gulf of Mexico Private Angling Recreational Red Snapper Season

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; extension.

SUMMARY: NMFS extends the recreational fishing season for the private angling component for red snapper in the exclusive economic zone (EEZ) of the Gulf of Mexico (Gulf) through this temporary rule. NMFS previously determined the private angling component would reach its annual catch target (ACT) for Gulf red snapper by 12:01 a.m., local time, June 10, 2016. However, due to recent severe weather conditions in the eastern Gulf, fishing opportunities were restricted during the recreational fishing season for the private angling component. NMFS has projected the private angling component will not reach its ACT by the current closure date. Therefore, NMFS is extending the recreational red snapper fishing season for the private angling component for 2 days to allow the ACT to be harvested. The intent of this action is to provide the recreational private angling component the opportunity to harvest its red snapper ACT, and the opportunity to achieve the optimum yield for the fishery, thus enhancing social and economic benefits to the fishery.

DATES: The extension is effective from 12:01 a.m., local time, June 10, 2016, until 12:01 a.m., local time, June 12, 2016. The beginning of the 2017 Federal recreational fishing season for the private angling component begins on June 1, 2017.

FOR FURTHER INFORMATION CONTACT: Steve Branstetter, NMFS Southeast Regional Office, telephone: 727–824–5305, email: steve.branstetter@noaa.gov.

SUPPLEMENTARY INFORMATION: The Gulf reef fish fishery includes red snapper and is managed under the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico (FMP). The FMP was prepared by the Gulf of Mexico Fishery Management Council (Council) and is implemented by NMFS through regulations at 50 CFR part 622 under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). On April 28, 2016, NMFS announced in the Federal Register the 2016 recreational fishing seasons for the private angling and Federal charter vessel/headboat (for-hire) components for red snapper in the Gulf EEZ (81 FR 25583, April 28, 2016). The Federal recreational seasons for red snapper in the Gulf began on June 1, 2016. Regulations at 50 CFR 622.41(q)(2)(i) require NMFS to close the respective recreational fishing seasons for Gulf red snapper in Federal waters when the respective recreational component ACT, specified in 50 CFR 622.41(q)(2)(iii), is met or projected to be met. For recreational harvest by the private angling component, NMFS determined that the season would end at 12:01 a.m., local time, on June 10, 2016, which constituted a 9-day fishing season. Landings and effort data are not available in-season to determine if the recreational ACT for the private angling component will be met on June 9, 2016. However, the eastern Gulf experienced severe weather conditions from Tropical Storm Colin during the 2016 red snapper recreational fishing season and it is likely that fishing effort and landings for the private angling component are less than NMFS projected. The majority of red snapper recreational harvest in the Gulf comes from the eastern Gulf. Because of the assumed effort reduction as a result of severe weather, NMFS has determined that the recreational private angling component will not harvest its red snapper ACT by the previously estimated June 10, 2016, closing date. Based on the assumption that weather conditions will improve and recreational fishing effort will return to expected rates, NMFS projects the recreational red snapper season for the private angling component can be extended for an additional 2 days, and will therefore close at 12:01 a.m., local time, on June 12, 2016.

The Federal season for the Federal for-hire component began at 12:01 a.m., local time, June 1, 2016, and will close at 12:01 a.m., local time, July 17, 2016 (81 FR 25583, April 28, 2016). The Federal recreational fishing season for the for-hire component will not be revised by NMFS as a result of the recent severe weather, because the comparatively longer component fishing season allows for greater flexibility in scheduling fishing trips and greater opportunity to harvest the component ACT.

The 2017 Federal recreational fishing seasons for both private angling and for-hire components begin on June 1, 2017. On and after the effective date of a recreational component closure, the bag and possession limits for red snapper in the respective component are zero. When the Federal charter vessel/headboat component or entire recreational sector is closed, these bag and possession limits apply in the Gulf on board a vessel for which a valid Federal charter vessel/headboat permit for Gulf reef fish has been issued, without regard to where such species were harvested, i.e., in state or Federal waters.

Classification

The Regional Administrator for the NMFS Southeast Region has determined this temporary rule is necessary for the conservation and management of Gulf red snapper and is consistent with the Magnuson-Stevens Act and other applicable laws. This action is taken under 50 CFR 622.8(c) and 622.41(q)(2)(i) and is exempt from review under Executive Order 12866.

These measures are exempt from the procedures of the Regulatory Flexibility Act because the temporary rule is issued without opportunity for prior notice and comment.

This action responds to the best scientific information available. The Assistant Administrator for NOAA Fisheries (AA), finds that the need to immediately implement this action to extend the season for the private angling component for the red snapper recreational sector constitute good cause to waive the requirements to provide prior notice and opportunity for public comment on this temporary rule pursuant to the authority set forth in 5 U.S.C. 553(b)(B), because such procedures are unnecessary and contrary to the public interest. Such procedures are unnecessary because the rule implementing the recreational red snapper ACLs and ACTs, and the rule...
implementing the requirement to close the recreational components when the ACTs are projected to be reached have already been subject to notice and comment, and all that remains is to notify the public of the extension. Providing prior notice and opportunity for public comment are contrary to the public interest because of the need to immediately implement this action to allow for a limited extended season. Prior notice and opportunity for public comment would require time and would not allow for the extension of the season.

For the aforementioned reasons, the AA also finds good cause to waive the 30-day delay in the effectiveness of this action under 5 U.S.C. 553(d)(3).

Authority: 16 U.S.C. 1801 et seq.

Dated: June 8, 2016.

Alan D. Risenhoover,
Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

Federal Register / Vol. 81, No. 113 / Monday, June 13, 2016 / Rules and Regulations 38111
vessels participating in the BSAI trawl limited access fishery in the BSAI.

DATES: Effective 1200 hrs, Alaska local time (A.l.t.), June 8, 2016, through 2400 hrs, A.l.t., December 31, 2016.


SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the BSAI according to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2016 allocation of yellowfin sole total allowable catch for vessels participating in the BSAI trawl limited access fishery in the BSAI is 14,979 metric tons (mt) as established by the final 2016 and 2017 harvest specifications for groundfish in the BSAI (81 FR 14773, March 18, 2016). In accordance with §679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the 2016 allocation of yellowfin sole total allowable catch for vessels participating in the BSAI trawl limited access fishery in the BSAI will soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 14,879 mt, and is setting aside the remaining 100 mt as incidental catch. In accordance with §679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for yellowfin sole for vessels participating in the BSAI trawl limited access fishery in the BSAI.

After the effective date of this closure the maximum retainable amounts at §679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of directed fishing for yellowfin sole by vessels fishing in the BSAI trawl limited access fishery in the BSAI. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of June 7, 2016.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by §679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 et seq.

Dated: June 8, 2016.

Alan D. Risenhoover,
Director, Office of Sustainable Fisheries,
National Marine Fisheries Service.

[FR Doc. 2016–13952 Filed 6–8–16; 4:15 pm]
BILLING CODE 3510–22–P
This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all The Boeing Company Model MD–90–30 airplanes. This proposed AD was prompted by reports of stick shaker activation at airspeeds that were above the stall protection system’s stick shaker schedule. This proposed AD would require installing angle-of-attack (AOA) sensor external case heaters and AOA sensors, changing wires, and doing a functional test and applicable corrective actions. We are proposing this AD to correct water intrusion and subsequent ice formation between the AOA sensor vane and face plate, which could cause the vane to become immobilized. If the vane becomes immobilized, the stall protection system could become unreliable or non-functional, which could result in loss of control of the airplane.

DATES: We must receive comments on this proposed AD by July 28, 2016.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
• Fax: 202–493–2251.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800–0019, Long Beach, CA 90846–001; telephone 206–544–5000, extension 2; fax 206–766–5683; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221. It is also available on the Internet by searching for and locating Docket No. FAA–2016–6898.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA–2016–6898; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.


SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2016–6898; Directorate Identifier 2016–NM–010–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received reports of stick shaker activation at airspeeds that were above the stall protection system’s stick shaker schedule. Stall protection system anomalies have been reported on Model 717–200 airplanes related to the AOA sensor becoming immobilized and reporting incorrect AOA alpha values. Boeing investigated and found potential water intrusion and subsequent ice formation between the AOA sensor vane and face plate could cause the vane to become immobilized until the airplane is operated at temperatures above freezing. Model MD–90 airplanes use the same AOA sensors as the Model 717 airplanes and the same potential for AOA vane immobilization exists. This condition, if not corrected, could cause the vane to become immobilized. If the vane becomes immobilized, the stall protection system could become unreliable or non-functional, which could result in loss of control of the airplane.

Related Service Information Under 1 CFR Part 51

We reviewed Boeing Alert Service Bulletin MD90–30A029, dated November 25, 2015. The service information describes procedures for installing AOA sensor external case heaters and AOA sensors, changing wires, and doing a functional test and applicable corrective actions. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA’s Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.
Proosed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously. For information on the procedures, see this service information at http://www.regulations.gov by searching for and locating Docket No. FAA–2016–6898.

The phrase “corrective actions” is used in this proposed AD. “Corrective actions” are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

Anthony for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,
(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
(3) Will not affect intrastate aviation in Alaska, and
(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

§ 39.13 [Amended]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):


(a) Comments Due Date

We must receive comments by July 28, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model MD–90–30 airplanes certified in any category.

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Unsafe Condition

This AD was prompted by reports of stick shaker activation at airspeeds that were above the stall protection system’s stick shaker schedule. We are issuing this AD to correct water intrusion and subsequent ice formation between the angle-of-attack (AOA) sensor vane and face plate, which could cause the vane to become immobilized. If the vane becomes immobilized, the stall protection system could become unreliable or non-functional, which could result in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Installation of AOA Sensor External Case Heater

Within 6 years after the effective date of this AD, install AOA sensor external case heaters and AOA sensors, change wires, and do a functional test and applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90–30A029, dated November 25, 2015. All applicable corrective actions must be done before further flight.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/ certification holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of

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### ESTIMATED COSTS

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of AOA sensor external case heaters and AOA sensors, changing wires, and doing a functional test.</td>
<td>Up to 44 work-hours (depending on the group number) $3,740.</td>
<td>Up to $1,220 (depending on the group number).</td>
<td>Up to $4,960 (depending on the group number).</td>
<td>Up to $471,200 (depending on the group number).</td>
</tr>
</tbody>
</table>
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39
[Docket No. FAA–2016–7048; Directorate Identifier 2016–CE–014–AD]

RIN 2120–AA64

Airworthiness Directives; PILATUS AIRCRAFT LTD. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for PILATUS AIRCRAFT LTD. Models PC–12, PC–12/45, PC–12/47, and PC–12/47E airplanes as defined in the service information (referred to after this as “the SB” in this AD) to provide for the swaging process. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aircraft product. The MCAI describes the unsafe condition as longitudinal material separation on the internal surface of the engine mounting frame assembly tubes. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by July 28, 2016.

ADDRESSES: You may send comments by any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: (202) 493–2251.


• Hand Delivery: U.S. Department of Transportation, Docket Operations, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD Docket Office is in the East Tower at the corner of First and Constitution Avenues, NW, Washington, DC 20590; telephone: (816) 329–4090; email: doug.rudolph@faa.gov.

For the reason described above, this AD is being issued in the interest of air safety.

We invite you to send any written comments, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2016–7048; Directorate Identifier 2016–CE–014–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD.

We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2016–7048; Directorate Identifier 2016–CE–014–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD.

We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No. 2016–0081, dated April 25, 2016 (referred to after this as “the MCAI”), to correct an unsafe condition for PILATUS AIRCRAFT LTD. Models PC–12, PC–12/45, PC–12/47, and PC–12/47E airplanes and was based on mandatory continuing airworthiness information originated by an aviation authority of another country. The MCAI states:

The PC–12 Engine Mounting Frame Assembly (hereafter referred to as “EMF” in this AD), Part Number (P/N) 571.20.12.036, is a welded structure including three special tubes, P/N 571.20.12.073, P/N 571.20.12.074, and P/N 571.20.12.075, the ends of which are subject to a special swaging process during manufacturing. Longitudinal material separation on the internal surface of the special tubes was detected in few EMFs on new production aeroplanes. Investigations identified the root cause to be an incorrect accomplishment of the swaging process. This condition, if not detected and corrected, could lead to growth of the material separation and subsequent partial or complete failure of the structural joint, possibly resulting in in-flight detachment of the engine and consequent reduced control, or loss of control, of the aeroplane.

To address this potential unsafe condition, Pilatus issued Service Bulletin (SB) No. 71–009, now at Revision 2 (hereafter referred to as “the SB” in this AD), to provide inspection instructions for the affected EMF to detect indications of material separation.

For the reason described above, this AD requires identification and inspection of the
affected EMF and, depending on the findings, their replacement with serviceable EMF.


Related Service Information Under 1 CFR Part 51

PILATUS AIRCRAFT LTD. has issued PILATUS PC–12 Service Bulletin No: 71–009, Reference No: 345. Modification No: EC–15–0632, Revision 2, dated March 18, 2016; Pilatus Powerplant Mounting Frame, Removal/Installation, Date module/Technical publication 12–A–71–00–05–00–A–920A–A, dated February 26, 2010, found in Pilatus Model type—PC–12, PC–12/45, PC–12/47 MSN–101–888 Aircraft Maintenance Manual (AMM), Document No. 02049, 12–A–AM–00–00–00–I; and Pilatus Powerplant Mounting Frame, Removal/Installation, Date module/Technical publication 12–B–71–00–05–00–A–920A–A, dated October 4, 2010, found in Pilatus Model type—PC–12, PC–12/47 MSN–101–UP Aircraft Maintenance Manual (AMM), Document No. 02300, 12–B–AM–00–00–00–I. The service information describes procedures for determining if an affected engine mounting frame assembly (EMF) is installed, inspecting the EMF, and replacing the EMF with a serviceable EMF. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA’s Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of origin, the FAA proposes to amend 14 CFR Part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:


(a) Comments Due Date

We must receive comments by July 28, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to PILATUS AIRCRAFT LTD. Models PC–12, PC–12/45, PC–12/47, and PC–12/47E airplanes, all serial numbers, that are:

(1) Installed with an affected serial number engine mounting frame assembly (EMF), part number (P/N) 571.20.12.036, listed in figure 1 of paragraph (e)(1) of this AD;

(2) Certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 71: Power Plant.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI...
describes the unsafe condition as longitudinal material separation on the internal surface of the engine mounting frame assembly tubes (EMF). We are issuing this AD to detect and correct material separation on the internal surface of the engine mounting frame assembly tubes, which could lead to partial or complete failure of the structural joint and possibly result in inflight detachment of the engine with consequent loss of control.

(f) Actions and Compliance

Do the actions in paragraphs (f)(1) through (7) of this AD. If paragraphs (f)(1) through (6) of this AD have already been done before the effective date of this AD, then only paragraph (f)(7) of this AD applies.

(1) Within the compliance time identified in figure 2 of paragraph (f)(1) of this AD, do an ultrasonic inspection of the swaged engine mounting tube ends of the affected EMF following the instructions of paragraph 3.B.(1) of PILATUS AIRCRAFT LTD PILATUS PC–12 Service Bulletin No: 71–009. Reference No: 345, Modification No: EC–15–0632, Revision 2, dated March 18, 2016.

FIGURE 2 TO PARAGRAPH (f)(1) OF THIS AD—INITIAL COMPLIANCE TIME

A or B, whichever occurs later:

A Before the EMF exceeds 11,000 hours time-in-service (TIS) or 13,500 flight cycles (FC), whichever occurs first since first installation of the EMF on an airplane.

B Within 1,000 hours TIS or 1,000 FC or 6 months, whichever occurs first after the effective date of this AD.

(2) If an indication with an echo of less than 40 percent full screen height is detected on an EMF during the ultrasonic inspection required in paragraph (f)(1) of this AD, except for paragraph (f)(7), no further actions are required for this AD. Document compliance with this AD in the maintenance records.

(3) If an indication with an echo of 40 percent full screen height or more is detected on an EMF during the ultrasonic inspection required in paragraph (f)(1) of this AD, do the actions in paragraphs (f)(3)(i) through (iii) of this AD, as applicable.

(4) If no crack is found during any of the visual inspections or if an indication with a signal of 20 percent or more is detected during any of the eddy current inspections required in paragraph (f)(3)(i) of this AD, before further flight, replace the EMF with a serviceable EMF following the instructions in the service information listed in paragraphs 3.B.(2) and 3.B.(3) of PILATUS AIRCRAFT LTD PILATUS PC–12 Service Bulletin No: 71–009. Reference No: 345, Modification No: EC–15–0632, Revision 2, dated March 18, 2016.

(i) Unless already done as required by paragraph (f)(3)(ii) of this AD, within 1,800 hours TIS or 36 months after the initial visual and eddy current inspections of the affected EMF required by paragraph (f)(3)(i) of this AD, whichever occurs first, replace the EMF with a serviceable EMF following the instructions in the service information listed in paragraph (f)(5) of this AD, including all subparagraphs as applicable.

(4) For the purpose of this AD, a serviceable EMF is defined as any EMF that is not listed in figure 1 of paragraph (c)(1) of this AD or an affected EMF that is listed in figure 1 of paragraph (c)(1) of this AD but has had the ultrasonic inspection required in paragraph (f)(1) of this AD and had an indication with an echo of less than 40 percent full screen height.

(5) For replacement of the EMF, follow the instructions listed in paragraphs (f)(5)(i) and (ii), as applicable.


(6) If an EMF has an indication with an echo of 40 percent or more during the ultrasonic inspection required in paragraph (f)(1) of this AD, you may replace the EMF with a serviceable EMF in lieu of the visual or eddy current inspections required in paragraph (f)(3)(i) of this AD. For replacement of the EMF, follow the instructions in the service information listed in paragraph (f)(5) of this AD, including all subparagraphs as applicable.

(7) As of the effective date of this AD, do not install an EMF PN 577.20.12.036 unless it has been determined to be a serviceable EMF as specified in paragraph (f)(4) of this AD.

(8) If any crack is found during any of the visual inspections or if an indication with a signal of 20 percent or more is detected during any of the eddy current inspections required in paragraph (f)(3)(i) of this AD, before further flight, replace the EMF with a serviceable EMF following the instructions in the service information listed in paragraph (f)(5) of this AD, including all subparagraphs as applicable.

(8) As of the effective date of this AD, do not install an EMF PN 577.20.12.036 unless it has been determined to be a serviceable EMF as specified in paragraph (f)(4) of this AD.

(9) If any crack is found during any of the visual inspections or if an indication with a signal of 20 percent or more is detected during any of the eddy current inspections required in paragraph (f)(3)(i) of this AD, before further flight, replace the EMF with a serviceable EMF following the instructions in the service information listed in paragraph (f)(5) of this AD, including all subparagraphs as applicable.

(9) As of the effective date of this AD, do not install an EMF PN 577.20.12.036 unless it has been determined to be a serviceable EMF as specified in paragraph (f)(4) of this AD.

(10) If any crack is found during any of the visual inspections or if an indication with a signal of 20 percent or more is detected during any of the eddy current inspections required in paragraph (f)(3)(i) of this AD, before further flight, replace the EMF with a serviceable EMF following the instructions in the service information listed in paragraph (f)(5) of this AD, including all subparagraphs as applicable.

(10) As of the effective date of this AD, do not install an EMF PN 577.20.12.036 unless it has been determined to be a serviceable EMF as specified in paragraph (f)(4) of this AD.

(b) Related Information

(1) Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2016–0081, dated April 25, 2016, for related information pertaining to this AD.

(2) You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA–2016–7048. For service information related to this AD, contact Pilatus Aircraft Ltd., Customer Support PC–12, CH–6371 Stans, Switzerland; phone: +41 41 619 73 11; email: ServicePC12@pilatus-aircraft.com; Internet: www.pilatus-aircraft.com.

(3) You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Issued in Kansas City, Missouri, on June 3, 2016.

Melvin Johnson,
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–13854 Filed 6–10–16; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1910

[Docket No. OSHA–2008–0012]

RIN 1218–AC40

Tree Care Operations

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Notice of stakeholder meeting.

SUMMARY: OSHA invites interested parties to participate in an informal stakeholder meeting concerning tree care operations on July 13, 2016, in
I. Background

Tree care operations, such as tree trimming and removal, expose workers to a number of dangerous hazards. These dangers include falling from trees or aerial equipment; being hit by falling trees/branches, flying objects and vehicular traffic; being cut by high-speed chain saws and chippers; and coming into contact with energized power lines. The hazards present in tree care operations have resulted in many fatalities and serious injuries, such as falls, being struck by falling objects, and electrocutions. On December 8, 2008, OSHA issued an Advanced Notice of Proposed Rulemaking (ANPR) seeking information on tree care operations (73 FR 54118 (9/18/2008), Docket No. OSHA—2008–0012). The Agency requested data, information, and comment on the hazards present in tree care operations as well as the measures to control those hazards and reduce the high rate of incidents, injuries, and fatalities. OSHA received 69 comments in response to the ANPR. Based upon those responses, other information in the record and a review of data and scientific literature, OSHA is considering what action, if any, the Agency should take to control hazards related to tree care operations. One option the Agency is considering is developing a standard to eliminate or reduce workers’ exposure to hazards when they perform tree care tasks such as trimming and removing branches and trees; using tree care equipment (e.g., chain saws, chippers, ladders) and vehicles (e.g., bucket trucks, aerial lifts); removing tree stumps; and disposing of branches, brush, and trees. The Agency believes that an informal discussion with a diverse range of stakeholders (e.g., employers, tree care companies, workers, labor organization, tree care and arboriculture organizations, occupational safety and health professionals, equipment manufacturers, government, the public) would be beneficial in determining how to proceed in eliminating and reducing hazards in tree care operations.

II. Stakeholder Meeting

The stakeholder meeting will be interactive group discussions on participants’ views, concerns, and issues on tree care hazards and how best to control them. To encourage as much group interaction as possible, formal presentations by stakeholders will not be permitted.

The stakeholder meeting discussions will center on a variety of tree care topics, including fall, struck-by (e.g., falling branches/trees, vehicular traffic) and electrical hazards; climbing and working in trees; tree trimming and removal; rigging; personal protection equipment (PPE); safe use of tools, equipment, machines and vehicles; effective engineering and work practice controls; and medical service and first aid. The stakeholder meeting also will include in-depth discussions on specific issues, such as the following:

- **Fatalities and injuries:** As mentioned, fatalities in tree care operations primarily result from falls, being struck by falling objects or vehicles, and electrocutions. What are the primary causes, circumstances and factors that have led to those and other types of fatalities and injuries in your company and in the tree care industry? What actions does your company take when an accident, fatality or injury occurs (e.g., accident review, job hazard analysis, safety meetings, training)?
- **New technology in the tree care industry:** What new technology, equipment, machines, vehicles and work practices are currently being used in the tree care industry? What new technology has your company found to be effective in controlling hazards and preventing tree care workers from being killed or injured?
- **National consensus and State Plan State standards:** ANSI standards applicable to tree care operations include ANSI Z133 Safety Requirements for Arboricultural Operations and the ANSI A300 Standards for tree care operations. In addition, five states have issued standards on tree care operations: California, Maryland, Michigan, Oregon, and Virginia. What provisions and requirements in these state standards has your company found to be particularly effective in controlling and preventing hazards in tree care operations, and which provisions/requirements should OSHA consider?
- **Vehicles and mobile equipment:** To what extent and frequency does your company and the tree care industry now
use vehicles and mobile equipment (e.g., bucket trucks, aerial lifts, cranes) to perform tree care operations? What are the best practices for, as well as concerns with, using vehicles and mobile equipment in tree care operations? What controls (e.g., engineering controls, PPE) and safety practices has your company implemented to protect workers operating and working on and near vehicles and mobile equipment?

- **Information and training.** What occupational safety and health information and training does your company or the tree care industry provide to workers? What topics does the training cover? What does your company do to ensure workers understand the information and training? For example, how do you communicate information so temporary workers, non-English speaking workers, and workers with limited literacy understand it?

### III. Public Participation

The stakeholder meeting will accommodate approximately 30 participants. In addition, as space permits, interested persons may observe, rather than participate in, the meeting. To participate in or observe the stakeholder meeting you must register electronically, by facsimile, or by hard copy. To receive confirmation to participate in or observe the meeting, register as soon as possible and by July 1, 2016. If space is still available after that date, registration for participating in or observing the meeting will remain open. However, late registrants may not receive confirmation and should contact Ms. Wangdahl to confirm that space is available. As space permits, OSHA will accommodate observers who do not register for the meeting.

To register electronically, follow the instructions provided on the Web site. To register by hard copy or facsimile, please provide the following information:

- Name;
- Professional Title;
- Organization for which you work or represent;
- Address;
- Phone;
- Email address;
- The interest you represent (e.g., tree care employer/company; worker; labor organization; trade or professional association/organization; insurance company; manufacturer; government; public).

- The type of participation: Participant at the main table (“I will actively discuss topics that come up”); observer making comments (“I may have limited comments on one or more key areas”); observer only (“I will not be speaking”); Press.
- If necessary, OSHA may select participants in order to ensure the meeting includes a fair representation of interests and diverse viewpoints. OSHA staff will participate in discussions with the stakeholder participants and Eastern Research Group (ERG), Inc., will facilitate the meeting. In addition, ERG will compile notes summarizing the stakeholder discussions, but the notes will not identify participants by name. ERG also will make an audio recording solely for the purpose of ensuring the accuracy of the summary notes. The recording will not be transcribed or put in the public docket. The summary notes will be posted in the Tree Care Operations docket (Docket No. OSHA–2008–0012) and will be available at [http://www.regulations.gov](http://www.regulations.gov), the Federal eRulemaking Portal.

Electronic copies of this Federal Register notice, as well as news releases and other relevant documents, are available on the OSHA Web page at: [http://www.osha.gov](http://www.osha.gov).

### Authority and Signature

This document was prepared under the direction of David Michaels, Ph.D., M.P.H., Assistant Secretary of Labor for Occupational Safety and Health, and under authority granted by 29 U.S.C. 651, 653, and 655; Secretary of Labor’s Order No. 1–2012 (77 FR 3912); and 29 CFR part 1911.

Signed at Washington, DC, on June 6, 2016.

David Michaels,
Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. 2016–13844 Filed 6–10–16; 8:45 am]

BILLING CODE 4510–26–P

### DEPARTMENT OF HOMELAND SECURITY

#### Coast Guard

33 CFR Part 165

[Docket Number USCG–2016–0032]

RIN 1625–AA11

Regulated Navigation Areas; Escorted Submarines Sector Jacksonville Captain of the Port Zone

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes to establish regulated navigation areas (RNA) covering the St. Mary’s Entrance Channel, portions of the Cumberland Sound, and the Atlantic Ocean, that will be in effect whenever any Navy submarine (foreign or domestic) is being escorted by the Coast Guard and operating within the jurisdictional waters of the Sector Jacksonville Captain of the Port Zone. These RNAs are necessary to help ensure the safety and security of submarines, their Coast Guard escorts, and the public. The RNAs will do so by requiring all persons and vessels located within a RNA to follow orders and/or directions given to them by Coast Guard escort personnel. Additionally, these proposed RNAs will supersede the current temporary safety/security zone for Cumberland Sound, Georgia and St. Mary’s River Entrance Channel. We invite your comments on this proposed rulemaking.

**DATES:** Comments and related material must be received by the Coast Guard on or before July 13, 2016.

**ADDRESSES:** You may submit comments identified by docket number USCG–2016–0032 using the Federal eRulemaking Portal at [http://www.regulations.gov](http://www.regulations.gov). See the “Public Participation and Request for Comments” portion of the SUPPLEMENTARY INFORMATION section for further instructions on submitting comments.

**FOR FURTHER INFORMATION CONTACT:** If you have questions about this proposed rulemaking, call or email Lieutenant Allan Storm, Coast Guard Sector Jacksonville, Chief of Waterways Management, telephone (904) 564–7563, email Allan.H.Storm@uscg.mil.

**SUPPLEMENTARY INFORMATION:**

**Table of Abbreviations**

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### II. Background, Purpose, and Legal Basis

Navy submarines frequently operate within the Cumberland Sound and the St. Marys Entrance Channel. When transiting these areas, the submarines and the vessels towing them are restricted in ability to maneuver and are unable to keep out of the way of other vessels. Due to the safety concerns of the submarines being severely restricted in their ability to deviate from course and other various security concerns involved with submarine operations near shore in restricted waters, the Coast Guard provides submarine escorts when they are operating in those areas and offshore in the Atlantic Ocean.
Currently, there are two regulatory options the Coast Guard uses to safeguard the movement of submarines, their Coast Guard escorts, and the public in and around the Cumberland Sound, the St. Marys Entrance Channel, and offshore in the Atlantic Ocean. The primary, and most often used, option comes from the authorities contained in the Naval Vessel Protection Zone (NVPZ) regulations found in 33 CFR 165.2025. The NVPZ provides a 500-yard regulated area of water surrounding large U.S. naval vessels. However, this 500-yard regulated area can be insufficient at times due to the narrow confines of the Cumberland Sound and the St. Marys Entrance Channel, because it forces the submarines and their Coast Guard escorts to come into close quarters with other vessels. The Captain of the Port (COTP) Jacksonville, Florida can also activate the safety/security zone, published in 33 CFR 165.731, to protect the safety and security of naval assets and the public, however this regulation may provide greater restrictions on vessel traffic than would be necessary through these proposed RNAs. Additionally, the method of activating the safety/security zone is generally a broadcast notice to mariners, which alerts the public to the location of submarines and exposes the submarines to potential threats. Under these proposed RNAs, military vessel locations and movements would not be broadcast, therefore mitigating threats to the safety and security of the naval vessels and their Coast Guard escort assets. These RNAs supersede the temporary safety/security zone mentioned above.

The RNAs established by this rule will allow Coast Guard escort personnel adequate time to effectively order and/or direct persons and vessels operating within a RNA to stop, move, change orientation, etc., as needed to ensure safety and/or security. The ability to order and/or direct persons and vessels will help avoid unnecessary and potentially dangerous close quarters contact between Coast Guard escorts and the maritime public within Cumberland Sound, the St. Marys Entrance Channel, and offshore in the Atlantic Ocean. In addition, it will give Coast Guard escorts an additional tool for determining the intention of vessels that are operating in close vicinity to an escorted submarine. The RNAs will mitigate the risks associated with these issues, and ensure the safety and security of the submarines, their Coast Guard escorts, and the maritime public.

The Coast Guard proposes this rulemaking under authority in 33 U.S.C. 1231.

III. Discussion of Proposed Rule

As stated in Section II above, submarines that transit within the Cumberland Sound and the St. Marys Entrance Channel are severely restricted in their ability to deviate from their course and encounter a variety of security concerns involved with submarine operations near shore in very restricted waters. To better protect the movement of submarines, Coast Guard escorts and the public in and around the Cumberland Sound, the St. Marys Entrance Channel, and offshore in the Atlantic Ocean, the Coast Guard proposes to establish RNAs when Navy submarines (foreign or domestic) are escorted by Coast Guard vessels within the Sector Jacksonville Captain of the Port Zone territorial seas. The proposed regulation applies in two locations.

One area would encompass all waters within one (1) nautical mile of the charted center of the navigation channel from Crab Island in the Cumberland Sound, Georgia, to the St. Marys Entrance Channel and its approach extending eastward to lighted buoys “STM”. This portion of the proposed regulation would allow Coast Guard vessels to direct waterway traffic in any portion of this confined channel when a submarine is being escorted.

Additionally, a regulated area will encompass waters within one (1) nautical mile of any Navy submarine while it is transiting territorial seas within the Sector Jacksonville Captain of the Port Zone. All persons and vessels located within the RNA are required to follow orders and/or directions given to them by Coast Guard escort personnel.

Lastly, these proposed RNAs supersede the temporary safety/security zone currently implemented under 33 CFR 165.731, thus requiring revision to 33 CFR 165.731(a). These amendments include a title change to the regulation, the removal of the temporary safety/security zone, and the addition of the term “designated representatives” for enforcement authorities.

The regulatory text we are proposing appears at the end of this document.

IV. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders (E.O.s) related to rulemaking. Below we summarize our analysis based on a number of these statutes and E.O.s, and we discuss First Amendment rights of protestors.

A. Regulatory Planning and Review

E.O.s 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. E.O. 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This NPRM has not been designated a “significant regulatory action,” under E.O. 12866. Accordingly, the NPRM has not been reviewed by the Office of Management and Budget.

The Coast Guard made this determination based on the fact that (1) the RNAs are only enforced for the short periods of time when submarines are operating in the St. Marys Entrance Channel, portions of the Cumberland Sound, and Atlantic Ocean and escorted by the Coast Guard or any territory when a submarine is operating and escorted by the Coast Guard within the Sector Jacksonville Captain of the Port Zone territorial seas and (2) vessels may freely operate within the RNAs to the extent permitted by other law or regulation unless given an order and/or direction by Coast Guard escort personnel.

The Coast Guard has determined that this proposal, superseding the temporary safety/security zone implemented under 33 CFR 165.731(b), does not constitute a “significant regulatory action” under E.O. 12866 based on the size and location of the security zone. The permanent security zone currently implemented under 33 CFR 165.731(a) remains in effect and covers approximately 5 square nautical miles of a sparsely populated section of Cumberland Sound and tributaries where few recreational or commercial vessels transit. Vessels transiting this area of Cumberland Sound can transit around the security zone.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities. While some owners or operators of vessels intending to transit the RNA may be small entities, for the reasons...
stated in section IV.A. Above this proposed rule would not have a significant economic impact on any vessel owner or operator.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact on it, please submit a comment (see ADDRESSES) explaining why you think it qualifies and how and to what degree this rule would economically affect it.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this proposed rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the FOR FURTHER INFORMATION CONTACT section. The Coast Guard will not retaliate against small entities that question or complain about this proposed rule or any policy or action of the Coast Guard.

C. Collection of Information

This proposed rule would not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Governments

A rule has implications for federalism under E.O. 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this proposed rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in E.O. 13132.

Also, this proposed rule does not have tribal implications under E.O. 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. If you believe this proposed rule has implications for federalism or Indian tribes, please contact the person listed in the FOR FURTHER INFORMATION CONTACT section above.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

F. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.1D, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This proposed rule involves the establishment of RNAs, thereby removing the temporary safety/security zone covering the St. Marys Entrance Channel, portions of the Cumberland Sound, and Atlantic Ocean, that will be enforced whenever any Navy submarine (foreign or domestic) is being escorted by the Coast Guard and operating within the jurisdictional waters of the Sector Jacksonville Captain of the Port Zone. Normally such actions are categorically excluded from further review under paragraph 34(g) of Figure 2–1 of Commandant Instruction M16475.1D. A preliminary environmental analysis checklist and Categorical Exclusion Determination are available in the docket where indicated under ADDRESSES. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to contact the person listed in the FOR FURTHER INFORMATION CONTACT section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

V. Public Participation and Request for Comments

We view public participation as essential to effective rulemaking, and will consider all comments and material received during the comment period. Your comment can help shape the outcome of this rulemaking. If you submit a comment, please include the docket number for this rulemaking, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation.

We encourage you to submit comments through the Federal eRulemaking Portal at http://www.regulations.gov. If your material cannot be submitted using http://www.regulations.gov, contact the person in the FOR FURTHER INFORMATION CONTACT section of this document for alternate instructions.

We accept anonymous comments. All comments received will be posted without change to http://www.regulations.gov and will include any personal information you have provided. For more about privacy and the docket, you may review a Privacy Act notice regarding the Federal Docket Management System in the March 24, 2005, issue of the Federal Register (70 FR 15086).

Documents mentioned in this NPRM as being available in the docket, and all public comments, will be in our online docket at http://www.regulations.gov and can be viewed by following that Web site’s instructions. Additionally, if you go to the online docket and sign up for email alerts, you will be notified when comments are posted or a final rule is published.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

§ 165.150—General.

1. The authority citation for part 165 continues to read as follows:


2. Revise § 165.731 to read as follows:

§ 165.731 Security Zone: Cumberland Sound, Georgia.

(a) Definition. The term “designated representative” means Coast Guard Patrol Commanders, including Coast Guard coxswains, petty officers, and other officers operating Coast Guard vessels, and Federal, state, and local
officers designated by or assisting the Captain of the Port (COTP) Jacksonville, Florida in the enforcement of the regulated areas.

(b) Location. A permanent security zone is established within the following coordinates, the area enclosed by a line starting at 30°44'55" N., 081°29'39" W.; thence to 30°44'55" N., 081°29'18" W.; thence to 30°46'35" N., 081°29'18" W.; thence to 30°47'02" N., 081°29'34" W.; thence to 30°47'21" N., 081°29'39" W.; thence to 30°48'00" N., 081°29'42" W.; thence to 30°49'07" N., 081°29'56" W.; thence to 30°49'55" N., 081°30'35" W.; thence to 30°50'15" N., 081°31'08" W.; thence to 30°50'14" N., 081°31'30" W.; thence to 30°49'58" N., 081°31'45" W.; thence to 30°49'58" N., 081°32'03" W.; thence to 30°50'12" N., 081°32'17" W.; thence following the land based perimeter boundary to the point of origin.

(c) Regulations. (1) No person or vessel may enter or remain within the security zone without the permission of the COTP Jacksonville or designated representative.

(2) All persons and vessels in authorized permission to enter the security zone shall immediately obey any direction or order of the COTP Jacksonville or designated representative.

(3) This regulation does not apply to persons or vessels operating under the authority of the United States Navy or to authorized law enforcement agencies.

3. Add §165.732 to read as follows:

§165.732 Escorted Submarines Sector Jacksonville Captain of the Port Zone.

(a) Location. The following areas are regulated navigation areas (RNA) whenever any Navy submarine (foreign or domestic) is being escorted by the Coast Guard within the Sector Jacksonville Captain of the Port Zone territorial seas:

(1) All waters within 1 nautical mile of any Navy submarine operating within the Sector Jacksonville Captain of the Port Zone territorial seas; and

(2) All waters within 1 nautical mile of the charted center of the navigation channel from Crab Island in the Cumberland Sound, Georgia to the St. Marys Entrance Channel and its approach extending eastward to lighted buoy "STM".

(b) Regulations. All persons and vessels located within a RNA created by paragraph (a) shall follow all orders and/or directions given to them by Coast Guard escort personnel. 33 CFR 165, Subpart B, contains additional provisions applicable to the RNA created in paragraph (a).

(c) Notification. The Coast Guard escort will attempt, when necessary and practicable, to notify any persons or vessels inside or approaching the vicinity of a RNA created in paragraph (a) of this section of its existence via VHF Channel 16 and/or any other means reasonably available.

Dated: June 2, 2016.

S.A. Buschman,
Rear Admiral, U.S. Coast Guard, Commander, Seventh Coast Guard District.
[FR Doc. 2016–13861 Filed 6–10–16; 8:45 am]
BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 63
OAR]

RIN 2060–AS94
National Emission Standards for
Hazardous Air Pollutants for
Secondary Aluminum Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to amend the National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production (Secondary Aluminum NESHAP). In the “Rules and Regulations” section of this Federal Register, we are publishing a direct final rule, without a prior proposed rule, that amends the final rule that was published in the Federal Register on September 18, 2015, to correct inadvertent errors, to clarify rule requirements for initial performance tests and submittal of malfunction reports, to provide an additional option for new round top furnaces to account for unmeasured emissions during compliance testing and to clarify what constitutes a change in furnace operating mode. The direct final rule also updates Web site addresses for the EPA’s Electronic Reporting Tool (ERT) and the Compliance and Emissions Data Reporting Interface (CEDRI). If we receive no adverse comment, we will not take further action on this proposed rule.

DATES: Written comments must be received by July 28, 2016.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by June 20, 2016, we will hold a public hearing on June 28, 2016 on the EPA campus at 109 T.W. Alexander Drive, Research Triangle Park, North Carolina.

ADDITIONAL INFORMATION: The EPA is proposing to amend the Secondary Aluminum NESHAP. In addition, the EPA has published a direct final rule amending the Secondary Aluminum NESHAP in the “Rules and Regulations” section of this Federal Register because we view this as a noncontroversial action and anticipate no adverse comment. The direct final rule will correct inadvertent errors, clarify rule requirements for initial performance tests and submittal of malfunction reports, extend to new round top furnaces a compliance testing option to account for unmeasured emissions during compliance testing that is already available to uncontrolled group 1 furnaces and clarify what constitutes a change in furnace operating mode. The direct final rule also updates Web site addresses for the EPA’s ERT and CEDRI.
explained our reasons for this action in the preamble to the direct final rule.

If we receive no adverse comment, we will not take further action on this proposed rule. If we receive adverse comment on all or a distinct portion of this direct final rule, we will publish a timely withdrawal in the Federal Register informing the public that some or all of the direct final rule will not take effect. We would address all public comments in any subsequent final rule based on the proposed rule.

If we receive adverse comment on a distinct provision of the direct final rule, we will publish a timely withdrawal in the Federal Register indicating which provisions we are withdrawing. The provisions that are not withdrawn will become effective on the date set out in the direct final rule, notwithstanding adverse comment on any other provision. We do not intend to institute a second comment period on this action. Any parties interested in commenting must do so at this time.

The regulatory text for this proposal is identical to that for the direct final rule published in the “Rules and Regulations” section of this Federal Register. For further supplementary information, the detailed rationale for this proposal, and the regulatory revisions, see the direct final rule published in the “Rules and Regulations” section of this Federal Register.

II. Does this action apply to me?

Categories and entities potentially regulated by this proposed rule include:

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<tr>
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"North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this proposed rule. To determine whether your facility is affected, you should examine the applicability criteria in 40 CFR 63.1500. If you have any questions regarding the applicability of any aspect of this action to a particular entity, consult either the air permitting authority for the entity or your EPA regional representative as listed in 40 CFR 63.13.

III. Statutory and Executive Orders

For a complete discussion of the rationale, regulatory text, and all of the administrative requirements applicable to this action, see the direct final rule in the “Rules and Regulations” section of this Federal Register.

Dated: May 27, 2016.

Gina McCarthy, Administrator.

[FR Doc. 2016–13504 Filed 6–10–16; 8:45 am]
BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

50 CFR Part 665

[Docket No. 150908833–6479–01]

RIN 0648–BF37

Mariana Archipelago Fisheries; Remove the CNMI Medium and Large Vessel Bottomfish Prohibited Areas

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: This proposed rule would remove the medium and large vessel bottomfish prohibited fishing areas in the Commonwealth of the Northern Mariana Islands (CNMI). Conditions in the fishery that led to establishing the prohibited areas are no longer present, and the restriction is no longer necessary. The Western Pacific Fishery Management Council recommended Amendment 4 to the Fishery Ecosystem Plan for the Mariana Archipelago (FEP) to remove these prohibited areas, and this proposed rule would implement the recommended change. The intent of the proposed rule is to improve the viability of the CNMI bottomfish fishery and promote optimum yield while preventing overfishing. This proposed rule would also make an administrative housekeeping change to the regulations for the CNMI management subarea crustacean fishing.

DATES: NMFS must receive comments by July 28, 2016.

ADDRESSES: You may submit comments on this document, identified by NOAA–NMFS–2015–0115, by either of the following methods:

• Electronic Submission: Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2015-0115, click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.

• Mail: Send written comments to Michael D. Tosatto, Regional Administrator, NMFS Pacific Islands Region (PIR), 1845 Wasp Blvd., Bldg. 176, Honolulu, HI 96818.

Instructions: NMFS may not consider comments sent by any other method, to any other address or individual, or received after the end of the comment period. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

The Western Pacific Fishery Management Council (Council) and NMFS prepared an environmental analysis that describes the potential impacts on the human environment that could result from the proposed rule. The environmental analysis and other supporting documents are available at www.regulations.gov.

FOR FURTHER INFORMATION CONTACT: Sarah Ellgen, NMFS PIRO Sustainable Fisheries, 808–725–5173.

SUPPLEMENTARY INFORMATION: In 2008, the Council recommended establishing, and NMFS implemented, prohibited areas for commercial fishing for Mariana bottomfish management unit species (BMUS) in the CNMI. Federal regulations currently prohibit medium and large vessels (40 ft and greater) from commercial fishing for BMUS in certain Federal waters around the CNMI. The prohibited areas include waters within approximately 50 nm of the Southern Islands (i.e., Rota, Aguijan (alt. Aguijan), Tinian, Saipan, and Farallon de Medinilla) and within 10 nm of Alamagan Island. The Council established the prohibited areas to prevent large bottomfish vessels based in Guam from traveling to CNMI fishing grounds. At the time, the Council was concerned that the Guam vessels could negatively affect fish stocks and local fisheries through stock depletion, catch competition, and gear conflicts. You may read more about the establishment of the prohibited areas in the 2008 proposed rule (73 FR 51992, September
The CNMI bottomfish fishery has changed since 2008, and the conditions that led the Council and NMFS to establish the prohibited areas are no longer present. Large vessels from Guam have not shown interest in fishing for CNMI bottomfish. The prohibited areas may also be negatively impacting the CNMI bottomfish fishery. Only a few small vessels have been operating on a regular basis, and the few medium and large vessels have faced declining participation, possibly resulting from higher fuel costs that prevent them from traveling beyond the prohibited areas. The prohibited areas may be contributing to the potential under-utilization of the bottomfish resource in CNMI and removing them may promote optimum yield.

To address fishery conditions resulting from the CNMI prohibited areas, the Council recommended that NMFS remove them. The Council and NMFS would continue to manage the fishery under a suite of management requirements that include the specification of annual catch limits and accountability measures, post-season review of catches and effort including against ACLs, requirements for vessel markings, Federal catch and sales reporting, and the vessel monitoring system. The fishing requirements for the Marianas Trench Marine National Monument would also remain unchanged. Figure 1 shows the current prohibited areas.

**Figure 1. Current CNMI medium and large vessel prohibited areas and Guam large vessel prohibited area. This proposed rule would remove the areas that start with “NM.”**
This proposed rule is intended to improve the efficiency and economic viability of the CNMI bottomfish fishery. The Council and NMFS would annually review the effects of the proposed action. Any proposed changes would be subject to additional environmental review and opportunity for public review and comment.

This proposed rule would also include two administrative housekeeping changes: Corrections to the description of the CNMI management subarea and to the CNMI permit area designation for crustacean fishing. First, prior to 2013, the CNMI management subarea was divided into an inshore area (the EEZ within 3 nm of the shoreline) and an offshore area (the EEZ seaward of 3 nm from the shoreline). In 2013, under Public Law 113–34 (which amended Public Law 94–435) the United States transferred nearshore waters (0–3 nm) to the CNMI, so this distinction is no longer necessary. Second, the regulations at § 660.442(a)(1) currently incorrectly refer to Permit Area 3, which is associated with American Samoa. The correct reference for the CNMI is Crustacean Permit Area 5.

Classification

Pursuant to section 304(b)(1)(A) of the Magnuson-Stevens Act, the NMFS Assistant Administrator for Fisheries has determined that this proposed rule is consistent with the FEP, other provisions of the Magnuson-Stevens Act, and other applicable laws, subject to further consideration after public comment.

Regulatory Flexibility Act: Certification of Finding of No Significant Impact on Substantial Number of Small Entities

The Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. A description of the proposed action, why it is being considered, and the legal basis for it are contained in the preamble to this proposed rule.

The Western Pacific Fishery Management Council recommended a prohibited area in the U.S. Exclusive Economic Zone around the Commonwealth of the Mariana Islands (CNMI), among other requirements, for medium and large (i.e., vessels 40 ft and greater) vessels commercially fishing for bottomfish to separate the fishing activity of these vessels from that of smaller vessels. NMFS implemented the Council’s recommendation in 2008 (73 FR 75615; December 12, 2008).

The Council established the prohibited area as a precaution in response to concerns expressed by CNMI fishermen that Guam bottomfish fishermen would travel to fish in CNMI waters after establishment of the large vessel prohibited fishing area in Guam. CNMI fishermen were concerned that such additional fishing by the vessels from Guam would create localized depletion of bottomfish, gear conflicts, and catch competition. Few medium and large vessels, however, are capable of bottomfish fishing, and it appears that few medium and large vessels would enter the CNMI bottomfish fishery. Recent CNMI bottomfish harvests are far below recent Annual Catch Limits set for the fishery. Therefore, the current prohibited area may not be needed to ensure the sustainability of the CNMI bottomfish fishery and, in fact, may be constraining it.

This proposed rule would provide economic relief to the CNMI medium and large bottomfish vessel fleet, through removing the prohibition from commercial fishing for BMUS within the prohibited areas. The proposed action would allow the medium and large longline vessels to fish within additional areas within Federal waters. The proposed action would improve the efficiency and economic viability of the CNMI bottomfish longline fleet.

The proposed action would directly apply to operators of medium and large bottomfish vessels that would potentially fish within CNMI currently prohibited areas, in particular, CNMI and Guam bottomfish permit holders. This permit is required of all vessels commercially fishing for, landing, or transshipping BMUS in the EEZ around the CNMI.

Based on information presented below, NMFS has determined that all affected entities are small entities under the SBA definition of a small entity, i.e., they are engaged in the business of fish harvesting, are independently owned or operated, are not dominant in their field of operation, and have gross annual receipts below $20.5 million (NAICS code: 114111). Since 2012, NMFS has issued fewer than five CNMI and Guam bottomfish permits to medium or large vessels annually. Between 2012 and 2014 NMFS issued an average of eight CNMI Bottomfish permits with less than one classified as CNMI medium or large bottomfish vessel. In Guam, only large bottomfish vessels (50 ft or greater) are required to have a permit. Between 2012 and 2014, NMFS issued an average of two Guam bottomfish permits. During that same time, annual revenue from all bottomfish species landed by the CNMI bottomfish fishery ranged from $23,947–$85,294, and ranged from $13,650–$65,676 when only considering BMUS catch. For Guam based bottomfish boats, revenue earned from bottomfish catch ranged from $18,433–$36,635.

Therefore, NMFS estimates that this action would potentially affect up to five medium to large bottomfish vessels directly, at least initially before the potential for expansion of the larger boat sector is realized.

This proposed action would lift restrictions for the directly affected entities without imposing obligations. Bottomfish vessel owners could choose to upgrade to larger vessels or continue fishing with their current vessels. NMFS does not expect the rule to have disproportionate economic impacts between large and small entities directly affected by this rule, although the small vessels currently allowed to fish throughout the prohibited areas may be indirectly affected by the potential increase in the number of medium and large bottomfish vessels fishing within a portion of the prohibited areas. There would be no disproportionate economic impacts among the universe of potentially affected vessels based on gear, or vessel length. However, due to their proximity to the prohibited areas, vessels based in CNMI would stand to see greater benefit from this action, relative to those based in Guam.

The implementation of this action will not result in significant adverse economic impacts to individual vessels. The proposed action does not duplicate, overlap, or conflict with other Federal rules and is not expected to have significant impact on a substantial number of small entities (as discussed above), organizations, or government jurisdictions. As such, an initial regulatory flexibility analysis is not required and none has been prepared.

Executive Order 12866

This proposed rule has been determined to be not significant for purposes of Executive Order 12866.

List of Subjects in 50 CFR Part 665

Administrative practice and procedure, Commonwealth of the Northern Mariana Islands, Mariana Archipelago Fisheries, Fisheries, Fishing, Guam, Permits, Reporting and recordkeeping requirements.
Dated: June 7, 2016.

Samuel D. Rauch III,
Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, NMFS proposes to amend 50 CFR part 665 as follows:

PART 665—FISHERIES IN THE WESTERN PACIFIC

1. The authority citation for 50 CFR part 665 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

2. In § 665.402, revise paragraphs (b) and (c) to read as follows:

§ 665.402 Management subareas.

(b) CNMI Management Subarea means the EEZ seaward of the CNMI, with the inner boundary defined as a line coterminous with the seaward boundary of the CNMI.

(c) The outer boundary of each fishery management area is a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured, or is coterminous with adjacent international maritime boundaries. The boundary between the fishery management areas of Guam and the CNMI extends to those points which are equidistant between Guam and the island of Rota in the CNMI. CNMI and Guam management subareas are divided by a line intersecting these two points: 148° E. long., 12° N. lat., and 142° E. long., 16° N. lat.

§ 665.403 [Amended]

3. In § 665.403, remove and reserve paragraph (b).

4. In § 665.405, revise paragraphs (e) and (f), and remove paragraphs (g) and (h) to read as follows:

§ 665.405 Prohibitions.

(e) Use a vessel to fish commercially for Mariana bottomfish MUS in the CNMI management subarea without a valid CNMI commercial bottomfish permit registered for use with that vessel, in violation of § 665.404(a)(2).

(f) Falsify or fail to make, keep, maintain, or submit a Federal logbook as required under § 665.14(b) when using a vessel to engage in commercial fishing for Mariana bottomfish MUS in the CNMI management subarea in violation of § 665.14(b).

6. In § 665.442, revise paragraph (a)(1) to read as follows:

§ 665.442 Permits.

(a) * * *

(1) The owner of any vessel used to fish for lobster in Permit Area 5 must have a permit issued for such a vessel.

* * * * *

[FR Doc. 2016–13852 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–22–P
The patent rights in this invention are co-owned by the United States of America, as represented by the Secretary of Agriculture and Allison Tree, LLC of Verona, Wisconsin. The prospective exclusive license will grant to the owner, Allison Tree, LLC, an exclusive license to the Federal Government’s patent rights. It is in the public interest to so license this invention as Allison Tree, LLC of Verona, Wisconsin has submitted a complete and sufficient application for a license. The prospective exclusive license will be royalty-bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The prospective exclusive license may be granted unless, within thirty (30) days from the date of this published Notice, the Forest Service receives written evidence and argument which establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7.

Mojdeh Bahar,
Assistant Administrator.

DEPARTMENT OF AGRICULTURE
Food Safety and Inspection Service
Submission for OMB Review; Comment Request
June 7, 2016.

The Department of Agriculture has submitted the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. Comments are requested regarding (1) whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency’s estimate of burden including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments regarding this information collection received by July 13, 2016 will be considered. Written comments should be addressed to: Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), New Executive Office Building, 725 17th Street NW., Washington, DC 20502. Commenters are encouraged to submit their comments to OMB via email to: OIRA_Submission@OMB.EOP.GOV or fax (202) 395–3806 and to Departmental Clearance Office, USDA, OCIO, Mail Stop 7602, Washington, DC 20250–7602. Copies of the submission(s) may be obtained by calling (202) 720–8958.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

Food Safety and Inspection Service
Title: Registration Requirements.
OMB Control Number: 0583–0128.

Summary of Collection: The Food Safety and Inspection Service (FSIS) has been delegated the authority to exercise the functions of the Secretary as provided in the Federal Meat Inspection Act (FMIA) (21 U.S.C. 601 et seq.) and the Poultry Products Inspection Act (PPIA) (21 U.S. C. 451 et seq.). These statutes mandate that FSIS protect the public by ensuring that meat and poultry are safe, wholesome, unadulterated, and properly labeled and packaged. According to the regulations, (9 CFR 320.5 and 381.179), parties required to register with FSIS must do so by submitting form FSIS Form 5020–1, “Registration of Meat and Poultry Handlers.”

Need and Use of the Information: FSIS will collect the name, address of all locations at which they conduct the business that requires them to register, and all trade or business names under which they conduct the businesses. FSIS uses this information to maintain a database of these businesses. If the information were not collected, it would reduce the effectiveness of the meat and poultry inspection program.

Description of Respondents: Business or other for-profit.

Number of Respondents: 1200.
Frequency of Responses: Reporting: Other (Once).
Total Burden Hours: 300.

Ruth Brown,
Departmental Information Collection Clearance Officer.

BILLING CODE 3410–DM–P
DEPARTMENT OF AGRICULTURE

Forest Service

Notice of Lincoln County Resource Advisory Committee Meeting

AGENCY: Forest Service, USDA.

ACTION: Notice of meeting.

SUMMARY: Pursuant to the authorities in the Federal Advisory Committee Act (Pub. L. 92–463) and under the Secure Rural Schools and Community Self-Determination Act of 2000 (Pub. L. 106–393) the Kootenai National Forest’s Lincoln County Resource Advisory Committee will meet on Tuesday, June 28, 2016 at 6:00 p.m. at the Forest Supervisor’s Office in Libby, Montana for a business meeting. The meeting is open to the public.

DATE: June 28, 2016

ADDRESSES: Forest Supervisor’s Office, 31374 U.S. Hwy. 2, Libby, Montana

FOR FURTHER INFORMATION CONTACT: JeriAnn Chapel, Committee Coordinator, Kootenai National Forest at (406) 283–7643, or email jchapel@fs.fed.us.

SUPPLEMENTARY INFORMATION: Agenda will include a review and vote on project proposals. If the meeting date or location is changed, notice will be posted in the local newspapers, including the Missoulian, based in Missoula, Montana.


Christopher Savage, Forest Supervisor.

[FR Doc. 2016–13868 Filed 6–10–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Forest Service

Tuolumne and Mariposa Counties Resource Advisory Committee

AGENCY: Forest Service, USDA.

ACTION: Notice of meeting.

SUMMARY: The Tuolumne and Mariposa Counties Resource Advisory Committee (RAC) will meet in Sonora, California. The committee is authorized under the Secure Rural Schools and Community Self-Determination Act (the Act) and operates in compliance with the Federal Advisory Committee Act. The purpose of the committee is to improve collaborative relationships and to provide advice and recommendations to the Forest Service concerning projects and funding consistent with Title II of the Act. RAC information can be found at the following Web site: http://www.fs.usda.gov/main/pts/specialprojects/racweb.

DATES: The meeting will be held on July 11, 2016, from 12:00 p.m. to 3:00 p.m. All RAC meetings are subject to cancellation. For status of meeting prior to attendance, please contact the person listed under FOR FURTHER INFORMATION CONTACT.

ADDRESSES: The meeting will be held at the Stanislaus National Forest Supervisor’s Office, Tuolumne Room, 19777 Greenley Road, Sonora, California. A phone line will be available to attend the meeting via conference call, for the conference line information please contact the person listed under FOR FURTHER INFORMATION CONTACT.

FOR FURTHER INFORMATION CONTACT: Written comments may be submitted as described under: SUPPLEMENTARY INFORMATION. All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at the Stanislaus National Forest Supervisor’s Office. Please call ahead to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Beth Martinez, RAC Coordinator, by phone at 209–532–3671 extension 321 or via email at bethmartinez@fs.fed.us.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:

1. Provide RAC updates, and
2. Review project proposal submittals.

The meeting is open to the public. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by at least a week in advance to be scheduled on the agenda. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before or after the meeting. Written comments and requests for time for oral comments must be sent to Beth Martinez, RAC Coordinator, Stanislaus National Forest, 19777 Greenley Road, Sonora, California 95370; by email to bethmartinez@fs.fed.us, or via facsimile to Attention: Beth Martinez at 209–533–1890.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices, or other reasonable accommodation. For access to the facility or proceedings, please contact the person listed in the section titled FOR FURTHER INFORMATION CONTACT. All reasonable accommodation requests are managed on a case by case basis.

Dated: June 6, 2016.

Jeanne M. Higgins, Forest Supervisor.

[FR Doc. 2016–13874 Filed 6–10–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Forest Service

National Urban and Community Forestry Advisory Council

AGENCY: Forest Service, USDA.

ACTION: Notice of meeting.


DATES: The teleconference will be held on Wednesday, July 13, 2016, from 10:30 a.m. to 12:45 p.m., Eastern Daylight Time (EDT) or until Council business is completed.

All meetings are subject to cancellation. For an updated status of the teleconference prior to attendance, please contact the person listed under FOR FURTHER INFORMATION CONTACT.

ADDRESSES: The meeting will be held via teleconference. For anyone who would like to attend the teleconference, please visit the Web site listed in the SUMMARY section or contact Nancy Stremple at nstremple@fs.fed.us for further details. Written comments may be submitted as described under SUPPLEMENTARY INFORMATION. All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at the USDA Forest Service, Sidney Yates Building., Room 3SC–01C, 201 14th Street SW., Washington DC 20224. Please call ahead at 202–205–7629 to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Nancy Stremple, Executive Staff,
National Urban and Community Forestry Advisory Council, by telephone at 202–205–7829, or by email at nstremple@fs.fed.us, or by cell phone at 202–309–9873, or via facsimile at 202–690–5792.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:
1. Review the 2016 Work Plan;
2. Update on the 2016 Grants and status of 2017 grant proposals;
3. Develop the 2018 grant categories;
4. Listen to local constituents with urban forestry concerns;
5. Discuss the National ten year action plan (2016–2026) implementation;
6. Receive Forest Service budget and program updates; and
7. Discuss development of the annual accomplishments/recommendations report.

The teleconference is open to the public. However, the public is strongly encouraged to RSVP prior to the teleconference to ensure all related documents are shared with public meeting participants. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should submit a request in writing by July 1, 2016, to be scheduled on the agenda. Council discussion is limited to Forest Service staff and Council members, however anyone who would like to bring urban and community forestry matters to the attention of the Council may file written statements with the Council’s staff before or after the meeting. Written comments and time requests for oral comments must be sent to Nancy Stemple, Executive Staff, National Urban and Community Forestry Advisory Council, Sidney Yates Building, Room 3SC–01C, 201 14th Street SW., Washington, DC 20024, or by email at nstremple@fs.fed.us.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices or other reasonable accommodation for access to the facility or proceedings by contacting the person listed in the section titled FOR FURTHER INFORMATION CONTACT. All reasonable accommodation requests are managed on a case by case basis.

Dated: June 7, 2016.

Steve Marshall,
Assistant Director, Cooperative Forestry.

[FR Doc. 2016–13843 Filed 6–10–16; 8:45 am]
BILLING CODE 3411–15–P

DEPARTMENT OF COMMERCE
Foreign-Trade Zones Board

[Order No. 2003]

Approval of Subzone Status—Cummins, Inc., Lakewood and Jamestown, New York

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a–81u), the Foreign-Trade Zones Board (the Board) adopts the following Order:

Whereas, the Foreign-Trade Zones Act provides for “. . . the establishment. . . . of foreign-trade zones in parts of entry of the United States, to expedite and encourage foreign commerce, and for other purposes,” and authorizes the Foreign-Trade Zones Board to grant to qualified corporations the privilege of establishing foreign-trade zones in or adjacent to U.S. Customs and Border Protection ports of entry;

Whereas, the Board’s regulations (15 CFR part 400) provide for the establishment of subzones for specific uses;

Whereas, the County of Erie, grantees of Foreign-Trade Zone 23, has made application to the Board for the establishment of a subzone at the facilities of Cummins, Inc., located in Lakewood and Jamestown, New York, (FTZ Docket B–8–2016, docketed February 17, 2016);

Whereas, notice inviting public comment has been given in the Federal Register (81 FR 8682, February 22, 2016) and the application has been processed pursuant to the FTZ Act and the Board’s regulations; and,

Whereas, the Board adopts the findings and recommendations of the examiner’s memorandum, and finds that the requirements of the FTZ Act and the Board’s regulations are satisfied;

Now, Therefore, the Board hereby approves subzone status at the facilities of Cummins, Inc., located in Lakewood and Jamestown, New York (Subzone 23D), as described in the application and Federal Register notice, subject to the FTZ Act and the Board’s regulations, including Section 400.13.

Signed at Washington, DC, this 2nd day of June 2016.

Paul Piquado,
Assistant Secretary of Commerce for Enforcement and Compliance, Alternate Chairman, Foreign-Trade Zones Board.

[FR Doc. 2016–13923 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE
Foreign-Trade Zones Board

[S–81–2016]

Foreign-Trade Zone 44—Morris County, New Jersey; Application for Subzone; Givaudan Flavors Corporation, East Hanover, New Jersey

An application has been submitted to the Foreign-Trade Zones (FTZ) Board by the State of New Jersey, Department of State, grantees of FTZ 44, requesting subzone status for the facilities of Givaudan Flavors Company (Givaudan), located in East Hanover. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a–81u), and the regulations of the FTZ Board (15 CFR part 400). It was formally docketed on June 3, 2016.

The proposed subzone would consist of the following sites: Site 1 (57.9 acres) 245 Merry Lane, East Hanover; and, Site 2 (1.23 acres) 901 Murray Road, East Hanover. A notification of proposed production activity has been submitted and will be published separately for public comment. The proposed subzone would be subject to the existing activation limit of FTZ 44.

In accordance with the FTZ Board’s regulations, Kathleen Boyce of the FTZ Staff is designated examiner to review the application and make recommendations to the Executive Secretary.

Public comment is invited from interested parties. Submissions shall be addressed to the FTZ Board’s Executive Secretary at the address below. The closing period for their receipt is July 25, 2016. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period to August 8, 2016.

A copy of the application will be available for public inspection at the Office of the Executive Secretary, Foreign-Trade Zones Board, Room 21013, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230–0002, and in the “Reading Room” section of the FTZ
Board’s Web site, which is accessible via www.trade.gov/ftz.

For further information, contact Kathleen Boyce at Kathleen.Boyce@trade.gov or at (202) 482–1346.

Dated: June 3, 2016.
Elizabeth Whiteman,
Acting Executive Secretary.

[FR Doc. 2016–13919 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Order No. 2000]

Reorganization and Expansion of Foreign-Trade Zone 21 Under Alternative Site Framework; Charleston, South Carolina

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a–81u), the Foreign-Trade Zones Board (the Board) adopts the following Order:

Whereas, the Board adopted the alternative site framework (ASF) (15 CFR Sec. 400.2(c)) as an option for the establishment or reorganization of zones; and,

Whereas, the South Carolina State Ports Authority, grantee of Foreign-Trade Zone 21, submitted an application to the Board (FTZ Docket B–14–2015, docketed February 25, 2015) for authority to reorganize and expand under the ASF with a service area of the Counties of Charleston, Berkeley, Dorchester, Orangeburg, Williamsburg, Georgetown, Colleton, Jasper, Hampton and Beaufort, subject to the FTZ Act and the Board’s regulations, including Section 400.13, to the Board’s standard 2,000-acre activation limit for the zone, to an ASF sunset provision for magnet sites that would terminate authority for Sites 9, 16 and 18 if not activated within five years from the month of approval, and to an ASF sunset provision for usage-driven sites that would terminate authority for Sites 6, 15, 26, 28, 30, 31 and 32 if no foreign-status merchandise is admitted for a bona fide customs purpose within three years from the month of approval.

Signed at Washington, DC, this 2nd day of June 2016.

Paul Piquado, Andrew McGilvray,
Executive Secretary.

[FR Doc. 2016–13947 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Order No. 1999]

Reorganization of Foreign-Trade Zone 38 (Expansion of Service Area) Under Alternative Site Framework, Spartanburg County, South Carolina

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a–81u), the Foreign-Trade Zones Board (the Board) adopts the following Order:

Whereas, the Board adopted the alternative site framework (ASF) (15 CFR Sec. 400.2(c)) as an option for the establishment or reorganization of zones; and,

Whereas, the South Carolina State Ports Authority, grantee of Foreign-Trade Zone 38, submitted an application to the Board (FTZ Docket B–80–2015, docketed November 18, 2015) for authority to expand the service area of the zone to include Pickens, Greenwood, and Abbeville Counties, as described in the application, adjacent to the Greenville/Spartanburg Customs and Border Protection port of entry; and,

Whereas, notice inviting public comment was given in the Federal Register (80 FR 73700–73701, November 25, 2015) and the application has been processed pursuant to the FTZ Act and the Board’s regulations; and,

Whereas, the Board adopts the findings and recommendation of the examiner’s report, and finds that the requirements of the FTZ Act and the Board’s regulations are satisfied; and,

Now, Therefore, the Board hereby orders:

The application to reorganize and expand FTZ 21 under the ASF is approved with a service area of the Counties of Charleston, Berkeley, Dorchester, Orangeburg, Williamsburg, Georgetown, Colleton, Jasper, Hampton and Beaufort; and

Now, therefore, the Board hereby orders:

The application to reorganize FTZ 38 to expand the service area under the ASF is approved, subject to the FTZ Act and the Board’s regulations, including Section 400.13, and to the Board’s standard 2,000-acre activation limit for the zone.

Signed at Washington, DC, this 2 day of June 2016.

Paul Piquado,
Assistant Secretary of Commerce for Enforcement and Compliance, Alternate Chairman, Foreign-Trade Zones Board.

[FR Doc. 2016–13924 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Order No. 2002]

Approval of Expansion of Subzone 78A; Nissan North America, Inc.; Smyrna, Tennessee

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a–81u), the Foreign-Trade Zones Board (the Board) adopts the following Order:

Whereas, the Foreign-Trade Zones Act provides for “ . . . the establishment . . . of foreign-trade zones in ports of entry of the United States, to expedite and encourage foreign commerce, and for other purposes,” and authorizes the Foreign-Trade Zones Board to grant to qualified corporations the privilege of establishing foreign-trade zones in or adjacent to U.S. Customs and Border Protection ports of entry; and,

Whereas, the Board’s regulations (15 CFR part 400) provide for the establishment of subzones for specific uses; and,

Whereas, the Metropolitan Government of Nashville and Davidson County, grantee of Foreign-Trade Zone 78, has made application to the Board to expand Subzone 78A on behalf of Nissan North America, Inc., located in Smyrna, Tennessee (FTZ Docket B–84–2015, docketed December 23, 2015); and,

Whereas, notice inviting public comment has been given in the Federal Register (81 FR 63, January 4, 2016) and the application has been processed pursuant to the FTZ Act and the Board’s regulations; and,
Whereas, the Board adopts the findings and recommendations of the examiner’s memorandum, and finds that the requirements of the FTZ Act and the Board’s regulations are satisfied;

Now, therefore, the Board hereby approves the expansion of Subzone 78A on behalf of Nissan North America, Inc., as described in the application and Federal Register notice, subject to the FTZ Act and the Board’s regulations, including Section 400.13.

Signed at Washington, DC, this 2nd day of June 2016.

Paul Piquado,
Assistant Secretary for Commerce for Enforcement and Compliance, Alternate Chairman, Foreign-Trade Zones Board.

Andrew McGilvray,
Executive Secretary.

FOR FURTHER INFORMATION CONTACT: Julia Hancock or Susan Pulongbari, AD/CVD Operations, Office V, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–1394, or (202) 482–4031, respectively.

SUPPLEMENTARY INFORMATION:
Postponement of Preliminary Determination

On February 16, 2016, the Department of Commerce (“Department”) published a notice initiating an antidumping duty investigation of certain biaxial integral geogrid products from the People’s Republic of China (“PRC”).1 Section 733(b)(1)(A) of the Tariff Act of 1930, as amended (“the Act”), and 19 CFR 351.205(b)(1) state that the Department will make a preliminary determination no later than 140 days after the date of the initiation (i.e., February 8, 2016). Accordingly, the preliminary determination of this antidumping duty investigation is currently due no later than June 27, 2016.

On May 27, 2016, Tensar Corporation (“Petitioner”), made a timely request, pursuant to 19 CFR 351.205(e), for postponement of the preliminary determination, in order to facilitate the Department’s analysis of respondents’ questionnaire responses and interested parties’ surrogate value data submissions. Because there are no compelling reasons to deny the request, in accordance with section 733(c)(1)(A) of the Act, the Department is postponing the deadline for the preliminary determination by 50 days.2

For the reasons stated above, the Department, in accordance with section 733(c)(1)(A) of the Act, is postponing the deadline for the preliminary determination to no later than 190 days after the date on which the Department initiated this investigation. Therefore, the new deadline for the preliminary determination is August 16, 2016. In accordance with section 735(a)(1) of the Act, the deadline for the final determination of this investigation will continue to be 75 days after the date of the preliminary determination, unless postponed at a later date.

This notice is issued and published pursuant to section 733(c)(2) of the Act and 19 CFR 351.205(f)(1).

Dated: June 7, 2016.

Paul Piquado,
Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2016–13953 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE
International Trade Administration

Submission for OMB Review; Comment Request; Correction

Agency: International Trade Administration (ITA). Department of Commerce.

Title: Procedures for Importation of Supplies for Use in Emergency Relief Work.

OMB Control Number: 0625–0256.

Type of Request: Regular Submission.

In the Federal Register of April 11, 2016, FR Vol. 81, No. 69, Page 21315–21316, under Section II. “Method of Collection,” the second line in the paragraph after Attention: should read “Enforcement and Compliance” instead of “Import Administration.”

Dated: June 8, 2016.

Glenna Mickelson,
Management Analyst, Office of the Chief Information Officer.

[FR Doc. 2016–13859 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–FP–P

DEPARTMENT OF COMMERCE
International Trade Administration

[A–570–036]

Certain Biaxial Integral Geogrid Products from the People’s Republic of China: Postponement of Preliminary Determination of Antidumping Duty Investigation

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

DATES: June 13, 2016.

1 See Certain Biaxial Integral Geogrid Products from the People’s Republic of China: Initiation of Antidumping Duty Investigation, 81 FR 7755 (February 16, 2016).

2 See Letter to the Secretary of Commerce from Petitioner “Request to Postpone Preliminary Determination” (May 27, 2016).

3 See Certain Biaxial Integral Geogrid Products from the People’s Republic of China: Initiation of Antidumping Duty Investigation, 81 FR 7755 (February 16, 2016).

1 Wheatland Tube Company, Borusan Mannesmann Boru Sanayi ve Ticaret A.S., and Borusan Isiktikal Ticaret requested the instant administrative review.


3 This review covers the following companies: Borusan Isiktikal Ticaret T.A.S. and Borusan Mannesmann Boru Sanayi ve Ticaret A.S. (collectively, Borusan); Toscelik Profil ve Sac Endustriisi A.S. and Tosyali Dis Ticaret A.S. (collectively, Toscelik); Toscelik Metal Ticaret A.S. (Toscelik Metal);1 Borusan Bilisik Boru Fabrikalari San ve Tic (Borusan Bilisik); Borusan Gemi Boru Tesisleri A.S. (Borusan Gemi); Borusan Bracat Ihalat ve Dagitim A.S. (Borusan Ihalat); Borusan Ihalat ve Dagitim A.S. (Borusan Ihalat); Tubeco Pipe and Steel Corporation (Tubeco); Erbosan Erciyas Boru Sanayi ve Ticaret A.S. (Erbosan); and Yucel Boru ve Profil Endustriisi A.S., Yuezellboru Ihalat ve Pazarlama A.S., and Cayirova Boru Sanayi ve Ticaret A.S. (collectively, the Yucel Group).

We note that in prior segments of this proceeding, we treated Toscelik Profil ve Sac Endustriisi, Tosyali Dis Ticaret A.S., and Toscelik Metal as the same legal entity. See, e.g., Welded Carbon Steel Standard Pipe and Tube Products From Turkey: Final Results of Antidumping Duty Administrative Review; 2012–2013, 79 FR 71087, 71088 n.8 (December 1, 2014). However, in a prior review, we found that Toscelik Metal has ceased to exist. Id. There is no record evidence for altering this treatment. Therefore, for these preliminary results, we are treating Toscelik and Tosyali as the same legal entity, and continue to find that Toscelik
Department preliminarily determines that Toscelik made U.S. sales of subject merchandise below normal value (NV) while Borusan did not make sales of subject merchandise below NV. In addition, the Department preliminarily finds that Erbosan and the Yucel Group had no reviewable shipments during the POR. The preliminary results are listed below in the section titled “Preliminary Results of Review.” Interested parties are invited to comment on the preliminary results of this review.

DATES: Effective Date: June 13, 2016.

FOR FURTHER INFORMATION CONTACT: Michael J. Heaney, Scott Hoefke, or Robert James at (202) 482–4475, (202) 482–4947, or (202) 482–0649, respectively; AD/CVD Operations, Office VI, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230.

SUPPLEMENTARY INFORMATION:

Scope of the Order

The merchandise subject to the order is welded pipe and tube. The welded pipe and tube subject to the order is currently classifiable under subheading 7306.30.10.00, 7306.30.50.25, 7306.30.50.32, 7306.30.50.40, 7306.30.50.55, 7306.30.50.85, and 7306.30.90.90 of the Harmonized Tariff Schedule of the United States (HTSUS). The HTSUS subheading is provided for convenience and customs purposes. A full description of the scope of the order is contained in the memorandum from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, to Paul Piquado, Assistant Secretary for Enforcement and Compliance, “Decision Memorandum for Preliminary Results of Antidumping Duty Administrative Review: Welded Carbon Steel Standard Pipe and Tube Products from Turkey: 2013–2014 Administrative Review” (Preliminary Decision Memorandum), which is hereby described by this notice. The written description of the scope of the order is dispositive.

Methodology

The Department is conducting this review in accordance with section 751(a)(1)(B) and (2) of the Tariff Act of 1930, as amended (the Act). Export price is calculated in accordance with section 772 of the Act. NV is calculated in accordance with section 773 of the Act. For a full description of the methodology underlying our conclusions, see the Preliminary Decision Memorandum. The Preliminary Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance’s Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at http://access.trade.gov and is available to all parties in the Central Records Unit, room B–8024 of the main Department of Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be accessed directly at http://enforcement.trade.gov/frn/index.html. The signed Preliminary Decision Memorandum and the electronic version of the Preliminary Decision Memorandum are identical in content. A list of the topics discussed in the Preliminary Decision Memorandum is attached as the Appendix to this notice.

Preliminary Determination of No Shipments

On July 2, 2015 and July 17, 2015, Erbosan and the Yucel Group, respectively, submitted letters to the Department certifying that they had no sales, shipments, or entries of the subject merchandise to the United States during the POR. 4 Erbosan further certified that it did not know or have reason to know that any of its customers would subsequently export or sell Erbosan’s merchandise to the United States during the POR. On August 11, 2015, consistent with our practice, the Department issued “No Shipment Inquiries” to U.S. Customs and Border Protection (CBP) to confirm that there were no entries of welded pipe and tube from Turkey exported by either Erbosan or Yucel Group during the POR. 5 We received no information from CBP that contradicted the Yucel Group’s no shipment claim.

The Department did however, receive information from CBP indicating possible shipments from Erbosan. As further discussed in the Preliminary Decision Memo, subsequent to these Preliminary Results, we intend to solicit comments from interested parties concerning Erbosan’s no shipment claim. 6 Based the foregoing, we preliminarily determine that Erbosan and Yucel Group had no reviewable shipments during the POR. Also, consistent with our practice, the Department finds that it is not appropriate to rescind the review with respect to Erbosan or the Yucel Group, but rather to complete the review with respect to both Erbosan and the Yucel Group, and to issue appropriate instructions to CBP based on the final results of this review. 7 Thus, if we continue to find that Erbosan and Yucel Group had no shipments of subject merchandise in the final results, we will instruct CBP to liquidate any existing entries of merchandise produced by Erbosan or Yucel Group, but exported by other parties, at the rate for the intermediate reseller, if available, or at the all-others rate. 8

Rates for Non-Examined Companies

The statute and the Department’s regulations do not address the establishment of a rate to be applied to companies not selected for examination when the Department limits its examination in an administrative review pursuant to section 777A(c)(2) of the Act. Generally, the Department looks to section 735(c)(5) of the Act, which provides instructions for calculating the all-others rate in a market economy

Metal no longer exists. Additionally we note that in prior segments of this proceeding, we treated Borusan Mannesmann Boru Sanayi ve Ticaret A.S. and Borusan Isikbil Ticaret T.A.S. as the same legal entity. See, e.g., Welded Carbon Steel Standard Pipe and Tube Products From Turkey: Final Results of Antidumping Duty Administrative Review and Final Determination of No Shipments; 2013–2014, 80 FR 76674, 76674 n.2 (December 10, 2015). We preliminarily determine that there is no evidence on the record for altering our treatment of Borusan Mannesmann Boru Sanayi ve Ticaret A.S. and Borusan Isikbil Ticaret T.A.S., as the same legal entity. Finally, as noted above, we initiated a review of (1) Borusan Birsle; (2) Borusan Gemlik, (3) Borusan Ibrahim, (4) Borusan Ishclit, and (5) Tubeco. See Initiation Notice. Although the Department may have treated these companies as part of a “Borusan Group” entity in prior segments, the current record does not support treating these companies as part of the Borusan Mannesmann Boru Sanayi ve Ticaret A.S. and Borusan Isikbil Ticaret T.A.S. entity. Accordingly, as discussed infra, each of these five companies will be assigned the rate applicable to companies not selected for individual examination in this review.


* See Customs email message number 5223304, dated August 11, 2015 (Erbosan); see also Customs email message number 5223305, dated August 11, 2015 (Yucel Group).

* See Preliminary Decision Memorandum at 4.


* See, e.g., Magnesium Metal From the Russian Federation: Preliminary Results of Antidumping Duty Administrative Review, 75 FR 20622, 20623 (May 13, 2010), unchanged in Magnesium Metal From the Russian Federation: Final Results of Antidumping Duty Administrative Review, 75 FR 56989 (September 17, 2010).
in the case briefs, may be filed not later than five days after the due date for filing case briefs. Parties who submit case briefs or rebuttal briefs in this proceeding are encouraged to submit with each argument: (1) A statement of the issue; (2) a brief summary of the argument; and (3) a table of authorities. Case and rebuttal briefs should be filed using ACCESS. In order to be properly filed, ACCESS must successfully receive an electronically-filed document in its entirety by 5 p.m. Eastern Time.

Pursuant to 19 CFR 351.310(c), interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Enforcement and Compliance, filed electronically via ACCESS, within 30 days after the date of publication of this notice. Requests should contain: (1) The party’s name, address, and telephone number; (2) the number of participants; and (3) a list of issues to be discussed. Issues raised in the hearing will be limited to those raised in the respective case and rebuttal briefs.

Unless otherwise extended, the Department intends to issue the final results of this administrative review, including the results of its analysis of the issues raised in any written briefs, not later than 120 days after the date of publication of this notice, pursuant to section 751(a)(3)(A) of the Act.

Assessment Rates

Upon completion of the administrative review, the Department shall determine, and CBP shall assess, antidumping duties on all appropriate entries in accordance with 19 CFR 351.212(b)(1). We intend to issue instructions to CBP 15 days after the date of publication of the final results of this review.

If Borusan’s or Toscelik’s weighted-average dumping margins are not zero or de minimis (i.e., less than 0.5 percent) in the final results of this review, we will calculate importer-specific assessment rates on the basis of the ratio of the total amount of dumping calculated for the importer’s examined sales and the total entered value of the sales in accordance with 19 CFR 351.212(b)(1). Where either a respondent’s weighted-average dumping margin is zero or de minimis, or an importer-specific assessment rate is zero or de minimis, we will instruct CBP to liquidate the appropriate entries without regard to antidumping duties.

For the companies which were not selected for individual review, we will assign an assessment rate based on the methodology described in the “Rate for Non-Examined Companies” section, above.

With respect to Erbosan and Yucel Group, if we continue to find that Erbosan and Yucel Group had no shipments of subject merchandise in the final results, we will instruct CBP to liquidate any existing entries of merchandise produced by Erbosan or Yucel Group, but exported by other parties, at the rate for the intermediate reseller, if available, or at the all-others rate.

Cash Deposit Requirements

The following cash deposit requirements will be effective for all shipments of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the publication date of the final results of this administrative review, as provided by section 751(a)(2)(C) of the Act: (1) The cash deposit rate for Borusan and Toscelik will be equal to the weighted-average dumping margin established in the final results of this review, except if the rate is zero or de minimis within the meaning of 19 CFR 351.106(c)(1), in which case the cash deposit rate will be zero; (2) for other manufacturers and exporters covered in a prior segment of the proceeding, the cash deposit rate will continue to be the company-specific rate published for the most recently completed segment of this proceeding in which that manufacturer or exporter participated; (3) if the exporter is not a firm covered in this review, a prior review, or the original less-than-fair-value (LTFV) investigation, but the manufacturer is, then the cash deposit rate will be the rate established for the most recently completed segment of this proceeding for the manufacturer of subject merchandise; and (4) the cash deposit rate for all other manufacturers or exporters will continue to be 14.74 percent, the all-others rate established in the LTFV investigation.

These cash deposit requirements, when imposed, shall remain in effect until further notice.

See Antidumping Duty Order; Welded Carbon Steel Standard Pipe and Tube Products From Turkey, 51 FR 17784 (May 15, 1986).

See also includes Tosyalı Dis Ticaret A.S. See footnote 3.

See also includes Erbosan İstikbal Ticaret T.A.S. See footnote 4.

See Magnesium Metal From the Russian Federation: Preliminary Results of Antidumping Duty Administrative Review, 75 FR 26922, 26923 (May 13, 2010), unchanged in Magnesium Metal From the Russian Federation: Final Results of Antidumping Duty Administrative Review, 75 FR 56989 (September 17, 2010).

13 See 19 CFR 351.309(d).

14 See 19 CFR 351.309(c)(2) and (d)(2).

15 See 19 CFR 351.303.

16 See 19 CFR 351.310(c).
Notification to Importers
This notice also serves as a preliminary reminder to importers of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during this review period. Failure to comply with this requirement could result in the Secretary’s presumption that reimbursement of antidumping duties occurred and the subsequent assessment of double antidumping duties.

We are issuing and publishing these results in accordance with sections 751(a)(1) and 777(i)(1) of the Act.

Dated: June 6, 2016.

Paul Piquado,
Assistant Secretary for Enforcement and Compliance.

Appendix
List of Topics Discussed in the Preliminary Decision Memorandum
1. Summary
2. Background
3. Scope of the Order
4. Preliminary Determination of No Shipments
5. Rates for Non Examined Companies
6. Comparisons to Normal Value
7. Product Comparisons
8. Date of Sale
9. Export Price
10. Normal Value
11. Currency Conversion
12. Recommendation

FR Doc. 2016–13968 Filed 6–10–16; 8:45 am
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE
International Trade Administration
[A–570–964; A–201–838]

Seamless Refined Copper Pipe and Tube From the People’s Republic of China and Mexico: Final Results of the Full Sunset Reviews of the Antidumping Duty Orders

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: As a result of these sunset reviews, the Department of Commerce (“the Department”) finds that revocation of the antidumping duty orders on seamless refined copper pipe and tube (“copper pipe and tube”) from the People’s Republic of China (“PRC”) and Mexico would likely lead to continuation or recurrence of dumping, at the levels indicated in the “Final Results of Sunset Reviews” section of this notice.

DATES: Effective Date: June 13, 2016.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Background
On November 22, 2010, the Department published the antidumping duty orders on copper pipe and tube from the PRC and Mexico.1 On October 1, 2015, the Department published the notice of initiation of the sunset reviews of the Orders pursuant to section 751(c) of the Tariff Act of 1930, as amended (the “Act”).2 The Ad Hoc Coalition for Domestically Produced Seamless Refined Copper Pipe and Tube and its individual members, Cerro Flow Products, LLC, Wieland Copper Products, LLC, Howell Metal Company, Mueller Copper Tube Products, Inc., and Mueller Copper Tube Company, Inc. (collectively, “domestic interested parties”), submitted adequate and timely notices of intent to participate in these sunset reviews within the 15-day deadline specified in 19 CFR 351.218(d)(1)(i). On November 2, 2015, domestic interested parties and respondent interested party Golden Dragon3 submitted adequate substantive responses to the notice of initiation within the 30-day deadline specified in 19 CFR 351.218(d)(3). As a result, pursuant to section 751(c)(3)(B) of the Act and 19 CFR 351.216(e)(ii), the Department conducted full sunset reviews of the Orders.

On January 26, 2016, the Department published the Preliminary Results4 of this review. The parties were permitted to submit comments within 50 days of the publication of our Preliminary Results, pursuant to 19 CFR 351.309(c)(1)(i). The Department received no comments.

Scope of the Orders
For the purpose of these Orders, the products covered are all seamless circular refined copper pipes and tubes. The products subject to the Orders are currently classifiable under subheadings 7411.10.1030 and 7411.10.1090 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Products subject to the Orders may also enter under HTSUS subheadings 7407.10.1500, 7419.99.5050, 8415.90.8065 and 8415.90.8085. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of the Orders is dispositive.

For a full description of the scope of the Orders, see the “Preliminary Decision Memorandum.”5

Final Results of Sunset Reviews
For the reasons expressed in the Preliminary Results, pursuant to section 751(c) of the Act, the Department determines that revocation of the Orders would likely lead to continuation or recurrence of dumping at weighted-average dumping margins up to 60.85 percent for the PRC and up to 27.16 percent for Mexico.

We are issuing and publishing these results and notice in accordance with sections 751(c), 752(c), and 777(i)(1) of the Act and 19 CFR 351.218.

Dated: June 6, 2016.

Paul Piquado,
Assistant Secretary for Enforcement and Compliance.

FR Doc. 2016–13956 Filed 6–10–16; 8:45 am
BILLING CODE 3510–DS–P

1 See Seamless Refined Copper Pipe and Tube from the People’s Republic of China and Mexico: Final Results of the Full Sunset Reviews of the Antidumping Duty Orders, 81 FR 4252 (January 26, 2016) (“Preliminary Results”).

2 See Preliminary Decision Memorandum for the Full Sunset Reviews of the Antidumping Duty Orders on Seamless Refined Copper Pipe and Tube from the People’s Republic of China and Mexico, dated January 19, 2016 (“Preliminary Decision Memorandum”). The Preliminary Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance’s Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at http://access.trade.gov. In addition, a complete version of the Preliminary Decision Memorandum can be accessed at http://enforcement.trade.gov/frn/.
DEPARTMENT OF COMMERCE
International Trade Administration
[C–570–046]

Countervailing Duty Investigation of 1-Hydroxyethylidene-1,1-Diphosphonic Acid From the People’s Republic of China: Postponement of Preliminary Determination

AGENCY: Enforcement and Compliance International Trade Administration, Department of Commerce.


SUPPLEMENTARY INFORMATION:

Background

On April 20, 2016, the Department of Commerce (the “Department”) initiated the countervailing duty investigation of 1-Hydroxyethylidene-1, 1-Diphosphonic Acid (“HEDP”) from the People’s Republic of China (“PRC”).1 Currently, the countervailing duty investigation of the Department initiated investigation.2 Also, the Department concerned are cooperating because each not yet chosen mandatory respondents, determines that the investigation is parties concerned are cooperating and timely request for a postponement, or it initiated the investigation if, among than 130 days after the date on which the Department to postpone making the section 703(c)(1) of the Act permits the Department to issue the preliminary determination to no later than August 29, 2016.3 This notice is issued and published pursuant to section 703(c)(2) of the Act and 19 CFR 351.205(f)(1).

Dated: June 6, 2016.

Paul Piquado,
Assistant Secretary for Enforcement and Compliance.

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE
International Trade Administration
[A–583–850]

Certain Oil Country Tubular Goods from Taiwan: Preliminary Results of Antidumping Duty Administrative Review; 2014–2015

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (the Department) is conducting an

DEPARTMENT OF COMMERCE
International Trade Administration

must analyze four complicated alleged subsidy programs 3 for each respondent, including companies that are cross-owned with each respondent, and likely issue multiple supplemental questionnaires. For all these reasons, the Department finds this investigation to be extraordinarily complicated within the meaning of section 703(c)(1)(B) of the Act, and is hereby fully postponing the preliminary countervailing duty determination by 130 days.4 Therefore, pursuant to the discretion afforded to the Department under section 703(c)(1)(B) of the Act, we are postponing the due date for the preliminary determination to no later than August 29, 2016.5

This notice is issued and published effective date is April 20, 2016.6

SUPPLEMENTARY INFORMATION:

Scope of the Order

The merchandise covered by the order is certain OCTG. The merchandise subject to the order is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under item numbers: 7304.29.10.10, 7304.29.10.20, 7304.29.10.30, 7304.29.10.40, 7304.29.10.50, 7304.29.10.60, 7304.29.10.80, 7304.29.20.00, 7304.29.20.10, 7304.29.20.20, 7304.29.20.30, 7304.29.20.40, 7304.29.20.50, 7304.29.20.60, 7304.29.20.80, 7304.29.31.00, 7304.29.31.10, 7304.29.31.20, 7304.29.31.30, 7304.29.31.40, 7304.29.31.50, 7304.29.31.60, 7304.29.31.80, 7304.29.41.10, 7304.29.41.20, 7304.29.41.30, 7304.29.41.40, 7304.29.41.50, 7304.29.41.60, 7304.29.41.80, 7304.29.50.15, 7304.29.50.30, 7304.29.50.40, 7304.29.50.50, 7304.29.50.60, 7304.29.50.75, 7304.29.61.15, 7304.29.61.30, 7304.29.61.45, 7304.29.61.60, 7304.29.61.75, 7305.20.20.00, 7305.20.40.00, 7305.20.60.00, 7306.29.20.00, 7306.29.10.30, 7306.29.10.90, 7306.29.20.50, 7306.29.20.60, 7306.29.20.80, 7306.29.31.00, 7306.29.31.10, 7306.29.31.20, 7306.29.31.30, 7306.29.31.40, 7306.29.31.50, 7306.29.31.60, 7306.29.31.80, 7306.29.41.10, 7306.29.41.20, 7306.29.41.30, 7306.29.41.40, 7306.29.41.50, 7306.29.41.60, 7306.29.41.80, 7306.29.50.15, 7306.29.50.30, 7306.29.50.40, 7306.29.50.50, 7306.29.50.60, 7306.29.50.75, 7306.29.61.15, 7306.29.61.30, 7306.29.61.45, 7306.29.61.60, 7306.29.61.75, 7306.29.81.00, 7306.29.81.10, and 7306.29.81.50.

The merchandise subject to the order may also enter under the following HTSUS item numbers: 7304.39.00.24, 7304.39.00.28, 7304.39.00.32, 7304.39.00.36, 7304.39.00.40, 7304.39.00.44, 7304.39.00.48, 7304.39.00.52, 7304.39.00.56, 7304.39.00.62, 7304.39.00.66, 7304.39.00.72, 7304.39.00.76, 7304.39.00.80, 7305.59.60.00, 7305.59.80.15, 7305.59.80.20, 7305.59.80.25, 7305.59.80.30, 7305.59.80.35, 7305.59.80.40,

1 See 1-Hydroxyethylidene-1,1-Diphosphonic Acid from People’s Republic of China: Initiation of Countervailing Duty Investigation, 81 FR 25383 (April 28, 2016) (“Initiation”). Although the 2 See, e.g., Entry of Appearance Letters by Compass Chemical International LLC dated April 5, 2016. 3 The number of programs may be found in the Countervailing Duty Investigation Initiation Checklist: 1-Hydroxyethylidene-1, 1-Diphosphonic Acid from the People’s Republic of China from the People’s Republic of China,” at 5–8. 4 We note that section 351.205(f)(1) of the Department’s regulations stipulates that parties to this proceeding will be notified of an extension 20 days in advance of the preliminary determination. See 19 CFR 351.205(f)(1). We note that 29 days before the preliminary determination is June 4, 2016. However, because this date falls on a Saturday, the due date is the next business day, June 6, 2016. See Notice of Clarification; Application of “Next Business Day” Rule for Administrative Determination Deadlines Pursuant to the Tariff Act of 1930, As Amended, 70 FR 24533 (May 10, 2005) (“Next Business Day Rule”).
Pursuant to 19 CFR 351.309(c), interested parties may submit case briefs not later than 30 days after the date of publication of this notice. Rebuttal briefs, limited to issues raised in the case briefs, may be filed not later than five days after the date for filing case briefs. Parties who submit case briefs or rebuttal briefs in this proceeding are encouraged to submit with each argument: (1) A statement of the issue, (2) a brief summary of the argument, and (3) a table of authorities.

Pursuant to 19 CFR 351.310(c), interested parties who wish to request a hearing, must submit a written request to the Assistant Secretary for Enforcement and Compliance, filed electronically via ACCESS. An electronically filed document must be received successfully in its entirety by the Department’s electronic records system, ACCESS, by 5:00 p.m. Eastern Time within 30 days after the date of publication of this notice. Requests should contain: (1) The party’s name, address and telephone number; (2) the number of participants; and (3) a list of issues to be discussed. Issues raised in the hearing will be limited to those raised in the respective case briefs. The Department intends to issue the final results of this administrative review, including the results of its analysis of the issues raised in any written briefs, not later than 120 days after the date of publication of this notice, pursuant to section 751(a)(3)(A) of the Act.

Assessment Rates

Upon completion of the administrative review, the Department shall determine and U.S. Customs and Border Protection (CBP) shall assess antidumping duties on all appropriate entries. If Tension Steel’s weighted-average dumping margin is above de minimis in the final results of this review, we will calculate an importer-specific assessment rate on the basis of the ratio of the total amount of antidumping duties calculated for the importer’s examined sales and the total entered value of the sales in accordance with 19 CFR 351.212(b)(1). If Tension Steel’s weighted-average dumping margin is zero or de minimis in the final results of review, we will instruct CBP not to assess duties on any of its entries in accordance with the Final Modification for Reviews, i.e., “[w]here the weighted-average margin of dumping for the exporter is determined to be zero or de minimis, no antidumping duties will be assessed.”

For entries of subject merchandise during the POR produced by Tension Steel for which it did not know its merchandise was destined for the United States, we will instruct CBP to liquidate unreviewed entries at the all-others rate if there is no rate for the intermediate company(ies) involved in the transaction.

We intend to issue liquidation instructions to CBP 15 days after publication of the final results of this review.

Cash Deposit Requirements

The following deposit requirements will be effective upon publication of the notice of final results of this review for all shipments of OCTG Taiwan entered, or withdrawn from warehouse, for consumption on or after the date of publication as provided by section 751(a)(2) of the Act: (1) The cash deposit rate for Tension Steel will be the rate established in the final results of this administrative review; (2) for merchandise exported by manufacturers or exporters not covered in this review but covered in a prior segment of the proceeding, the cash deposit rate will continue to be the company-specific rate published for the most recent period; (3) if the exporter is not a firm covered in this review, a prior review, or the original investigation but the manufacturer is, the cash deposit rate will be the rate established for the most recent period for the manufacturer of the merchandise; (4) the cash deposit rate for all other manufacturers or exporters will continue to be 2.34 percent, the all-others rate established in the less-than-fair-value investigation. These cash deposit requirements, when imposed, shall remain in effect until further notice.

Notification to Importers

This notice serves as a preliminary reminder to importers of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation.


of the relevant entries during this POR. Failure to comply with this requirement could result in the Department’s presumption that reimbursement of antidumping duties occurred and the subsequent assessment of double antidumping duties.

The Department is issuing and publishing these results in accordance with sections 751(a)(1) and 777(i) of the Act.

Dated: June 7, 2016.

Paul Piquado,
Assistant Secretary for Enforcement and Compliance.

Appendix

List of Topics Discussed in the Preliminary Decision Memorandum

Summary

Background

Scope of the Order

Discussion of the Methodology

Comparisons to Normal Value

A. Determination of Comparison Method

B. Results of Differential Pricing Analysis

Product Comparisons

Date of Sale

Constructed Export Price

Normal Value

A. Home-Market Viability and Comparison Market

B. Level of Trade

C. Cost of Production

1. Calculation of Cost of Production

2. Test of Comparison-Market Sales Prices

3. Results of the COP Test

D. Calculation of Normal Value Based on Comparison Market Prices

E. Calculation of Normal Value Based on Constructed Value

Currency Conversion

Recommendation

[FR Doc. 2016–13950 Filed 6–10–16; 8:45 am]

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DEPARTMENT OF COMMERCE

International Trade Administration

President’s Advisory Council on Doing Business in Africa: Meeting of the President’s Advisory Council on Doing Business in Africa

AGENCY: International Trade Administration, U.S. Department of Commerce.

ACTION: Notice of an open meeting.

SUMMARY: The President’s Advisory Council on Doing Business in Africa (Council) will hold a meeting to deliberate on recommendations related to strengthening commercial engagement between the United States and Africa. Topics may include: The U.S. Government Power Africa initiative and energy infrastructure, the upcoming U.S.-Africa Business Forum, vocational and skills training, transportation infrastructure, and initiating tax treaties with African countries. The final agenda will be posted at least one week in advance of the meeting on the Council’s Web site at http://trade.gov/pac-dbia.

DATES: June 29, 2016 at 2:00 p.m. (EDT)

ADDRESS: The President’s Advisory Council on Doing Business in Africa meeting will be broadcast via live webcast on the Internet at http://whitehouse.gov/live.

FOR FURTHER INFORMATION CONTACT:
Tricia Van Orden, Executive Secretary, President’s Advisory Council on Doing Business in Africa, Room 4043, 1401 Constitution Avenue NW., Washington, DC, 20230, telephone: 202–482–5876, email: dbia@trade.gov.

SUPPLEMENTARY INFORMATION:

Background: President Barack Obama directed the Secretary of Commerce to establish the President’s Advisory Council on Doing Business in Africa by Executive Order No. 13675 dated August 5, 2014. The Council was established by Charter on November 4, 2014, to advise the President, through the Secretary of Commerce, on strengthening commercial engagement between the United States and Africa, with a focus on advancing the President’s Doing Business in Africa Campaign as described in the U.S. Strategy Toward Sub-Saharan Africa of June 14, 2012. This Council is established in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App.

Public Submissions: The public is invited to submit written statements to the President’s Advisory Council on Doing Business in Africa. Statements must be received by 5:00 p.m. (EDT) June 27, 2016 by either of the following methods: a. Electronic Submissions Submit statements electronically to Tricia Van Orden, Executive Secretary, President’s Advisory Council on Doing Business in Africa, via email: dbia@trade.gov.

b. Paper Submissions Send paper statements to Tricia Van Orden, Executive Secretary, President’s Advisory Council on Doing Business in Africa, Room 4043, 1401 Constitution Avenue NW., Washington, DC, 20230.

Statements will be provided to the members in advance of the meeting for consideration and also will be posted on the President’s Advisory Council on Doing Business in Africa Web site (http://trade.gov/pac-dbia) without change, including any business or personal information provided such as names, addresses, email addresses, or telephone numbers. All statements received, including attachments and other supporting materials, are part of the public record and subject to public disclosure. You should submit only information that you wish to make publicly available.

Meeting minutes: Copies of the Council’s meeting minutes will be available within ninety (90) days of the meeting on the Council’s Web site at http://trade.gov/pac-dbia.

Dated: June 9, 2016.

Tricia Van Orden,
Executive Secretary, President’s Advisory Council on Doing Business in Africa.

[FR Doc. 2016–14039 Filed 6–10–16; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[C–570–968]

Aluminum Extrusions From the People’s Republic of China: Preliminary Results of the Countervailing Duty Administrative Review and Preliminary Intent To Rescind, in Part; 2014

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: In response to multiple requests from interested parties, the Department of Commerce (the Department) is conducting an administrative review of the countervailing duty order 1 on aluminum extrusions from the People’s Republic of China (PRC). The period of review (POR) is January 1, 2014 through December 31, 2014. We preliminarily determine that the companies selected for individual examination (the mandatory respondents)—Jangho 2 and

2 For purposes of this administrative review, “Jangho” refers to the cross-owned entity consisting of the following members and affiliates of the Jangho Group: Guangzhou Jangho Curtain Wall System Engineering Co., Ltd. (Guangzhou Jangho); Guangzhou Jangho’s parent company, Jangho Group Co., Ltd. (Jangho Group Company); Guangzhou Jangho’s corporate parent, Beijing Jiangheyuan Holding Com., Ltd. (Beijing Jiangheyuan), and Jangho Group Company’s producer subsidiaries, Beijing Jangho Curtain Wall System Engineering Co., Ltd. (Beijing Jangho); Shanghai Jangho Curtain Wall System Engineering Co., Ltd. (Shanghai Jangho); and Chengdu Jangho Curtain Wall System Engineering Co., Ltd. (Chengdu Jangho). As stated above, we have used “Jangho” to refer to the cross-owned entity, the entity to which we will assign a subsidy rate. See “Preliminary Results of Administrative Review,” below. We have used “the Jangho Group” and “Jangho Group” to refer to the
Zhongya \(^3\) \(^4\) received countervailable subsidies during the POR. Interested parties are invited to comment on these preliminary results of review.

**DATES:** Effective Date: June 13, 2016.

**FOR FURTHER INFORMATION CONTACT:** Davina Friedmann, Tyler Weinhold or Robert James, AD/CVD Operations, Office VI, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–0698, (202) 482–1121 or (202) 482–0649, respectively.

**SUPPLEMENTARY INFORMATION:**

**Scope of the Order**

The merchandise covered by the order is aluminum extrusions which are shapes and forms, produced by an extrusion process, made from aluminum alloys having metallic elements corresponding to the alloy series designated by The Aluminum Association commencing with the numbers 1, 3, and 6 (or proprietary equivalents or other certifying body equivalents).

Imports of the subject merchandise are provided for under the following categories of the Harmonized Tariff Schedule of the United States ("HTSUS"): 9405.99.40.20, 9424.90.90.00, 9031.90.90.95, 7616.90.90, 7609.00.00, 7610.10.00, 7610.90.00, 7615.10.30, 7615.10.71, 7615.10.91, 7615.19.10, 7615.19.30, 7615.19.50, 7615.19.70, 7615.19.90, 7615.20.00, 7616.99.10, 7616.99.95, 8479.99.98, 8479.90.94, 8513.90.20, 9403.10.80, 9403.20.00, 9403.20.00, 85.21.00.00, 7604.29.10.00, 7604.29.30.10, 7604.29.30.50, 7604.29.50.30, 7608.20.00.30, 7608.20.00.90, 8302.10.30.00, 8302.10.60.30, 8302.10.60.60, 8302.10.60.90, 8302.20.00.00, 8302.30.30.10, 8302.30.30.60, 8302.41.30.00, 8302.41.60.15, 8302.41.60.45, 8302.41.60.50, 8302.42.60.30, 8302.42.60.90, 8302.43.30.95, 8302.50.00.00, 8302.60.90.00, 8305.10.00.50, 8306.30.00.00, 8414.59.60.90, 8415.90.80.45, 8418.99.80.05, 8418.99.80.50, 8418.99.80.60, 8419.90.10.00, 8422.90.06.40, 8473.30.20.00, 8473.30.51.00, 8479.90.85.00, 8486.90.00.00, 8487.90.00.80, 8503.00.95.20, 8508.70.00.00, 8515.90.20.00, 8516.90.50.00, 8516.90.80.50, 8517.70.00.00, 8529.90.73.00, 8529.90.97.60, 8532.90.80.00, 8532.90.80.90, 8543.90.88.80, 8708.29.50.60, 8708.80.65.90, 8803.30.00.60, 9013.90.50.00, 9013.90.90.00, 9401.90.50.81, 9401.90.90.10, 9403.90.10.50, 9403.90.10.85, 9403.90.25.40, 9403.90.25.80, 9403.90.40.05, 9403.90.40.10, 9403.90.40.60, 9403.90.50.05, 9403.90.50.10, 9403.90.50.50, 9403.90.60.05, 9403.90.60.10, 9403.90.60.80, 9403.90.70.05, 9403.90.70.10, 9403.90.70.80, 9403.90.80.10, 9403.90.80.15, 9403.90.80.20, 9403.90.80.30, 9403.90.80.51, 9403.90.80.61, 9506.11.40.80, 9506.51.40.00, 9506.51.60.00, 9506.51.60.40, 9506.51.80.00, 9506.70.20.90, 9506.90.11.00, 9506.91.00.20, 9506.91.00.30, 9506.99.05.10, 9506.99.05.20, 9506.99.05.30, 9506.99.15.00, 9506.99.20.00, 9506.99.25.80, 9506.99.28.00, 9506.99.55.00, 9506.99.60.80, 9507.30.20.00, 9507.30.40.00, 9507.30.60.00, 9507.90.60.00, and 9603.90.80.50.

The subject merchandise as parts of other aluminum products may be classifiable under the following additional Chapter 76 subheadings: 7610.10, 7610.90, 7615.19, 7615.20, and 7616.99, as well as under other HTSUS chapters. In addition, fin evaporator coils may be classifiable under HTSUS numbers: 8418.99.80.50 and 8418.99.80.60. While HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of this Order is dispositive.\(^5\)

**Methodology**

The Department conducted this review in accordance with section 751(a)(1)(A) of the Tariff Act of 1930, as amended (the Act). For each program identified as bestowing a countervailable subsidy, we preliminarily find that there is a government-provided financial contribution by an “authority” that gives rise to a benefit to the recipient, and that the subsidy is specific.\(^6\) For a full description of the methodology underlying all of the Department’s conclusions, see the Preliminary Decision Memorandum. A list of topics discussed in the Preliminary Decision Memorandum is included as Appendix I to this notice. The Preliminary Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance’s Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at http://access.trade.gov, and is available to all parties in the Central Records Unit, room B8024 of the main Department of Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be access directly at http://enforcement.trade.gov/frn/. The signed Preliminary Decision Memorandum and the electronic version of the Preliminary Decision Memorandum are identical in content.

**Preliminary Rate for Non-Selected Companies Under Review**

As stated in the *Initiation Notice*, the Department issued quantity and value (Q&V) questionnaires based on import
values in the CBP data to select respondents for individual examination. The Department received timely responses from each company to which it issued Q&A questionnaires, including pro se companies, required to submit such responses. For further discussion of this determination, refer to the section in the Preliminary Decision Memorandum entitled, “Background.”

Between July 1, 2015 and August 1, 2015, the Department received no-shipment certifications from certain companies. Because there is no evidence on the record to indicate that these companies had entries of subject merchandise during the POR, pursuant to 19 CFR 351.213(d)(3), we preliminarily intend to rescind the review with respect to these companies. These companies are listed in Appendix II to this notice. A final decision regarding whether to rescind the review of these companies will be issued with the final results of this review.

Additionally, for those companies named in the Initiation Notice for which all review requests have been timely withdrawn, we preliminarily intend to rescind this administrative review in accordance with 19 CFR 351.213(d)(1). These companies are listed at Appendix II to this notice. A final decision regarding whether to rescind the review of these companies will be issued with the final results of review.

There are 43 companies for which a review was requested and not rescinded, but were not selected as mandatory respondents. We preliminarily did not calculate the non-selected rate using a methodology of weight-averaging the rates of Jangho and Zhongya because the preliminary subsidy rate for Zhongya is based on total AFA. Instead, we preliminarily based the non-selected rate on Jangho’s subsidy rate. For further information, refer to the section in the Preliminary Decision Memorandum entitled, “Ad Valorem Rate for Non-Selected Companies Under Review.”

**Preliminary Results of Administrative Review**

As a result of this administrative review, we preliminarily determine the listed net subsidy rates for 2014:

<table>
<thead>
<tr>
<th>Company</th>
<th>2014 Ad Valorem rate (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Maker Limited</td>
<td>20.62</td>
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<tr>
<td>A-Plus Industries Ltd.</td>
<td>20.62</td>
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<tr>
<td>Asia Pacific Indusal (Group) Co.</td>
<td>20.62</td>
</tr>
<tr>
<td>Birchwoods (Lin’an) Leisure</td>
<td>20.62</td>
</tr>
<tr>
<td>Products Co., Ltd.</td>
<td>20.62</td>
</tr>
<tr>
<td>Changzhou Jinxin Machinery Co.,</td>
<td>20.62</td>
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<td>Ltd.</td>
<td>20.62</td>
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<tr>
<td>Classic &amp; Contemporary Inc.</td>
<td>20.62</td>
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<tr>
<td>Dongguang Adcat Aluminum Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Dongquan Dazhan Metal Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Dongguan Golden Tiger</td>
<td>20.62</td>
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<tr>
<td>Hardware Industrial Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>ETTLA Technology (Wuxi) Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Fenghua Metal Product Factory</td>
<td>20.62</td>
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<tr>
<td>Foshan Golden Source Aluminum</td>
<td>20.62</td>
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<tr>
<td>Products Factory Ltd.</td>
<td>20.62</td>
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<tr>
<td>Foshan Guangcheng Aluminum Co.,</td>
<td>20.62</td>
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<tr>
<td>Ltd.</td>
<td>20.62</td>
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<tr>
<td>Genimeix Shanghai, Ltd.</td>
<td>20.62</td>
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<tr>
<td>Global Hi-Tek Precision Limited</td>
<td>20.62</td>
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<tr>
<td>Global Point Technology (Far East)</td>
<td>20.62</td>
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<tr>
<td>Limited</td>
<td>20.62</td>
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<tr>
<td>Golden Dragon Precision Copper</td>
<td>20.62</td>
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<tr>
<td>Tube Group, Inc.</td>
<td>20.62</td>
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<tr>
<td>Gold Mountain International</td>
<td>20.62</td>
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<tr>
<td>Development, Ltd.</td>
<td>20.62</td>
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<tr>
<td>Guangdong Whirlpool Electrical</td>
<td>20.62</td>
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<tr>
<td>Appliance Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Guang Ya Aluminum Indusries Co.,</td>
<td>20.62</td>
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<td>Ltd.</td>
<td>20.62</td>
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<tr>
<td>Hebei Xusen Wire Mesh Products</td>
<td>20.62</td>
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<tr>
<td>Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Jackson Travel Products Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Jiangsu Shengrun Industry Co.,</td>
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<td>Ltd.</td>
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<tr>
<td>Jiangsu Zhenhengxiang New</td>
<td>20.62</td>
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<tr>
<td>Material Technology Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Johnson Precision Engineering</td>
<td>20.62</td>
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<tr>
<td>(Suzhou) Co. Ltd.</td>
<td>20.62</td>
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<tr>
<td>Kam Kiu Aluminum Products</td>
<td>20.62</td>
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<tr>
<td>Sdn Bhd</td>
<td>20.62</td>
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<tr>
<td>Markem Image China (China) Co.</td>
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<tr>
<td>Ltd.</td>
<td>20.62</td>
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<tr>
<td>Metalex Group Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Ningbo Haina Machine Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Ningbo Innpower Tengda</td>
<td>20.62</td>
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<tr>
<td>Machinery Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Ningbo Yinzhou Sanhua</td>
<td>20.62</td>
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<tr>
<td>Electric Machine Factory</td>
<td>20.62</td>
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<tr>
<td>Precision Metal Works Ltd.</td>
<td>20.62</td>
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<tr>
<td>Sapa Profiles (Shanghai) Co. Ltd.</td>
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<tr>
<td>Shanghai Automobile Air-</td>
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<tr>
<td>Conditioner Accessories Co., Ltd.</td>
<td>20.62</td>
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<tr>
<td>Shanghai Tongtai Precise Aluminum</td>
<td>20.62</td>
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<tr>
<td>Alloy Manufacturing Co., Ltd.</td>
<td>20.62</td>
</tr>
<tr>
<td>Summit Heat Sinks Metal Co., Ltd.</td>
<td>20.62</td>
</tr>
<tr>
<td>Suzhou New Mongli Precision</td>
<td>20.62</td>
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<tr>
<td>Part Co.</td>
<td>20.62</td>
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</tbody>
</table>

Disclosure and Public Comment

The Department intends to disclose to interested parties the calculations performed in connection with these preliminary results within five days of the date of publication of this notice.9 Pursuant to 19 CFR 351.309(c), interested parties may submit case briefs no later than 30 days after the date of publication of these preliminary results of review. Parties who submit arguments are requested to submit with the argument: (1) The party’s name; (2) a brief summary of the argument; and (3) a table of authorities.10 Rebuttals to case briefs may be filed no later than five days after the deadline for filing case briefs, and all rebuttal comments must be limited to comments raised in the case briefs.11 Case and rebuttal briefs should be filed electronically using ACCESS.12

Pursuant to 19 CFR 351.310(c), interested parties who wish to request a hearing, or to participate if one is requested, must submit a written request to the Assistant Secretary for Enforcement and Compliance, filed electronically via ACCESS. An electronically filed document must be received successfully in its entirety by the Department’s electronic records system, ACCESS, by 5:00 p.m. Eastern Time within 30 days after the date of publication of this notice.13 Requests should contain: (1) The party’s name, address, and telephone number; (2) the number of participants; and (3) a list of issues to be discussed. Issues raised in the hearing will be limited to those raised in the respective case briefs. If a request for a hearing is made, parties will be notified of the date and time of the hearing to be held at the U.S. Department of Commerce, 14th Street

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9 See 19 CFR 351.224(b).
10 See 19 CFR 351.309(c)(2) and (d)(2).
11 See 19 CFR 351.309(d).
12 See 19 CFR 351.303.
13 See 19 CFR 351.310(c).
and Constitution Avenue NW.
Washington, DC 20230.

Unless the deadline is extended pursuant to section 751(a)(3)(A) of the Act, the Department intends to issue the final results of this administrative review, including the results of its analysis of the issues raised in all written case briefs, within 120 days after the date of publication of this notice, pursuant to section 751(a)(3)(A) of the Act and 19 CFR 351.213(h)(1).

Assessment Rates

Upon completion of the administrative review, the Department shall determine, and U.S. Customs and Border Protection (CBP) shall assess, countervailing duties on all appropriate entries covered by this review. We intend to issue assessment instructions to CBP 15 days after publication of the final results of this review.

Cash Deposit Requirements

The Department also intends to instruct CBP to collect cash deposits of estimated countervailing duties in the amounts indicated above for each company listed on shipments of subject merchandise entered, or withdrawn from warehouse, for consumption on or after the date of publication of the final results of this administrative review. For all non-reviewed firms, we will instruct CBP to collect cash deposits of estimated countervailing duties at the most recent company-specific or all-others rate applicable to the company, as appropriate. These cash deposit requirements, when imposed, shall remain in effect until further notice.

Notification to Interested Parties

We are issuing and publishing these results in accordance with sections 751(a)(1) and 777(i)(1) of the Act and 19 CFR 351.213.

Paul Piquado,
Assistant Secretary for Enforcement and Compliance.

Appendix I

List of Topics Discussed in the Preliminary Decision Memorandum

Summary

Background

Intent to Partially Rescind Review

Extension of Preliminary Results

Scope of the Order

Subsidies Valuation Information

Loan Benchmark Rates

Use of Facts Otherwise Available and Adverse Inferences

Programs Determined to be Countervailable

Programs Determined to Not Confer Measurable Benefit or Not Used

Ad Valorem Rate for Non-Selected Companies Under Review

Ad Valorem Rate for Non-Cooperative Companies Under Review

Appendix II

List of Companies on Which We Are Preliminarily Rescinding This Administrative Review

1. Acro Import and Export Co.
2. Activa International Inc.
3. Alnan Aluminum Co. Ltd.
4. Aluminica Purified Granules Co. de Mexico
5. Bracalente Metal Products (Suzhou) Co., Ltd. 15
6. Changshu Changshen Aluminum Products Co., Ltd.
7. Changzhou Tenglong Auto Parts Co., Ltd.
8. China Zhongwang Holdings, Ltd.
9. Chipping One Stop Industrial & Trade Co., Ltd.
12. Danfoss Micro Channel Heat Exchangers (Jia Xing) Co., Ltd. 16
13. Dragonluxe Limited
14. Dynabright International Group (HK) Limited
15. Dynamic Technologies China
16. Ever Extend Exp. Co., Ltd. 17
17. First Union Property Limited
18. Foreign Trade Co. of Suzhou New & High-Tech. Industrial Development Zone
19. Foshan City Nanhai Hongjia Aluminum Alloy Co., Ltd.
20. Foshan Jinlan Aluminum Co. Ltd.
21. Foshan JMA Aluminum Company Limited
22. Foshan Shanshui Penglu Aluminum Co., Ltd.
23. Foshan Shunde Aoneng Electrical Appliance Co., Ltd.
24. Foshan Young Li Jian Aluminum Co., Ltd.
25. Fujian Sanchuan Aluminum Co., Ltd.
27. Gran Cabrio Capital Pte. Ltd.
28. Gree Electric Appliances
29. GT88 Capital Pte. Ltd.
30. Guangdong JMA Aluminum Profile Company Limited
31. Guangdong Jianmei Aluminum Profile Company Limited
32. Guangdong JMA Aluminum Profile Factory (Group) Co., Ltd.
33. Guangdong Nanhai Foodstuffs Imp. & Exp. Co., Ltd.
34. Guangdong Weiyu Aluminum Factory Co., Ltd.
35. Guangdong Xingfa Aluminum Co., Ltd.
36. Guangdong Xingfa Aluminum Co., Ltd.
37. Guangdong Yonglijian Aluminum Co., Ltd.
38. Guangzhou Mingcan Die-Casting Hardware Products Co., Ltd.
39. Hangzhou Xingyi Metal Products Co., Ltd.
40. Hanwood Enterprises Limited
41. Hao Mei Aluminum Co., Ltd.
42. Hao Mei Aluminum International Co., Ltd.
43. Hanyung Alcoba Co., Ltd.
44. Hanyung Alcobis Co., Ltd.
45. Hanyung Metal (Suzhou) Co., Ltd.
46. Henan New Kelong Electrical Appliances Co., Ltd.
47. Hong Kong Gree Electric Appliances Sales Limited
48. Honsense Development Company
49. Hui Mei Gao Aluminum Foshan Co., Ltd.
50. IDEX Dingling Technology (Tianjin) Co., Ltd.19
51. IDEX Health 20
52. IDEX Technology Suzhou Co., Ltd.21
53. Innovative Aluminum (Hong Kong) Limited
54. iSource Asia
55. Jiangmen Qinxing Hardware Diecasting Co., Ltd.
56. Jiangsu Changfa Refrigeration Co.
57. Jiangsu Susun Group (HK) Co., Ltd.
58. Jiangyin Trust International Inc.
59. Jiangyin Xinzhong Doors and Windows Co., Ltd.
60. Jiaxing Jackson Travel Products Co., Ltd.
61. Jiaxing Taixin Metal Products Co., Ltd.
62. Jiuyan Co., Ltd.
63. Justhere
64. Kanal Precision Aluminum Product Co., Ltd.
65. Kromet International Inc.
66. Kunshan Giant Light Metal Technology Co., Ltd.
67. Liaoning Zhongwang Group Co., Ltd.
68. Liaoyang Zhongwang Aluminum Profile Co. Ltd.
69. Longkou Donghai Trade Co., Ltd.
70. Metaltek Metal Industry Co., Ltd.
71. Midea Air Conditioning Equipment Co., Ltd.
72. Midea International Trading Co., Ltd./Midea International Trading Co., Ltd.
73. Miland Luck Limited
74. Nanhai Textiles Import & Export Co., Ltd.
75. New Asia Aluminum & Stainless Steel Product Co., Ltd.
76. Nidec Sanyko (Zhejiang) Corporation
77. Nidec Sanyko Singapore Pte. Ltd.
78. Ningbo Counterst International Co., Ltd.
79. Ningbo Hi Tech Reliable Manufacturing Company
80. Ningbo Ivy Daily Commodity Co., Ltd.
81. Ningbo Yili Import and Export Co., Ltd.22
82. North China Aluminum Co., Ltd.
83. North Fonghua Aluminum Ltd.
84. Northern States Metals
85. PanAsia Aluminum (China) Limited
86. Pengcheng Aluminum Enterprise Inc.
87. Permasteelisa Hong Kong Ltd.23
88. Permasteelisa South China Factory24
89. Pingguo Aluminum Company Limited
90. Pingguo Asia Aluminum Co., Ltd.
91. Popular Plastics Company Limited
92. Press Metal International Ltd
93. Samuel, Son & Co., Ltd.
94. Sanchuan Aluminum Co., Ltd.
95. Shandong Huasheng Pesticide Machinery Co.
96. Shandong Nanshan Aluminum Co., Ltd.
97. Shanghai Canghai Aluminum Tube Packaging Co., Ltd

14 According to information on the record of this review, certain companies listed below made no shipments to the United States during the instant review period. Each such company is identified as a “no shipments company.”
15 No shipments company.
16 No shipments company.
17 No shipments company.
18 No shipments company.
19 No shipments company.
20 No shipments company.
21 No shipments company.
22 No shipments company.
23 No shipments company.
24 No shipments company.
DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XE677

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council’s (Council) Ecosystem and Ocean Planning Committee will hold a public meeting.

DATES: The meeting will be held on Thursday July 7, 2016, from 9 a.m. to 5 p.m. For agenda details, see SUPPLEMENTARY INFORMATION.

ADDRESSES: The meeting will be held at the BWI Airport Marriott, 1743 West Nursery Road, Linthicum, MD 21090; telephone: (410) 859–8300. A webinar connection will also be available. Information on how to connect via webinar will be posted to www.mafmc.org.


FOR FURTHER INFORMATION CONTACT: Christopher M. Moore, Ph.D., Executive Director, Mid-Atlantic Fishery Management Council, telephone: (302) 526–5255.

SUPPLEMENTARY INFORMATION: The MAFMC’s Ecosystem and Ocean Planning (EOP) Committee will meet to discuss the Council’s Unmanaged Forage Omnibus Amendment. This amendment will prohibit the development of new and expansion of existing directed commercial fisheries on unmanaged forage species in Mid-Atlantic Federal waters until the Council has had an adequate opportunity to both assess the scientific information relating to any new or expanded directed fisheries and consider potential impacts to existing fisheries, fishing communities, and the marine ecosystem. At this meeting, the EOP Committee will consider comments received during public hearings on the amendment, as well as recommendations from the EOP Advisory Panel. The EOP Committee will develop recommendations to the full Council for final action on the amendment. The Council plans to take final action on this amendment at their meeting in Virginia Beach on August 8–11, 2016. More information on the EOP Committee meeting, and the August Council meeting, including agendas and background materials, will be posted to www.mafmc.org.

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid should be directed to M. Jan Saunders, (302) 526–5231, at least 5 days prior to the meeting date.

Dated: June 8, 2016.

Tracey L. Thompson, Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–13892 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Submission for OMB Review; Comment Request

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).


Title: Antarctic Marine Living Resources Conservation and Management Measures.

OMB Control Number: 0648–0194.

Form Number(s): None.

Type of Request: Regular (extension of a currently approved information collection).

Number of Respondents: 1 research entity; 2 vessel owners; 50 dealers.

Average Hours per Response: One hour to apply for a CEMP research permit; 1 hour to report on research; 28 hours to supply information on potential new or exploratory fishing; 2 hours to apply for a harvesting permit; 2 minutes to transmit information by radio; 4 hours to install a vessel monitoring device (VMS); 2 hours for annual VMS maintenance; 45 minutes to mark a vessel; 40 minutes to mark buoys; 10 hours to mark pot gear; 6 minutes to mark trawl nets; 15 minutes to apply for a dealer permit to import and/or re-export Antarctic marine living resources; 15 minutes to complete and submit a toothfish catch document; 15 minutes to apply for pre-approval of toothfish imports; 15 minutes to complete and submit re-export catch documents; 15 minutes to submit import tickets.

25 No shipments company.

26 No shipments company.

27 In the third administrative review, the role of this company was that of an input supplier. Absent information to the contrary placed on the record of this administrative review, we are treating this company as an input supplier, and therefore, preliminarily intend to rescind the review of this company.
Burden Hours: 290.

Needs and Uses: This request is for extension of a currently approved information collection.

The 1982 Convention on the Conservation of Antarctic Marine Living Resources (Convention) established the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). The United States is a Contracting Party to the Convention. The Antarctic Marine Living Resources Convention Act (AMLRCA) directs and authorizes the United States to take actions necessary to meet its treaty obligations as a Contracting Party to the Convention. The regulations implementing AMLRCA are at 50 CFR part 300, subpart G. The record keeping and reporting requirements at 50 CFR part 300 form the basis for this collection of information. This collection of information concerns research in, and the harvesting and importation of, marine living resources from waters regulated by CCAMLR related to ecosystem research, U.S. harvesting permit application and/or harvesting vessel operators and to importers and re-exporters of Antarctic marine living resources. The collection is necessary in order for the United States to meet its treaty obligations as a contracting party to the Convention.

Affected Public: Business or other for-profit organizations; not-for-profit institutions; individuals or households.

Frequency: Annually and on occasion.

Respondent’s Obligation: Mandatory.

This information collection request may be viewed at reginfo.gov. Follow the instructions to view Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to OIRA_Submission@omb.eop.gov or fax to (202) 395–5806.

Sarah Brabson,
NOAA PRA Clearance Officer.
[FR Doc. 2016–13834 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Submission for OMB Review; Comment Request

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).


Title: International Dolphin Conservation Program.

OMB Control Number: 0648–0387.

Form Number(s): None.

Type of Request: Regular (revision of a currently approved information collection).

Number of Respondents: 279.

Average Hours per Response: 35 minutes for a vessel permit application; 10 minutes for an operator permit application, a notification of vessel arrival or departure, a change in permit operator; a notification of a net modification or a monthly tuna storage removal report; 30 minutes for a request for a waiver to transit the ETP without a permit (and subsequent radio reporting) or for a special report documenting the origin of tuna (if requested by the NOAA Administrator); 10 hours for an experimental fishing operation waiver; 15 minutes for a request for a Dolphin Mortality Limit; 35 minutes for written notification to request active status for a small tuna purse seine vessel; 5 minutes for written notification to request inactive status for a small tuna purse seine vessel or for written notification of the intent to transfer a tuna purse seine vessel to foreign registry and flag; 60 minutes for a tuna tracking form or for a monthly tuna receiving report; 30 minutes for IMO application or exemption request; 30 minutes for chain of custody recordkeeping reporting requirement.

Burden Hours: 248.

Needs and Uses: This request is for revision of a currently approved information collection. The chain of custody recordkeeping requirements approved under an emergency revision per an interim final rule filed on March 22, 2016 (81 FR 15444), will become a permanent part of the collection.

National Oceanic and Atmospheric Administration (NOAA) collects information to implement the International Dolphin Conservation Program Act (Act). The Act allows entry of yellowfin tuna into the United States (U.S.), under specific conditions, from nations in the International Dolphin Conservation Program that would otherwise be under embargo. The Act also allows U.S. fishing vessels to participate in the yellowfin tuna fishery in the eastern tropical Pacific Ocean (ETP) on terms equivalent with the vessels of other nations. NOAA collects information to allow tracking and verification of “dolphin-safe” and “non-dolphin safe” tuna products from catch through the U.S. market.

The regulations implementing the Act are at 50 CFR parts 216 and 300. The recordkeeping and reporting requirements at 50 CFR parts 216 and 300 form the basis for this collection of information. This collection includes permit applications, notifications, tuna tracking forms, reports, and certifications that provide information on vessel characteristics and operations in the ETP, the origin of tuna and tuna products, chain of custody recordkeeping requirements and certain other information necessary to implement the Act.

Affected Public: Business or other for-profit organizations.

Frequency: Annually and upon request.

Respondent’s Obligation: Mandatory.

This information collection request may be viewed at reginfo.gov. Follow the instructions to view Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to OIRA_Submission@omb.eop.gov or fax to (202) 395–5806.

Dated: June 8, 2016.

Sarah Brabson,
NOAA PRA Clearance Officer.

[FR Doc. 2016–13902 Filed 6–10–16; 8:45 am]
BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XE678

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council’s (Council) Ecosystem and Ocean Planning Advisory Panel (AP) will hold a public meeting.

DATES: The meeting will be held on Wednesday, July 6, 2016, from 9 a.m. to 4 p.m. For agenda details, see SUPPLEMENTARY INFORMATION.

ADDRESSES: The meeting will be held at the BWI Airport Marriott, 1743 West Nursery Road, Linthicum, MD 21090; telephone: (410) 859–8300. A webinar connection will also be available. Information on how to connect via
The webinar will be posted to www.mafmc.org.

Council address: Mid-Atlantic Fishery Management Council, 800 N. State Street, Suite 201, Dover, DE 19901; telephone: (302) 674–2331 or on their Web site at www.mafmc.org.

FOR FURTHER INFORMATION CONTACT:
Christopher M. Moore, Ph.D., Executive Director, Mid-Atlantic Fishery Management Council, telephone: (302) 526–5255.

SUPPLEMENTARY INFORMATION: The MAFMC’s Ecosystem and Ocean Planning Advisory Panel (AP) will meet to develop recommendations for final action on the Council’s Unmanaged Forage Omnibus Amendment. This amendment will prohibit the development of new and expansion of existing directed commercial fisheries on unmanaged forage species in Mid-Atlantic Federal waters until the Council has had an adequate opportunity to both assess the scientific information relating to any new or expanded directed fisheries and consider potential impacts to existing fisheries, fishing communities, and the marine ecosystem. At this meeting, the AP will consider comments received during public hearings and will develop recommendations to the Council’s Ecosystem and Ocean Planning Committee and to the full Council for final action on the amendment. An EOP Committee meeting on the same topic will be held on July 7, 2016. The Council plans to take final action on the amendment at their meeting in Virginia Beach on August 8–11, 2016. More information on the EOP AP meeting, the EOP Committee meeting, and the August Council meeting, including agendas and background materials, will be posted to www.mafmc.org.

Special Accommodations
The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid should be directed to M. Jan Saunders, (302) 526–5251, at least 5 days prior to the meeting date.

DATED: June 8, 2016.

Tracey L. Thompson,
Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–13893 Filed 6–10–16; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration
Community Connectivity Initiative—Webinar Series

AGENCY: National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Notice of open meetings, monthly webinars.

SUMMARY: The National Telecommunications and Information Administration (NTIA), as part of its BroadbandUSA program, will host a nine-part series of monthly webinars to engage stakeholders to inform the development of the Community Connectivity Initiative (Initiative). The objective of the Initiative is to support communities working to accelerate broadband access, improve digital inclusion, strengthen policies, and support local community priorities. The webinar series will convene stakeholders to discuss the role that broadband plays in achieving local priorities and will solicit input on the development of the Initiative, which is a compilation of three new resources for local communities featuring: (1) A Community Connectivity framework; (2) an online self-assessment tool; and (3) a report and recommendations. Through collaborative sessions, participants will: Review the Community Connectivity framework; review assessment questions and response options; co-design the structure and content for the report and recommendations; identify supporting resources and tools that will support the local communities’ use of the tools in 2017 and beyond.

DATES: The Community Connectivity Initiative monthly webinars will be held on the second Thursday of each month from 2:00–3:00 p.m., Eastern Time, starting on July 14, 2016 and ending on March 9, 2017.

ADDRESSES: This is a virtual meeting. Participants can register for one or more webinars in the series at NTIA’s Web site at http://www2.ntia.doc.gov/CommunityConnectivityWebinars.

FOR FURTHER INFORMATION CONTACT: Barbara Brown, National Telecommunications and Information Administration, U.S. Department of Commerce, Room 4889, 1401 Constitution Avenue NW., Washington, DC 20230; telephone: (202) 280–8260; email: bbrown@ntia.doc.gov. Please direct media inquiries to NTIA’s Office of Public Affairs, (202) 482–7002; email press@ntia.doc.gov.

SUPPLEMENTARY INFORMATION:

NTIA’s BroadbandUSA program provides expert advice and field-proven tools for assessing broadband adoption, planning new infrastructure and engaging a wide range of partners in broadband projects. BroadbandUSA convenes workshops on a regular basis to bring stakeholders together to discuss ways to improve broadband policies, share best practices, and connect communities to other federal agencies and funding sources for the purpose of expanding broadband infrastructure and adoption throughout America's communities. Experts from NTIA’s BroadbandUSA program are available to provide technical assistance and to connect communities with additional resources, such as best practices, guides and program models.

NTIA’s BroadbandUSA team is developing new tools to support communities working to expand broadband access, adoption and use. The Initiative will provide communities with a comprehensive self-assessment tool and report to enable communities to better understand how their current policies and programs support broadband connectivity; an index or comparative community connectivity score; technical assistance with broadband planning and implementation; and access to an expanding community of practice. This webinar series will address the development of each of these components, including the planning framework, online self-assessment tool, and report with recommendations. Each webinar will include a 15–20 minute overview and update on the Community Connectivity Initiative and a discussion topic pertinent to the 2016 development and program roll-out. The proposed focus areas for each meeting are listed below:

July 14: Initiative update and framework and assessment design discussion
Aug. 11: Initiative update and discussion of the report and recommended output
Sept. 8: Initiative update and recommendations discussion
Oct. 13: Initiative update and discussion on user support requirements
Nov. 10: Initiative update and evaluation discussion

Dec. 8: Initiative update and discussion of training requirements
Jan. 12: Initiative update and discussion of roll-out timeline

Feb. 9: Initiative update and communication discussion
March 9: Initiative update and next steps discussion

Participants are welcome to attend one or many webinars. General
questions and comments are welcome at any time during webinars via email to BroadbandUSA@ntia.doc.gov. The webinars are open to the public and press. Pre-registration is recommended. NTIA asks registrants to provide their first and last names and email addresses for both registration purposes and to receive any updates on the Connectivity Initiative at BroadbandUSA Community. Registrants are asked to notify the NTIA contact listed below, and docket number (see above), for further information.

FOR FURTHER INFORMATION CONTACT: Documentation prepared in support of this information collection request is available at www.reginfo.gov (this link active on the day following publication of this notice). Select “Information Collection Review,” under “Currently under Review,” use the dropdown menu “Select Agency” and select “Consumer Financial Protection Bureau” (recent submissions to OMB will be at the top of the list). The same documentation is also available at www.regulations.gov. Requests for additional information should be directed to the Consumer Financial Protection Bureau, (Attention: PRA Office), 1700 G Street NW., Washington, DC 20552, (202) 435–9575, or email: CFPB_PRA@cfpb.gov. Please do not submit comments to this email box.


Abstract: Regulation I applies to all depository institutions lacking Federal deposit insurance. It requires the disclosure of certain insurance-related information in periodic statements, account records, locations where deposits are normally received, and advertising. This part also requires such depository institutions to obtain a written acknowledgment from depositors regarding the institution’s lack of Federal deposit insurance. Addressee: You may submit comments, identified by the title of the information collection, OMB Control Number (see below), and docket number (see above), by any of the following methods:

• Electronic: http://www.regulations.gov. Follow the instructions for submitting comments.
• OMB: Office of Management and Budget, New Executive Office Building, Room 10235, Washington, DC 20503 or fax to (202) 395–5806. Mailed or faxed comments to OMB should be to the attention of the OMB Desk Officer for the Bureau of Consumer Financial Protection.

Please note that comments submitted after the comment period will not be accepted. In general, all comments received will become public records, including any personal information provided. Sensitive personal information, such as account numbers or Social Security numbers, should not be included.

BUREAU OF CONSUMER FINANCIAL PROTECTION (Docket No. CFPB–2016–0027)

Agency Information Collection Activities: Submission for OMB Review; Comment Request

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Notice and request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (PRA), the Bureau of Consumer Financial Protection (Bureau) is proposing to renew the Office of Management and Budget (OMB) approval for an existing information collection titled, “Regulation I: Disclosure Requirements for Depository Institutions Lacking Federal Deposit Insurance (12 CFR 1009).”

DATES: Written comments are encouraged and must be received on or before July 13, 2016 to be assured of consideration.

ADDRESSES: You may submit comments, identified by the title of the information collection, OMB Control Number (see below), and docket number (see above), by any of the following methods:

• Electronic: http://www.regulations.gov. Follow the instructions for submitting comments.
• OMB: Office of Management and Budget, New Executive Office Building,
Room 10235, Washington, DC 20503 or fax to (202) 395–5806. Mailed or faxed comments to OMB should be to the attention of the OMB Desk Officer for the Bureau of Consumer Financial Protection.

Please note that comments submitted after the comment period will not be accepted. In general, all comments received will become public records, including any personal information provided. Sensitive personal information, such as account numbers or social security numbers, should not be included.

FOR FURTHER INFORMATION CONTACT:

Documentation prepared in support of this information collection request is available at www.reginfo.gov (this link active on the day following publication of this notice). Select “Information Collection Review,” under “Currently under review, use the dropdown menu “Select Agency” and select “Consumer Financial Protection Bureau” (recent submissions to OMB will be at the top of the list). The same documentation is also available at www.regulations.gov. Requests for additional information should be directed to the Consumer Financial Protection Bureau, (Attention: PRA Office), 1700 G Street NW, Washington, DC 20552, (202) 435–5757, or email: CFPB_PRA@cfpb.gov. Please do not submit comments to this email box.

SUPPLEMENTARY INFORMATION:

Title of Collection: Generic Information Collection Plan for Qualitative Consumer Education, and Engagement Information Collections.

OMB Control Number: 3170–0036.

Type of Review: Extension with change of a currently approved collection.

Affected Public: Individuals or households, State, Local, or Tribal governments; Private Sector.

Estimated Number of Respondents: 4,000.

Estimated Total Annual Burden Hours: 2,000.

Abstract: Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111–203, Section 1013(d), the Bureau’s Office of Financial Education is responsible for developing and implementing initiatives intended to educate and empower consumers to make better informed financial decisions. The Bureau seeks to obtain approval of a generic information collection plan to collect qualitative data on effective strategies and consumer experiences from both financial education practitioners and consumers through a variety of methods, including in-person meetings, interviews, focus groups, qualitative surveys, online discussion forums, social media polls, and other qualitative methods as necessary. The information collected through these processes will increase the Bureau’s understanding of consumers’ financial experiences, financial education and empowerment programs, and practices that can improve financial decision-making skills and outcomes for consumers. This information will also enable the Bureau to better communicate to consumers about the availability of Bureau tools and resources that consumers can use to make better informed financial decisions.

Request for Comments: The Bureau issued a 60-day Federal Register notice on May 16, 2016 (81 FR 30255). Comments were solicited and continue to be invited on: (a) Whether the collection of information is necessary for the proper performance of the functions of the Bureau, including whether the information will have practical utility; (b) The accuracy of the Bureau’s estimate of the burden of the collection of information, including the validity of the methods and the assumptions used; (c) Ways to enhance the quality, utility, and clarity of the information to be collected; and (d) Ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval. All comments will become a matter of public record.

Dated: June 7, 2016.

Darrin A. King,
Paperwork Reduction Act Officer, Bureau of Consumer Financial Protection.

BILLING CODE 4810–AM–P

DEPARTMENT OF DEFENSE

Department of the Army

[DOCKET ID: USA–2016–HQ–0020]

Privacy Act of 1974; System of Records

AGENCY: Department of the Army, DoD.

ACTION: Notice to alter a System of Records.

SUMMARY: The Department of the Army proposes to alter a system of records notice, A0381–20 DAMI, entitled “Badge and Credential Files” in its existing inventory of records systems subject to the Privacy Act of 1974, as amended. This system is used to maintain control and accountability over Counterintelligence Badge and Credentials or Representative Credentials.

DATES: Comments will be accepted on or before July 13, 2016. This proposed action will be effective on the date following the end of the comment period unless comments are received which result in a contrary determination.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:


* Mail: Department of Defense, Office of the Deputy Chief Management Officer, Directorate for Oversight and Compliance, 4800 Mark Center Drive, Mailbox #24, Alexandria, VA 22350–1700.

Instructions: All submissions received must include the agency name and docket number for this Federal Register document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at http://www.regulations.gov as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: Ms. Tracy Rogers, Department of the Army, Privacy Office, U.S. Army Records Management and Declassification Agency, 7701 Telegraph Road, Casey Building, Suite 144, Alexandria, VA 22325–3905 or by calling (703) 428–7499.

SUPPLEMENTARY INFORMATION: The Department of the Army’s notices for systems of records subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended, have been published in the Federal Register and are available from the address in FOR FURTHER INFORMATION CONTACT or from the Defense Privacy, Civil Liberties, and Transparency Division Web site at http://dpcld.defense.gov/.

The proposed systems reports, as required by 5 U.S.C. 552a(r) of the Privacy Act, as amended, were submitted on May 23, 2016, to the House Committee on Oversight and Government Reform, the Senate Committee on Homeland Security and Governmental Affairs, and the Office of Management and Budget (OMB) pursuant to paragraph 4 of Appendix I to OMB Circular No. A–130, “Federal

Dated: June 8, 2016.
Aaron Siegel,
Alternate OSD Federal Register Liaison Officer, Department of Defense.

A0381–20 DAMI

SYSTEM NAME:
Badge and Credential Files (February 22, 1993, 58 FR 10002)

CHANGES:
*

SYSTEM NAME:
Delete entry and replace with “Counterintelligence (CI) Badge and Credentials (B&Cs) Files.”

SYSTEM LOCATION:
Delete entry and replace with “Headquarters, U.S. Army Intelligence Center of Excellence, ATTN: IATD (Badges and Credentials), Room 1279, Building 51005, 2520 Healy Street, Fort Huachuca, AZ 85613–7050.”

CATEGORY OF INDIVIDUALS COVERED BY THE SYSTEM:
Delete entry and replace with “U.S. Army military service members (active duty, reservist, or National Guard) and Department of the Army civilian employees, who currently possess, or previously possessed Counterintelligence (CI) Badge and Credential (B&Cs) or Representative Credentials (Rep Creds).”

CATEGORIES OF RECORDS IN THE SYSTEM:
Delete entry and replace with “Full name (last, first, middle, suffix), Social Security Number (SSN), date of birth, grade, issue status, accountable unit, badge number and/or intelligence credential number.”

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:
Delete entry and replace with “10 U.S.C. 3013, Secretary of the Army; E.O. 12333, U.S. Intelligence Activities 2.3—Collection of Information: Department of Defense Instruction 5240.25, Counterintelligence Badges and Credentials; Army Regulation 381–20, Army Counterintelligence Program; and E.O. 9397 (SSN), as amended.”

PURPOSE:
Delete entry and replace with “To maintain control and accountability over CI B&Cs and Rep Creds issued.”

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:
Delete entry and replace with “In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act of 1974, as amended, these records contained therein may specifically be disclosed outside the DoD as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows: Information may be disclosed to Federal investigative and/or intelligence agencies to ascertain if a U.S. Army military service member (active duty, reservist, or National Guard) or Army civilian employee legally possesses or possessed CI B&Cs or Rep Creds.

DoD Blanket Routine Uses set forth at the beginning of the Army compilation of system of records notices may apply to this system. The complete list of DoD Blanket Routine Uses can be found online at: http://dpcld.defense.gov/Privacy/SORNsIndex/BlanketRoutineUses.aspx.”

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:
Delete entry and replace with “Paper records and electronic storage media.”

RETRIEVABILITY:
Delete entry and replace with “Name and/or SSN.”

SAFEGUARDS:
Delete entry and replace with “Records are maintained in a controlled facility. Physical entry is restricted by the use of locks, guards, and is accessible only to authorized personnel. Access to records is limited to person(s) with an official need to know who are responsible for servicing the record in performance of their official duties. Persons are properly screened and cleared for access. Access to electronic data is restricted by passwords. In addition, integrity of automated data is ensured by internal audit procedures, data base access accounting reports and controls to preclude unauthorized disclosure.”

RETENTION AND DISPOSAL:
Delete entry and replace with “Keep in central filing area until no longer needed for conducting business, but not longer than 6 years after the event, then destroy by shredding and deleting.”

RECORD ACCESS PROCEDURES:
Delete entry and replace with “Individuals seeking access to information about themselves contained in this system should address written inquiries to the HQ, USAICoE, ATTN: IATD, Room 1279, Building 51005, 2520 Healy Street, Fort Huachuca, AZ 85613–7050.”

Individual should provide full name and SSN.

In addition, the requester must provide a notarized statement or an unsworn declaration made in accordance with 28 U.S.C. 1746, in the following format:

If executed outside the United States: ‘I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date). (Signature).’

If executed within the United States, its territories, possessions, or commonwealths: ‘I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct. Executed on (date). (Signature).’

CONTESTING RECORD PROCEDURES:
Delete entry and replace with “The Army’s rules for accessing records and for contesting contents and appealing initial agency determinations are contained in 32 CFR part 505, The Army Privacy Program or may be obtained from the system manager.”

RECORD SOURCE CATEGORIES:
Delete entry and replace with “From the individual and security records.”
DEPARTMENT OF DEFENSE

Department of the Army
[Docket ID: USA–2016–HQ–0021]

Privacy Act of 1974; System of
Records

AGENCY: Department of the Army, DoD.

ACTION: Notice to alter a system of
Records.

SUMMARY: The Department of the Army
proposes to alter a system of records notice
AAFES 0410.01, entitled “Employee Travel
Files” to process official travel requests for
military and civilian employees of the Army
and Air Force Exchange Service; to determine
eligibility of individual’s dependents to travel;
to obtain necessary clearance where foreign
travel is involved, including assisting individual
in applying for passports and visas and
counseling where proposed travel involves
visiting/transiting communist
countries and danger zones.

DATES: Comments will be accepted on or
before July 13, 2016. This proposed
action will be effective on the date
following the end of the comment
period unless comments are received
which result in a contrary
determination.

ADDRESSES: You may submit comments,
identified by docket number and title,
by any of the following methods:
* Federal Rulemaking Portal: http://
www.regulations.gov Follow
the instructions for submitting comments.
* Mail: Department of Defense, Office
of the Deputy Chief Management
Officer, Directorate for Oversight and
Compliance, 4800 Mark Center Drive,
Mailbox #24, Alexandria, VA 22350–
1700.

Instructions: All submissions received
must include the agency name and
docket number for this Federal Register
document. The general policy for
comments and other submissions from
members of the public is to make these
submissions available for public
viewing on the Internet at http://
www.regulations.gov as they are
received without change, including any
personal identifiers or contact
information.

FOR FURTHER INFORMATION CONTACT: Ms.
Tracy Rogers, Chief, FOIA and Privacy,
Department of the Army, U.S. Army
Records Management and
Declassification Agency, 7701 Telegraph
Road, Casey Building, Suite 144,
Alexandria, VA 22325–3905; telephone (703) 428–7499.

SUPPLEMENTARY INFORMATION: The
Department of the Army’s notices for
systems of records subject to the Privacy
Act of 1974 (5 U.S.C. 552a), as amended,
have been published in the Federal
Register and are available from the
address in FOR FURTHER INFORMATION
CONTACT or from the Defense Privacy
and Civil Liberties Division Web site at
http://dpcld.defense.gov/. The proposed
systems reports, as required by 5 U.S.C.
552a of the Privacy Act, as amended,
were submitted on May 23, 2016, to the
House Committee on Oversight and
Government Reform, the Senate
Committee on Homeland Security and
Governmental Affairs, and the Office of
Management and Budget (OMB)
pursuant to paragraph 4 of Appendix I
to OMB Circular No. A–130, “Federal
Agency Responsibilities for Maintaining
Records About Individuals,” revised
November 28, 2000 (December 12, 2000
65 FR 77677).

Dated: June 8, 2016.

Aaron Siegel,
Alternate OSD Federal Register Liaison
Officer, Department of Defense.

AAFES 0410.01

SYSTEM NAME:
Employee Travel Files (July 23, 2003,
68 FR 43502).

CHANGES:
* * * * * *

SYSTEM LOCATION:
Delete entry and replace with
“Headquarters, Army and Air Force
Exchange Service, 3911 South Walton
Walker Boulevard, Dallas, TX 75236–
1598; Exchange Regions and Area
Exchanges at posts, bases, and satellites
world-wide. Official mailing addresses
are published as an appendix to the
Army’s compilation of systems of
records notices.”

CATEGORIES OF INDIVIDUALS COVERED BY
THE SYSTEM:
Delete entry and replace with
“Employees of the Army and Air Force
Exchange Service (Exchange) and their
family members authorized to perform
official travel.”

CATEGORIES OF RECORDS IN THE SYSTEM:
Delete entry and replace with
“Documents pertaining to travel of
persons on official Government
business, and/or their dependents,
including travel assignment orders,
authorized leave en route, availability of
quarters and/or shipment of household
goods and personal effects, application
for passport/visas; security clearance;
travel expense vouchers; and similar
related documents. This includes the
full name of the employee and/or
dependent, dependent’s relationship to
employee, last five digits of the
employee’s SSN, DoD ID Number,
current pay grade level, current duty
station, new duty station, home address,
home phone number, work number, cell
number, personal email address, and
emergency contact’s name and phone
number; employee/dependent
biographical information, passport
number, security clearance, dependent’s
home phone number and address, and
employee/dependent date of birth.”

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Delete entry and replace with “Title
10 U.S.C. 3013, Secretary of the Army;
Title 10 U.S.C. 8013, Secretary of the
Air Force; Army Regulation 215–1, The
Administration of Morale, Welfare, and
Recreation Activities and Non-
appropriated Fund Instrumentalities;
Army Regulation 215–8/AFI 34–211(I),
Army and Air Force Exchange Service
Operations; and E.O. 9397 (SSN), as
amended.”

PURPOSE(S):
Delete entry and replace with “To
process official travel requests for
military and civilian employees of the
Army and Air Force Exchange Service;
to determine eligibility of individual’s
dependents to travel; to obtain
necessary clearance where foreign
travel is involved, including assisting
individual in applying for passports and
visas and counseling where proposed
travel involves visiting/transiting
communist countries and danger
zones.”

ROUTE USES OF RECORDS MAINTAINED IN
THE SYSTEM, INCLUDING CATEGORIES OF USERS
AND THE PURPOSES OF SUCH USES:

Delete entry and replace with “In
addition to those disclosures generally
permitted under 5 U.S.C. 552a(b) of the
Privacy Act of 1974, as amended, the
records contained therein may
specificially be disclosed outside the
DoD as a routine use pursuant to 5
U.S.C. 552a(b)(3) as follows:

Information may be disclosed to
attached or law enforcement authorities
of foreign countries.

To the U.S. Department of Justice or
Department of Defense legal/
inelligence/investigative agencies for
security, investigative, intelligence, and/
or counterintelligence operations.

The DoD blanket routine uses set forth
at the beginning of the Army’s
compilation of system of records notices
may apply to this system. The complete
list of DoD blanket routine uses can be
found online at: http://
dpcld.defense.gov/Privacy/
SORNIndex/BlanketRoutineUses.aspx”
Policies and practices for storing, retrieving, accessing, retaining, and disposing of records in the system:

STORAGE:
Delete entry and replace with “Paper records and electronic storage media.”

RETRIEVABILITY:
Delete entry and replace with “Employee’s name, SSN and/or DoD ID Number.”

SAFEGUARDS:
Delete entry and replace with “Records are maintained in a controlled facility. Physical entry is restricted by the use of locks, guards, and is accessible only to authorized personnel. Access to records is limited to person(s) with an official ‘need to know’ who are responsible for servicing the record in performance of their official duties. Personnel are properly screened and cleared for access. Access to computerized data is role-based and further restricted by passwords, which are changed periodically.”

RETENTION AND DISPOSAL:
Delete entry and replace with “Records are maintained in a controlled facility. Physical entry is restricted by the use of locks, guards, and is accessible only to authorized personnel. Access to records is limited to person(s) with an official ‘need to know’ who are responsible for servicing the record in performance of their official duties. Personnel are properly screened and cleared for access. Access to computerized data is role-based and further restricted by passwords, which are changed periodically.”

RECORD ACCESS PROCEDURES:
Delete entry and replace with “Individuals seeking to access information about themselves contained in this system should address written inquiries to the Director/Chief Executive Officer, Army and Air Force Exchange Service, ATTN: Director, Administrative Services Division, 3911 South Walton Walker Boulevard, Dallas, TX 75236–1598. Requests should contain the individual’s full name, SSN (last four) or DoD ID number, current address, telephone number, and signature. In addition, the requester must provide a notarized statement or an unsworn declaration made in accordance with 28 U.S.C. 1746, in the following format: If executed outside the United States: ‘I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date). (Signature).’ If executed within the United States, its territories, possessions, or commonwealths: ‘I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct. Executed on (date). (Signature).’”

SYSTEM MANAGER(S) AND ADDRESS:
Delete entry and replace with “Director/Chief Executive Officer, Army and Air Force Exchange Service, 3911 South Walton Walker Boulevard, Dallas, Texas 75236–1598.”

NOTIFICATION PROCEDURE:
Delete entry and replace with “Individuals seeking to determine whether information about themselves is contained in this system should address written inquiries to the Director/Chief Executive Officer, Army and Air Force Exchange Service, ATTN: Director, Administrative Services Division, 3911 South Walton Walker Boulevard, Dallas, TX 75236–1598. Requests should contain the individual’s full name, SSN (last four) or DoD ID number, current address, telephone number, and signature. In addition, the requester must provide a notarized statement or an unsworn declaration made in accordance with 28 U.S.C. 1746, in the following format: If executed outside the United States: ‘I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date). (Signature).’ If executed within the United States, its territories, possessions, or commonwealths: ‘I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct. Executed on (date). (Signature).’”

CONTesting RECORD PROCEDURES:
Delete entry and replace with “The Army’s rules for accessing records and for contesting contents and appealing initial agency determinations are contained in 32 CFR part 505, Army Privacy Program or may be obtained from the system manager.”

RECORD SOURCE CATEGORIES:
Delete entry and replace with “From the Exchange employee or other DoD agencies.”

DEPARTMENT OF DEFENSE
Office of the Secretary
[Docket ID: DOD–2016–OS–0072]
Privacy Act of 1974; System of Records
AGENCY: Office of the Secretary of Defense, DoD.
ACTION: Notice to alter a System of Records.
SUMMARY: The Office of the Secretary of Defense proposes to alter a system of records, DSCA 03, entitled “Regional Center Persons/Activity Management System (RCPAMS).” The Regional Center Persons/Activity Management System (RCPAMS) will provide a solution for Regional Center staff to manage operational, logistical and cost details about people, events, enrollments and organizations; a tool for reporting on all data related to Regional Center events; a platform for sharing common processes, terminology and data elements to facilitate efficient communication between the Regional Centers; a single view of each person with whom any of the Regional Centers have a relationship, representing the current snapshot and historical record of events and biographical information; an interface to other systems with which the Regional Centers must exchange data for use by other users and organizations; and an enterprise-class Customer Relationship Management platform to manage two-way communication between SAN and RCPAMS related to events and their participants.
DATES: Comments will be accepted on or before July 13, 2016. This proposed action will be effective the day following the end of the comment period unless comments are received which result in a contrary determination.
ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:
* Mail: Department of Defense, Office of the Deputy Chief Management Officer, Directorate for Oversight and
Compliance, 4800 Mark Center Drive, Mailbox #24, Alexandria, VA 22350–1700.

Instructions: All submissions received must include the agency name and docket number for this Federal Register document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at http://www.regulations.gov as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: Mrs. Luz D. Ortiz, Chief, Records, Privacy and Declassification Division (RPD2), 1155 Defense Pentagon, Washington, DC 20301–1155, or by phone at (571) 372–0478.

SUPPLEMENTARY INFORMATION: The Office of the Secretary of Defense notices for systems of records subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended, have been published in the Federal Register and are available from the address in FOR FURTHER INFORMATION CONTACT or at http://dpcld.defense.gov/.

The proposed system report, as required by 5 U.S.C. 552a(r) of the Privacy Act of 1974, as amended, was submitted on May 23, 2016, to the House Committee on Oversight and Government Reform, the Senate Committee on Governmental Affairs, and the Office of Management and Budget (OMB) pursuant to paragraph 4c of Appendix I to OMB Circular No. A-130. “Federal Agency Responsibilities for Maintaining Records About Individuals,” (See email from Denise on this citation.

DATED: June 8, 2016.

Aaron Siegel,
Alternate OSD Federal Register Liaison Officer, Department of Defense.

DSCA 03

SYSTEM NAME:
Regional Center Persons/Activity Management System (RCPAMS)

(January 28, 2013, 78 FR 5781)

CHANGES:
* * * * *

SYSTEM LOCATION:
Delete entry and replace with “AutoNomic Resources Cloud Platform, 200 Cascade Pointe Lane, Cary, NC 27513–5763.”

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:
Delete entry and replace with “DoD military and civilian employees, students, contractors, alumni, and subject matter experts affiliated with the following Defense Security Cooperation Agency’s (DSCA) five regional centers: Africa Center for Strategic Studies (ACSS), Asia-Pacific Center for Security Studies (APCSS), William J. Perry Center for Hemispheric Defense Studies (CHDS), George Marshall European Center for Security Studies (GCMC), and Near-East-South Asia Center for Strategic Studies (NESA).”

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Delete entry and replace with “In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act of 1974, as amended, these records contained therein may specifically be disclosed outside the DoD as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows:

Law Enforcement Routine Use: If a system of records maintained by a DoD Component to carry out its functions indicates a violation or potential violation of law, whether civil, criminal, or regulatory in nature, and whether arising by general statute or by regulation, rule, or order issued pursuant thereto, the relevant records in the system of records may be referred, as a routine use, to the agency concerned, whether federal, state, local, or foreign, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation, or order issued pursuant thereto.

Congressional Inquiries Disclosure Routine Use: Disclosure from a system of records maintained by a DoD Component may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

Disclosures Required by International Agreements Routine Use: A record from a system of records maintained by a DoD Component may be disclosed to foreign law enforcement, security, investigatory, or administrative authorities to comply with requirements imposed by, or to claim rights conferred in, international agreements and arrangements including those regulating the stationing and status in foreign countries of DoD military and civilian personnel.

Disclosure to the Department of Justice for Litigation Routine Use: A record from a system of records maintained by a DoD Component may be disclosed as a routine use to any component of the Department of Justice for the purpose of representing the Department of Defense, or any officer, employee or member of the Department in pending or potential litigation to which the record is pertinent.

Disclosure of Information to the National Archives and Records Administration Routine Use: A record from a system of records maintained by a DoD Component may be disclosed as a routine use to the National Archives and Records Administration for the purpose of records management inspections conducted under authority of 44 U.S.C. 2904 and 2906.

Data Breach Remediation Purposes Routine Use: A record from a system of records maintained by a Component may be disclosed to appropriate agencies, entities, and persons when (1) The Component suspects or has confirmed that the security or confidentiality of the information in the system of records has been compromised; (2) the Component has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interests, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by the Component or another agency or entity) that rely upon the compromised information; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with the Components efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

The DoD Blanket Routine Uses set forth at the beginning of the Office of the Secretary of Defense (OSD) compilation of systems of records notices may apply to this system. The complete list of DoD Blanket Routine Uses can be found online at: http://dpcld.defense.gov/Privacy/SORNs Index/BlanketRoutineUses.aspx.

RETENTION AND DISPOSAL:

Delete entry and replace with “Cut off on closure of study or event; destroy 25 years after cut off.”

SYSTEM MANAGER AND ADDRESS:
NOTIFICATION PROCEDURES:
Delete entry and replace with “Individuals seeking to determine whether information about themselves is contained in this system of records should address written inquiries to Regional Center Persons/Activity Management Program Manager, Defense Security Cooperation Agency, ATTN: STR/TNG—RCPAMS Program Manager, 201 12th Street South, Suite 203, Arlington, VA 22202–4306.

Signed, written requests should include the full name, current address and telephone number, and the name and number of this system of records notice.”

RECORD ACCESS PROCEDURES:
Delete entry and replace with “Individuals seeking access to records about themselves contained in this system should address written inquiries to the Office of the Secretary of Defense/Joint Staff, Freedom of Information Act Requester Services, 1155 Defense Pentagon, Washington, DC 20301–1155.

Signed, written requests should include the full name, current address and telephone number, and the name and number of this system of records notice.”

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DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Newmarket Creek CAP Section 205, City of Hampton, VA, NEPA Scoping Meeting and Public Comment Period

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: NEPA Scoping meeting and public comment period.

SUMMARY: Pursuant to the requirements of section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as amended, 42 U.S.C. 4321–4370, as implemented by the Council on Environmental Quality Regulations (40 CFR parts 1500–1508), the U.S. Army Corps of Engineers (USACE) plans to prepare a Feasibility Study with an integrated Environmental Assessment (EA) to evaluate environmental impacts from reasonable project alternatives and to determine the potential for significant impacts related to an evaluation of structural and non-structural measures that could be implemented as a part of a Federal project, under the Section 205 Continuing Authorities Program (CAP), to reduce the flood risk in the portion of the Newmarket Creek watershed within the City boundaries. The Newmarket Creek watershed is subject to flooding from both rainfall and tidal events, and there is a history of flood damage within the watershed. If the USACE determines that there is a potential for a significant environmental impact, the USACE will issue a Notice of Intent to prepare an Environmental
Impact Statement in the Federal Register.

DATES: Scoping comments may be submitted until July 14, 2016.

ADDRESSES: The public is invited to submit NEPA scoping comments at the meeting and/or submit comments to Mr. David Schulte, Department of the Army, U.S. Army Corps of Engineers, Norfolk District, Fort Norfolk, 803 Front St., Norfolk, VA 23510 or via email: David.M.Schulte@usace.army.mil. The project title and the commenter’s contact information should be included with submitted comments.

FOR FURTHER INFORMATION CONTACT: David Schulte, (757) 201–7007.

SUPPLEMENTARY INFORMATION: The Newmarket Creek watershed is subject to flooding from both rainfall and tidal events, and there is a history of flood damage within the watershed. USACE is investigating measures to reduce future flood risk in ways that support the long-term resilience and sustainability of the surrounding communities, and reduce the economic costs and risks associated with flood and tidal events.

USACE is the lead federal agency and the city of Hampton will be the non-federal sponsor for the study. The city of Hampton has experienced an accelerating increase in nuisance flooding due to storms and tidal events of varying magnitude, with large storms (nor’easters and hurricanes) often causing major flooding in many areas of the city. The feasibility study will address potential structural and non-structural alternatives to mitigate impacts from flooding and determining the Federal interest in cost-sharing for those alternatives.

As required by Council on Environmental Quality’s Principles, Requirements and Guidelines for Water and Land Related Resources Implementation Studies all reasonable alternatives to the proposed Federal action that meet the purpose and need will be considered in the EA. These alternatives will include no action and a range of reasonable alternatives for reducing flood risk within the Newmarket Creek and its watershed within the city of Hampton.

Scoping/Public Involvement. The public NEPA scoping meeting will be held on July 14, 2016, from 5 p.m.–8 p.m. It will be held at the West Hampton Community Center, 1638 Briarfield Rd., Hampton, VA 23661. Federal, state, and local agencies, Indian tribes, and the public are invited to provide scoping comments to identify issues and potentially significant effects to be considered in the analysis.

Brenda S. Bowen, Army Federal Register Liaison Officer.

BILLING CODE 3720–58–P

DEPARTMENT OF EDUCATION

Applications for New Awards: Undergraduate International Studies and Foreign Language Program

AGENCY: Office of Postsecondary Education, Department of Education.

ACTION: Notice.

Overview Information: Undergraduate International Studies and Foreign Language (UISFL) Program.

The UISFL Program provides grants for planning, developing, and carrying out programs to strengthen and improve undergraduate instruction in international studies and foreign languages in the United States.


Competitive Preference Priorities: For FY 2016, these priorities are competitive preference priorities. Under 34 CFR 75.105(c)(2)(i), we award an additional two or three points depending on whether and how an application meets Competitive Preference Priority 1, and we award up to an additional two points to an application that meets Competitive Preference Priority 2.

These priorities are: Competitive Preference Priority 1. (2 or 3 points)

Applications from Minority-Serving Institutions (MSIs) (as defined in this notice) or community colleges (as defined in this notice), whether as individual applicants or as part of a consortium of institutions of higher education (IHEs) (consortium) or a partnership between nonprofit educational organizations and IHEs (partnership).

An application from a consortium or partnership that has an MSI or community college as the lead applicant will receive more points under this priority than applications in which the MSI or community college is a member of a consortium or partnership but not the lead applicant.

A consortium or partnership must undertake activities designed to incorporate foreign languages into the curriculum of the MSI or community college and to improve foreign language and international or area studies instruction on the MSI or community college campus.

For the purpose of this priority: Community college means an institution that meets the definition in section 312(f) of the Higher Education Act of 1965, as amended (HEA) (20 U.S.C. 1058(f)); or an institution of higher education (as defined in section 101 of the HEA) that awards degrees and certificates, more than 50 percent of which are not bachelor’s degrees (or an equivalent) or master’s, professional, or other advanced degrees.

Minority-Serving Institution means an institution that is eligible to receive assistance under sections 316 through 320 of part A of title III, under part B of title III, or under title V of the HEA.

Note: We will award either two or three points to an application that meets this priority. If an MSI or community college is a single applicant, or the lead applicant in a consortium or partnership, the application will receive three additional points. If an MSI or community college is a member of a consortium or partnership, but not the lead applicant, the application will receive two additional points. No application will receive more than three additional points for this priority.

Note: You may view lists of title III- and title V-eligible institutions at the following link: https://www2.ed.gov/about/offices/list/ope/idues/t3t5-eligibles-2015.pdf. The eligibility status is still current for institutions listed at the link above. You may also view the list of Historically Black Colleges and Universities at 34 CFR 608.2.

Competitive Preference Priority 2. (2 points)

Applications from an institution of higher education (IHE), a consortium of institutions of higher education (consortium), or a partnership between nonprofit educational organizations and IHEs (partnership) that require entering students to have successfully completed at least two years of secondary school foreign language instruction or that require each graduating student to earn two years of postsecondary credit in a
foreign language (or have demonstrated equivalent competence in the foreign language) or, in the case of a two-year degree granting institution, offer two years of postsecondary credit in a foreign language.

Invitational Priorities: For FY 2016, these priorities are invitational priorities. Under 34 CFR 75.105(c)(1), we do not give an application that meets these invitational priorities a competitive or absolute preference over other applications. These priorities are:

Invitational Priority 1—Priority Languages Selected from the U.S. Department of Education’s List of Less Commonly Taught Languages (LCTLs).

Applications that propose programs or activities focused on language instruction or the development of area or international studies programs to include language instruction in any of the 78 priority languages selected from the U.S. Department of Education’s List of LCTLs: Akan (Twi-Fante), Albanian, Amharic, Arabic (all dialects), Armenian, Azerbaijani, Balochi, Bamanankan (Bamana, Bambara, Mandíkan, Mandingo, Maninka, Dyula), Belarusian, Bengali (Bangla), Berber (all languages), Bosnian, Bulgarian, Burmese, Cebuano (Visayan), Chechen, Chinese (Cantonese), Chinese (Gan), Chinese (Mandarin), Chinese (Min), Chinese (Wu), Croatian, Dari, Dinka, Georgian, Gujarati, Hausa, Hebrew (Modern), Hindi, Igbo, Indonesian, Japanese, Javanese, Kannada, Kashmiri, Kazakh, Khmer (Cambodian), Kirghiz, Korean, Kurdish (Kurmanji), Kurdish (Sorani), Lao, Malay (Bahasa Melayu or Malay), Malayalam, Marathi, Mongolian, Nepali, Oromo, Panjabi, Pashto, Persian (Farsi), Polish, Portuguese (all varieties), Quechua, Romanian, Russian, Serbian, Sinhala (Sinhalese), Somali, Swahili, Tagalog, Tajik, Tamil, Telugu, Thai, Tibetan, Tigre, Turkish, Turkmen, Ukrainian, Urdu, Uyghur/Uigur, Uzbek, Vietnamese, Wolof, Xhosa, Yoruba, and Zulu.

Area of National Need: In accordance with section 601(c) of the HEA (20 U.S.C. 1121(c)), the Secretary has consulted with and received recommendations regarding national need for expertise in foreign languages and world regions from the head officials of a wide range of Federal agencies. The Secretary has taken these recommendations into account, and a list of foreign languages and world regions identified by the Secretary as areas of national need may be found on the following Web site: http://www2.ed.gov/about/offices/list/ope/iegps/consultation-2016.pdf.

Invitational Priority 2—Developing Interdisciplinary Curriculum.

Applications that create innovative curricula that combine the teaching of international studies with one of the following academic fields of study: business, economics, public health, international and comparative education, science, technology, engineering, or mathematics. Programs can be located within the applicant’s home IHE or within the IHE(s) that form(s) part of the consortium/partnership applying for the grant (including those that are eligible to receive assistance under part A or B of title III or under title V).


Note: The regulations in 34 CFR part 86 apply to IHEs only.

II. Award Information

Type of Award: Discretionary grants.

Estimated Available Funds:

$2,257,434.

Estimated Range of Awards:

For single applicant grants: $70,000–$95,000 each 12-month budget period. For consortia or partnership grants: $90,000–$150,000 each 12-month budget period.

Estimated Average Size of Awards:

For single applicant grants: $86,824. For consortia or partnership grants: $120,000.

Maximum Award: We will reject any application from a single applicant that proposes a budget exceeding $95,000 for a single budget period of 12 months, or from an applicant that is a consortium or partnership that proposes a budget exceeding $150,000 for a single budget period of 12 months.

Estimated Number of Awards: 24.

III. Eligibility Information

1. Eligible Applicants: (1) IHEs; (2) consortia of IHEs; (3) partnerships between nonprofit educational organizations and IHEs; and (4) public and private nonprofit agencies and organizations, including professional and scholarly associations.

2. Cost Sharing or Matching: This program has a matching requirement under section 604(a)(3) of the HEA, 20 U.S.C. 1124(a)(3), and the regulations for this program in 34 CFR 658.41. UISFL Program grantees must provide matching funds in either of the following ways: (i) Cash contributions from private sector corporations or foundations equal to one-third of the total project costs; or (ii) a combination of institutional and non-institutional cash or in-kind contributions including State and private sector corporation or foundation contributions, equal to one-half of the total project costs. The Secretary may waive or reduce the required matching share for institutions that are eligible to receive assistance under part A or part B of title III or under title V of the HEA that have submitted an application that demonstrates a need for a waiver or reduction.

b. Supplement-Not-Supplant: This program involves supplement-not-supplant funding requirements. See paragraph 4(D) in section V of this notice for further information regarding this requirement.

IV. Application and Submission Information

1. Address to Request Application Package: You can obtain an application package via the Internet or from the Education Publications Center (ED Pubs). To obtain a copy via the Internet, use the following address: www.ed.gov/fund/grant/apply/grantapps/index.html. To obtain a copy from ED Pubs, write, fax, or call the following: ED Pubs, U.S. Department of Education, P.O. Box 22207, Alexandria, VA 22304. Telephone, toll free: 1–877–433–7827. FAX: (703) 605–6794. If you use a telecommunications device for the deaf (TDD) or a text telephone (TTY), call, toll free: 1–877–576–7734.

You can contact ED Pubs at its Web site, also: www.EDPubs.gov or at its email address: edpubs@net.ed.gov.

If you request an application from ED Pubs, be sure to identify this program as follows: CFDA number 84.016A.
Individuals with disabilities can obtain a copy of the application package in an accessible format (e.g., braille, large print, audiotape, or compact disc) by contacting the person listed under For: FURTHER INFORMATION CONTACT in section VII of this notice.

2. Content and Form of Application Submission: Requirements concerning the content of an application, together with the forms you must submit, are in the application package for this program.

Page Limit: The application narrative (Part III) is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. You must limit the application narrative to no more than 40 pages, using the following standards:

- A “page” is 8.5" x 11", on one side only, with 1” margins at the top, bottom, and both sides.
- Double space (no more than three lines per vertical inch) all text in the application narrative, except titles, headings, footnotes, quotations, references, and captions. Charts, tables, figures, and graphs in the application narrative may be single spaced and will count toward the page limit.
- Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch). However, you may use a 10-point font in charts, tables, figures, and graphs.
- Use one of the following fonts: Times New Roman, Courier, Courier New, or Arial. An application submitted in any other font (including Times Roman and Arial Narrow) will not be accepted.

The 40-page limit does not apply to Part I, the Application for Federal Assistance face sheet (SF 424); the supplemental information form required by the Department of Education; Part II, Budget Information—Non-Construction Programs (ED 524); Part IV, assurances, certifications, and the response to section 427 of the General Education Provisions Act (GEPA); the table of contents; the one-page project abstract; the appendices; or the line item budget. However, the page limit does apply to all of the application narrative section. If you include any attachments or appendices not specifically requested, these items will be counted as part of the application narrative for the purpose of the page-limit requirement.

We will reject your application if you exceed the page limit.


Applications for grants under this program must be submitted electronically using the Grants.gov Apply site (Grants.gov). For information (including dates and times) about how to submit your application electronically, or in paper format by mail or hand delivery if you qualify for an exception to the electronic submission requirement, please refer to Other Submission Requirements in section IV of this notice.

We do not consider an application that does not comply with the deadline requirements.

Individually with disabilities who need an accommodation or auxiliary aid in connection with the application process should contact the person listed under FOR FURTHER INFORMATION CONTACT in section VII of this notice. If the Department provides an accommodation or auxiliary aid to an individual with a disability in connection with the application process, the individual’s application remains subject to all other requirements and limitations in this notice.

4. Intergovernmental Review: This program is not subject to Executive Order 12372 and the regulations in 34 CFR part 79.

5. Funding Restrictions: We specify unallowable costs in 34 CFR 664.33. We refer to additional regulations outlining funding restrictions in the Applicable Regulations section of this notice.

6. Data Universal Numbering System Number, Taxpayer Identification Number, and System for Award Management: To do business with the Department of Education, you must—

   a. Have a Data Universal Numbering System (DUNS) number and a Taxpayer Identification Number (TIN);
   b. Register both your DUNS number and TIN with the System for Award Management (SAM) (formerly the Central Contractor Registry), the Government’s primary registrant database;
   c. Provide your DUNS number and TIN on your application; and
   d. Maintain an active SAM registration with current information while your application is under review by the Department and, if you are awarded a grant, during the project period.

   You can obtain a DUNS number from Dun and Bradstreet at the following Web site: http://fedgov.dnb.com/webform. A DUNS number can be created within one to two business days.

   If you are a corporate entity, agency, institution, or organization, you can obtain a TIN from the Internal Revenue Service. If you are an individual, you can obtain a TIN from the Internal Revenue Service or the Social Security Administration. If you need a new TIN, please allow two to five weeks for your TIN to become active.

   The SAM registration process can take approximately seven business days, but may take upwards of several weeks, depending on the completeness and accuracy of the data you enter into the SAM database. Thus, if you think you might want to apply for Federal financial assistance under a program administered by the Department, please allow sufficient time to obtain and register your DUNS number and TIN.

   We strongly recommend that you register early.

   Note: Once your SAM registration is active, you will need to allow 24 to 48 hours before you can access the information in, and submit an application through, Grants.gov.

   If you are currently registered with SAM, you may not need to make any changes. However, please make certain that the TIN associated with your DUNS number is correct. Also note that you will need to update your registration annually. This may take three or more business days.

   Information about SAM is available at www.SAM.gov. To further assist you with obtaining and registering your DUNS number and TIN in SAM or updating your existing SAM account, we have prepared a SAM.gov Tip Sheet, which you can find at: http://www2.ed.gov/fund/grant/apply/sam-faqs.html.

   In addition, if you are submitting your application via Grants.gov, you must (1) be designated by your organization as an Authorized Organization Representative (AOR); and (2) register yourself with Grants.gov as an AOR. Details on these steps are outlined at the following Grants.gov Web page: www.grants.gov/web/grants/register.html.

7. Other Submission Requirements: Applications for grants under this program must be submitted electronically unless you qualify for an exception to this requirement in accordance with the instructions in this section.

   a. Electronic Submission of Applications.

   Applications for grants under the UISFL Program, CFDA number 84.016A, must be submitted electronically using the Governmentwide Grants.gov Apply site at www.Grants.gov. Through this site, you will be able to download a copy of the application package, complete it offline, and then upload and submit your application. You may not email an electronic copy of a grant application to us.

   We will reject your application if you submit it in paper format unless, as
described elsewhere in this section, you qualify for one of the exceptions to the
electronic submission requirement and submit, no later than two weeks before
the application deadline date, a written statement to the Department that you
qualify for one of these exceptions. Further information regarding
calculation of the date that is two weeks before the application deadline date is
provided later in this section under Exception to Electronic Submission
Requirement.

You may access the electronic grant application for the UISFL Program at
www.Grants.gov. You must search for the downloadable application package
for this program by the CFDA number. Do not include the CFDA number’s
alpha suffix in your search (e.g., search for 84.016, not 84.016A).

Please note the following:

• When you enter the Grants.gov site, you will find information about
submitting an application electronically through the site, as well as the hours of
operation.

• Applications received by
Grants.gov are date and time stamped. Your application must be fully
uploaded and submitted and must be date and time stamped by the
Grants.gov system no later than 4:30:00 p.m., Washington, DC time, on the
application deadline date. Except as otherwise noted in this section, we will
not accept your application if it is received—that is, date and time
stamped by the Grants.gov system—after
4:30:00 p.m., Washington, DC time, on the
application deadline date. We do not consider an application that does
not comply with the deadline
requirements. When we retrieve your
application from Grants.gov, we will
notify you if we are rejecting your
application because it was date and time
stamped by the Grants.gov system after
4:30:00 p.m., Washington, DC time, on the
application deadline date.

• The amount of time it can take to
upload an application will vary
depending on a variety of factors,
including the size of the application and
the speed of your Internet connection.
Therefore, we strongly recommend that
you do not wait until the application
deadline date to begin the submission
process through Grants.gov.

• You should review and follow the
Education Submission Procedures for
submitting an application through
Grants.gov that are included in the
application package for this program to
ensure that you submit your application
in a timely manner to the Grants.gov
system. You can also find the Education
Submission Procedures pertaining to
Grants.gov under News and Events on
the Department’s G5 system home page
at www.G5.gov. In addition, for specific
guidance and procedures for submitting
an application through Grants.gov,
please refer to the Grants.gov Web site

• You will not receive additional
point value because you submit your
application in electronic format, nor
will we penalize you if you qualify for
an exception to the electronic
submission requirement, as described
elsewhere in this section, and submit
your application in paper format.

• You must submit all documents
electronically, including all information
you typically provide on the following
forms: the Application for Federal
Assistance (SF 424), the Department of
Education Supplemental Information for
SF 424, Budget Information—Non-
Construction Programs (ED 524), and
all necessary assurances and certifications.

• You must upload any narrative
sections and all other attachments to
your application as files in a read-only,
non-modifiable Portable Document
Format (PDF). Do not upload an
interactive or fillable PDF file. If you
upload a file type other than a read-
only, non-modifiable PDF (e.g., Word,
Excel, WordPerfect, etc.) or submit a
password-protected file, we will not
review that material. Please note that
this could result in your application not
being considered for funding because
the material in question—for example,
the project narrative—is critical to a
meaningful review of your proposal. For
that reason it is important to allow
yourself adequate time to upload all
material as PDF files. The Department
will not convert material from other
formats to PDF.

• Your electronic application must
comply with any page-limit
requirements described in this notice.

• After you electronically submit
your application, you will receive from
Grants.gov an automatic notification of
receipt that contains a Grants.gov
tracking number. This notification
indicates receipt by Grants.gov only, not
receipt by the Department. Grants.gov
will also notify you automatically by
email if your application met all the
Grants.gov validation requirements or if
there were any errors (such as
submission of your application by
someone other than a registered
Authorized Organization
Representative, or inclusion of an
attachment with a file name that
contains special characters). You will be
given an opportunity to correct any
errors and resubmit, but you must still
meet the deadline for submission of
applications.

Once your application is successfully
validated by Grants.gov, the Department
will retrieve your application from
Grants.gov and send you an email with
a unique a PR/Award number for your
application.

These emails do not mean that your
application is without any disqualifying
errors. While your application may have
been successfully validated by
Grants.gov, it must also meet the
Department’s application requirements
as specified in this notice and in the
application instructions. Disqualifying
errors could include, for instance,
failure to upload attachments in a read-
only, non-modifiable PDF; failure to
submit a required part of the
application; or failure to meet applicant
eligibility requirements. It is your
responsibility to ensure that your
submitted application has met all of the
Department’s requirements.

• We may request that you provide us
original signatures on forms at a later
date.

Application Deadline Date Extension
in Case of Technical Issues with the
Grants.gov System: If you are
experiencing problems submitting your
application through Grants.gov, please
contact the Grants.gov Support Desk,
toll free, at 1–800–518–4726. You must
obtain a Grants.gov Support Desk Case
Number and must keep a record of it.
If you are prevented from
electronically submitting your
application on the application deadline
date because of technical problems with
the Grants.gov system, we will grant you
an extension until 4:30:00 p.m.,
Washington, DC time, the following
business day to enable you to transmit
your application electronically or by
hand delivery. You also may mail your
application by following the mailing
instructions described elsewhere in this
notice.

If you submit an application after
4:30:00 p.m., Washington, DC time, on
the application deadline date, please
contact the person listed under FOR
FURTHER INFORMATION CONTACT in
section VII of this notice and provide an
explanation of the technical problem
you experienced with Grants.gov, along
with the Grants.gov Support Desk Case
Number. We will accept your
application if we can confirm that a
technical problem occurred with the
Grants.gov system and that the problem
affected your ability to submit your
application by 4:30:00 p.m.,
Washington, DC time, on the
application deadline date. We will
contact you after we determine whether
your application will be accepted.

Note: The extensions to which we refer in
this section apply only to the unavailability
Exception to Electronic Submission Requirement: You qualify for an exception to the electronic submission requirement, and may submit your application in paper format, if you are unable to submit an application through the Grants.gov system because—

- You do not have access to the Internet; or
- You do not have the capacity to upload large documents to the Grants.gov system; and
- No later than two weeks before the application deadline date (14 calendar days or, if the fourteenth calendar day before the application deadline date falls on a Federal holiday, the next business day following the Federal holiday), you mail or fax a written statement to the Department, explaining which of the two grounds for an exception prevents you from using the Internet to submit your application.

If you mail your written statement to the Department, it must be postmarked no later than two weeks before the application deadline date. If you fax your written statement to the Department, we must receive the faxed statement no later than two weeks before the application deadline date.

Address and mail or fax your statement to: Tanyelle Richardson, U.S. Department of Education, 400 Maryland Ave. SW., Room 3E211, Washington, DC 20202–4260. FAX: (202) 453–5780.

Your paper application must be submitted in accordance with the mail or hand delivery instructions described in this notice.

b. Submission of Paper Applications by Mail.

If you qualify for an exception to the electronic submission requirement, you may mail (through the U.S. Postal Service or a commercial carrier) your application to the Department. You must mail the original and two copies of your application, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, Application Control Center, Attention: (CFDA Number 84.016A), LBJ Basement Level 1, 400 Maryland Avenue SW., Washington, DC 20202–4260.

You must show proof of mailing consisting of one of the following:

1. A legibly dated U.S. Postal Service postmark.
2. A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.
3. A dated shipping label, invoice, or receipt from a commercial carrier.
4. Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If you mail your application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

1. A private metered postmark.
2. A mail receipt that is not dated by the U.S. Postal Service.

Note: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office.

We will not consider applications postmarked after the application deadline date.

c. Submission of Paper Applications by Hand Delivery.

If you qualify for an exception to the electronic submission requirement, you (or a courier service) may deliver your paper application to the Department by hand. You must deliver the original and three copies of your application, by hand, on or before the application deadline date, to the Department at the following address: U.S. Department of Education, Application Control Center, Attention: (CFDA Number 84.016A), 550 12th Street, SW., Room 7039, Potomac Center Plaza, Washington, DC 20202–4260.

The Application Control Center accepts hand deliveries daily between 8:00 a.m. and 4:30:00 p.m., Washington, DC time, except Saturdays, Sundays, and Federal holidays.

Note for Mail or Hand Delivery of Paper Applications: If you mail or hand deliver your application to the Department—

1. You must indicate on the envelope—and, if not provided by the Department—in Item 11 of the SF 424 the CFDA number, including suffix letter, if any, of the competition under which you are submitting your application; and

(2) The Application Control Center will mail to you a notification of receipt of your grant application. If you do not receive this notification within 15 business days from the application deadline date, you should call the U.S. Department of Education Application Control Center at (202) 453–6288.

V. Application Review Information

1. Selection Criteria: The selection criteria for this program are from 34 CFR 658.31, 658.32, 658.33, and 655.32 and are listed in this section. The maximum score for all of the criteria, including the competitive preference priorities, is 105 points.

   a. Applications. All applications will be evaluated based on the following criteria: (a) Plan of operation (15 points); (b) Quality of key personnel (10 points); (c) Budget and cost effectiveness (10 points); and (d) Adequacy of resources (5 points).

   b. Applications from IHEs, Consortia, or Partnerships. All applications submitted by an IHE or a consortia or partnership will also be evaluated based on the following criteria: (e) Commitment to international studies (15 points); (f) Elements of the proposed international studies program (10 points); and (g) Need for and prospective results of the proposed program (15 points).

   c. Applications from Public and Private Nonprofit Agencies and Organizations, Including Professional and Scholarly Associations. All applications from public and private nonprofit agencies and organizations, including professional and scholarly associations, will also be evaluated based on the following criterion: Need for and potential impact of the proposed project in improving international studies and the study of modern foreign language at the undergraduate level (40 points).

The evaluation plan will be scored separately as described in the Review and Selection Process section of this notice.

Additional information regarding these criteria is in the application package for this program. The total number of points available under these selection criteria, combined with the competitive preference priorities, is as follows:
Selection criteria | UISFL IHES | UISFL Consortia and partnerships | UISFL public and private nonprofit agencies and organizations, including professional and scholarly associations
--- | --- | --- | ---
(a) Plan of Operation | 15 | 15 | 15
(b) Quality of Key Personnel | 10 | 10 | 10
(c) Budget & Cost Effectiveness | 15 | 15 | n/a
(d) Adequacy of Resources | 5 | 5 | 5
(e) Commitment to International Studies | 15 | 15 | n/a
(f) Elements of Proposed International Studies Program | 10 | 10 | n/a
(g) Need for & Prospective Results of Proposed Program | 15 | 15 | n/a
(h) Need for & Potential Impact of the Proposed Project in Improving International Studies & the Study of Modern Foreign Languages at the Undergraduate Level | n/a | n/a | 40
(i) Evaluation Plan | 85 | 85 | 80
(j) Sub-Total | 20 | 20 | 20
Total Possible Points | 105 | 105 | 100

2. Review and Selection Process: We remind potential applicants that in reviewing applications in any discretionary grant competition, the Secretary may consider, under 34 CFR 75.217(d)(3), the past performance of the applicant in carrying out a previous award, such as the applicant’s use of funds, achievement of project objectives, and compliance with grant conditions. The Secretary may also consider whether the applicant failed to submit a timely performance report or submitted a report of unacceptable quality.

For the UISFL grant applications, the Department will use a two-tier review process to review and score eligible applications. Under the first—tier review, content reviewers will review and score eligible applications on the following selection criteria: (a) Plan of operation; (b) Quality of key personnel; (c) Budget and cost effectiveness; (d) Adequacy of resources; (e) Commitment to international studies; (f) Elements of the proposed international studies program; (g) Need for and prospective results of the proposed program as applicable; as well as (h) Need for and potential impact of the proposed project in improving international studies and the study of modern foreign languages at the undergraduate level, if the applicant is from a public or private nonprofit agency or organization. These reviewers will also review and score the applications that address the competitive preference priorities. Under the second-tier review, the top 60 ranked applications from the first tier will have the remaining criterion, Evaluation plan, reviewed and scored by a different panel of peer reviewers with evaluation expertise. Evaluation peer reviewers will be responsible for assessing the feasibility of evaluation plans and the proposed performance measure form (PMF). The PMF includes the Project Goals, Performance Measures, and Activities that all applicants must submit to demonstrate how their projects’ performance will be assessed. Both tier scores will then be combined and the combined score will be used to rank the top-scoring applications.

In addition, in making a competitive grant award, the Secretary also requires various assurances including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department of Education (34 CFR 100.4, 104.5, 106.4, 108.8, and 110.23).

3. Risk Assessment and Special Conditions: Consistent with 2 CFR 200.205, before awarding grants under this program the Department conducts a review of the risks posed by applicants. Under 2 CFR 3474.10, the Secretary may impose special conditions and, in appropriate circumstances, high-risk conditions on a grant if the applicant or grantee is not financially stable; has a history of unsatisfactory performance; has a financial or other management system that does not meet the standards in 2 CFR part 200, subpart D; has not fulfilled the conditions of a prior grant; or is otherwise not responsible.

4. Application Requirements: In addition to any other requirements outlined in the application package for this program, section 604(a)(7) of the HEA, 20 U.S.C. 1124(a)(7), requires that each application from an IHE, consortia, or partnership include—

(A) Evidence that the applicant has conducted extensive planning prior to submitting the application;
(B) An assurance that the faculty and administrators of all relevant departments and programs served by the applicant are involved in ongoing collaboration with regard to achieving the stated objectives of the application;
(C) An assurance that students at the applicant institutions, as appropriate, will have equal access to, and derive benefits from, the UISFL Program;
(D) An assurance that each applicant, consortium, or partnership will use the Federal assistance provided under the UISFL Program to supplement and not supplant non-Federal funds the institution expends for programs to improve undergraduate instruction in international studies and foreign languages;
(E) A description of how the applicant will provide information to students regarding federally funded scholarship programs in related areas;
(F) An explanation of how the activities funded by the grant will reflect diverse perspectives and a wide range of views, and generate debate on world regions and international affairs, where applicable; and
(G) A description of how the applicant will encourage service in areas of national need, as identified by the Secretary.

VI. Award Administration Information

1. Award Notices: If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN); or we may send you an email containing a link to access an electronic
version of your GAN. We may notify you informally, also.

If your application is not evaluated or not selected for funding, we notify you.

2. Administrative and National Policy Requirements: We identify administrative and national policy requirements in the application package and reference these and other requirements in the Applicable Regulations section of this notice.

We reference the regulations outlining the terms and conditions of an award in the Applicable Regulations section of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

3. Reporting: (a) If you apply for a grant under this competition, you must ensure that you have in place the necessary processes and systems to comply with the reporting requirements in 2 CFR part 170 should you receive funding under the competition. This does not apply if you have an exception under 2 CFR 170.110(b).

(b) At the end of your project period, you must submit a final performance report, including financial information, as specified by the Secretary. If you receive a multiyear award, you must submit an annual performance report that provides the most current performance and financial expenditure information as directed by the Secretary under 34 CFR 75.118. Grantees are required to use the online data and reporting system, the International Resource Information System (IRIS), to complete their interim and final reports. The Secretary may also require more frequent performance reports under 34 CFR 75.720(c). For specific requirements on reporting, please go to www.ed.gov/fund/grant/apply/appforms/appforms.html.

(c) Under 34 CFR 75.250(b), the Secretary may provide a grantee with additional funding for data collection analysis and reporting. In this case, the Secretary establishes a data collection period.

4. Performance Measures: Under the Government Performance and Results Act of 1993, as updated by the GPRA Modernization Act of 2010 on January 4, 2011, the Department will use the following performance measures to evaluate the success of the UISFL Program: percentage of UISFL projects that added or enhanced courses in international or foreign language studies. If funded, you will be required to collect and report data in IRIS on those measures and steps taken toward improving performance on those outcomes. Consequently, applicants are advised to include these outcomes in conceptualizing the design, implementation, and evaluation of their proposed projects. Their measurement should be a part of the proposed project evaluation plan, along with measures of progress and on the goals and objectives specific to your project.

The information provided by grantees in their performance reports submitted via IRIS will be the source of data for these performance measures.

5. Continuation Awards: In making a continuation award under 34 CFR 75.253, the Secretary considers, among other things: whether a grantee has made substantial progress toward meeting the goals and objectives of the project; whether the grantee has expended funds in a manner that is consistent with its approved application and budget; and, if the Secretary has established performance measurement requirements, the performance targets in the grantee’s approved application.

In making a continuation grant, the Secretary also considers whether the grantee is operating in compliance with the assurances in its approved application, including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department (34 CFR 100.4, 104.5, 106.4, 106.8, and 110.23).

VII. Agency Contact


If you use a TDD or a TTY, call the FRS, toll-free, at 1–800–877–8339.

VIII. Other Information

Accessible Format: Individuals with disabilities can obtain this document and a copy of the application package in an accessible format (e.g., braille, large print, audiotape, or computer disc) on request to the program contact person listed under FOR FURTHER INFORMATION CONTACT in section VII of this notice.

Electronic Access to This Document: The official version of this document is the document published in the Federal Register. Free Internet access to the official edition of the Federal Register and the Code of Federal Regulations is available via the Federal Digital System at: www.gpo.gov/fdsys. At this site you can view this document, as well as all other documents of this Department published in the Federal Register, in text or PDF. To use PDF you must have Adobe Acrobat Reader, which is available free at the site.

You may also access documents of the Department published in the Federal Register by using the article search function at www.federalregister.gov.

Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Dated: June 8, 2016.

Lynn B. Mahaffie,
Deputy Assistant Secretary for Policy, Planning and Innovation, Delegated the Duties of Assistant Secretary for Postsecondary Education.

[FR Doc. 2016–13933 Filed 6–10–16; 8:45 am]
BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

Annual Notice of Interest Rates of Federal Student Loans Made Under the William D. Ford Federal Direct Loan Program on or After July 1, 2013

AGENCY: Federal Student Aid, Department of Education.

ACTION: Notice.

Catalog of Federal Domestic Assistance (CFDA) Number: 84.268.

DATES: This notice is effective June 13, 2016.

SUMMARY: The Chief Operating Officer for Federal Student Aid announces the interest rates for loans made under the William D. Ford Federal Direct Loan (Direct Loan) Program on or after July 1, 2016, but before July 1, 2017.


If you use a telecommunications device for the deaf (TDD) or a text telephone (TTY), call the Federal Relay Service (FRS), toll free, at 1–800–877–8339.

Individuals with disabilities can obtain this document in an accessible format (e.g., braille, large print, audiotape, or compact disc) on request to the program contact person listed under FOR FURTHER INFORMATION CONTACT.

SUPPLEMENTARY INFORMATION: Section 455(b) of the Higher Education Act of 1965, as amended (HEA) (20 U.S.C. 1087f(b)), provides formulas for determining the interest rates charged to borrowers for loans made under the
Direct Loan Program including: Federal Direct Subsidized Stafford Loans (Direct Subsidized Loans); Federal Direct Unsubsidized Stafford Loans (Direct Unsubsidized Loans); Federal Direct PLUS Loans (Direct PLUS Loans); and Federal Direct Consolidation Loans (Direct Consolidation Loans).

Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans (collectively, Direct Loans) first disbursed on or after July 1, 2013, have a fixed interest rate that is calculated based on the high yield of the 10-year Treasury notes auctioned at the final auction held before June 1 of each year, plus a statutory add-on percentage (a "margin"). Therefore, while the interest rate determination for new loans will be different from year to year, each of these loans will have a fixed interest rate for the life of the loan. In each case the calculated rate is capped by a maximum interest rate. On Wednesday, May 11, 2016, the United States Treasury Department held a 10-year Treasury note auction that resulted in a high yield of 1.710%.

The following chart contains specific information on the calculation of the interest rates for Direct Loans first disbursed on or after July 1, 2016, but before July 1, 2017. We publish a separate notice containing the interest rates for Direct Loans that were made in prior years.

### FIXED-RATE DIRECT SUBSIDIZED LOANS, DIRECT UNSUBSIDIZED LOANS, AND DIRECT PLUS LOANS FIRST DISBURSED ON OR AFTER 7/1/2016 BUT BEFORE 7/1/2017

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<th>Loan type</th>
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<td>PLUS ............</td>
<td>Graduate and Professional Students.</td>
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<td>First disbursed before</td>
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If an application for a Direct Consolidation Loan is received by the Department on or after July 1, 2013, the interest rate on that loan is the weighted average of the consolidated loans, rounded up to the nearest higher 1/8 of 1 percent. These Direct Consolidation Loans do not have an interest rate cap.

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You may also access documents of the Department published in the Federal Register by using the article search feature at www.federalregister.gov. Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

**Program Authority:** 20 U.S.C. 1087, et seq.

Dated: June 8, 2016.

James W. Runcie, Chief Operating Officer, Federal Student Aid.

[FR Doc. 2016–13937 Filed 6–10–16; 8:45 am]

**DEPARTMENT OF EDUCATION**

[Docket No.: ED–2016–ICCD–0067]

**Agency Information Collection Activities; Comment Request; Fund for the Improvement of Postsecondary Education (FIPSE) Annual Performance Report**

**AGENCY:** Department of Education (ED), Office of Postsecondary Education (OPE).

**ACTION:** Notice.

**SUMMARY:** In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 et seq.), ED is proposing a revision of an existing information collection.

**DATES:** Interested persons are invited to submit comments on or before August 12, 2016.

**ADDRESSES:** To access and review all the documents related to the information collection listed in this notice, please use http://www.regulations.gov by searching the Docket ID number ED–2016–ICCD–0067. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at http://www.regulations.gov by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E–103, Washington, DC 20202–4537.

**FOR FURTHER INFORMATION CONTACT:** For specific questions related to collection activities, please contact Stacey Sljepcevic, 202–453–6150.

**SUPPLEMENTARY INFORMATION:** The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public’s reporting burden. It also helps the public understand the Department’s information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department? (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate;
4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Fund for the Improvement of Postsecondary Education (FIPSE) Annual Performance Report.

OMB Control Number: 1840–0793.

Type of Review: A revision of an existing information collection.

Respondents/Affected Public: State, Local, and Tribal Governments.

Total Estimated Number of Annual Responses: 100.

Total Estimated Number of Annual Burden Hours: 4,000.

Abstract: The Fund for the Improvement of Postsecondary Education (FIPSE) works to improve postsecondary education through grants to postsecondary educational institutions and agencies. Such grants are awarded to non-profit organizations on the basis of competitively reviewed applications submitted to FIPSE under the First in the World (FITW) Program. This collection includes a performance report for use with FITW programs 84.116F and 84.116X. We request clearance of one annual performance report for FITW programs 84.116F and 84.116X that will serve the dual purpose of an annual and final performance report. In this collection there is one (1) form, the annual performance report for FITW programs that includes a FITW program burden statement. The collection of the requested data in the performance report is necessary for the evaluation and assessment of FITW-funded programs and for assessment of continuation funding for each grantee.

Dated: June 8, 2016.

Kate Mullan,
Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2016–13865 Filed 6–10–16; 8:45 am]

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

[Case No. BLR–006]

Notice of Petition for Waiver From Johnston Boiler Company From the Department of Energy Commercial Packaged Boiler Test Procedure


ACTION: Notice of petition for waiver and request for public comments.

SUMMARY: This notice announces receipt of a petition for waiver from Johnston Boiler Company (Johnston) seeking an exemption from specified portions of the U.S. Department of Energy (DOE) test procedure applicable to commercial packaged boilers. Johnston contends that some of their commercial packaged boilers cannot be accurately tested using the currently applicable DOE test procedure and, as a result, seeks to use an alternate test procedure to test these basic models. DOE solicits comments, data, and information concerning Johnston’s petition and the suggested alternate test procedure.

DATES: DOE will accept comments, data, and information with respect to the Johnston petition until July 13, 2016.

ADDRESSES: You may submit comments, identified by case number “BLR–006,” by any of the following methods:

• Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.
• Email: AS Waiver Requests@ee.doe.gov. Include the case number [Case No. BLR–006] in the subject line of the message.

Docket: For access to the docket to review the background documents relevant to this matter, you may visit http://www.regulations.gov. Available documents include the following items:

(1) This notice; (2) public comments received; and (3) the petition for waiver.


SUPPLEMENTARY INFORMATION: In a petition received July 21, 2015, Johnston requested that the U.S. Department of Energy (“DOE”) grant a waiver to certain models of larger commercial package boilers that cannot be tested under the existing DOE test procedure. The models of commercial packaged boilers at issue are models with higher input capacities that typically require higher steam pressure and alternative instrumentation due to the large quantities of fluids being measured.

I. Background and Authority

Title III, Part C of the Energy Policy and Conservation Act of 1975 (EPCA), as amended (42 U.S.C. 6311 et seq.), established the Energy Conservation Program for certain industrial equipment, which includes commercial packaged boilers.1 Part C specifically includes definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316). Part C authorizes the Secretary of Energy (the Secretary) to prescribe test procedures that are reasonably designed to produce results that measure energy efficiency, energy use, and estimated annual operating costs, and that are not unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) With respect to commercial packaged boilers, Part C requires DOE to use industry test procedures developed or recognized by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) or the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), as referenced in ASHRAE/IES Standard 90.1. “Energy Standard for Buildings Except Low-Rise Residential Buildings.” (42 U.S.C. 6314(a)(4)(A)) Further, if such an industry test procedure is amended, DOE is required to amend its test procedure to be consistent with the amended industry test procedure, unless it determines, by rule published

1 For editorial reasons, upon codification in the U.S. Code, Part C was re-designated Part A–1.

2 Illuminating Engineering Society.
in the Federal Register and supported by clear and convincing evidence, that the amended test procedure would be unduly burdensome to conduct or would not produce test results that reflect the energy efficiency, energy use, and estimated operating costs of that equipment during a representative average use cycle. (42 U.S.C. 6314(a)(4)(B)). The test procedure for commercial packaged boilers is contained in 10 CFR part 431, subpart E.

DOE’s regulations for covered products and equipment permit a person to seek a waiver from the test procedure requirements for covered commercial equipment if at least one of the following conditions is met: (1) The petitioner’s basic model contains one or more design characteristics that prevent testing according to the prescribed test procedures; or (2) the prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption as to provide materially inaccurate comparative data. 10 CFR 431.401(a)(1). A petitioner must include in its petition any alternate test procedures known to the petitioner to evaluate the basic model in a manner representative of its energy consumption. 10 CFR 431.401(b)(1)(i).

DOE may grant a waiver subject to conditions, including adherence to alternate test procedures. 10 CFR 431.401(f)(2). As soon as practicable after the granting of any waiver, DOE will publish in the Federal Register a notice of proposed rulemaking to amend its regulations so as to eliminate any need for the continuation of such waiver. As soon thereafter as practicable, DOE will publish in the Federal Register a final rule. 10 CFR 431.401(l).

II. Petition for Waiver of Test Procedure


According to Johnston, there are several issues that make BTS–2000 incompatible with larger commercial packaged boilers, including those identified in its petition for waiver. Johnston stated that the requirements to use test conditions specified in BTS–2000 and the instrumentation requirements are outdated. Specifically, Johnston indicated the following regarding the test conditions:

- The 0 to 2 psig test pressure for steam boilers may be adequate for residential and small commercial (cast iron) boilers sized [commercial packaged] boilers, however such steam pressures are not compatible with large [commercial packaged] boilers as it will cause water carryover in large quantities, and an inability to meet design water flow rates and firing rates;
- Typically test steam pressures in the range of 10 to 12 psig are required; and
- Test temperatures defined for hot water [commercial packaged] boilers cause thermal shock problems in large [commercial packaged] boilers.

Johnston also indicated the following regarding the instrumentation chart in Table 1 of section 6.0, “Instruments,” of BTS–2000:

- Steam pressure cannot be measured by mercury manometer as the use of mercury in instruments and controls is banned; the correct instrument is a Bourdon Tube Gauge for pressures of 0 to 30 psig;
- Large boilers typically fire into a positive pressure combustion chamber, thus gas pressure, firebox pressure and vent/flue pressure instruments all need to reflect this;
- The use of scales to measure water/condensate/moisture flow rates is incompatible with the volume of these fluids being used or generated by large [commercial packaged] boilers; water flow meters should be used and in the case of moisture content, current practice is to use a throttling calorimeter;
- The measurement of carbon dioxide as a means of calculating excess air or oxygen is considered obsolete in the large [commercial packaged] boiler industry; direct measurement of excess oxygen is the preferred method as modern oxygen meters can easily be calibrated against the oxygen in the ambient air;
- Carbon Monoxide levels are no longer measured as a percentage; the current preferred unit is parts per million (ppm).

To address these concerns, Johnston proposes to use the newly published American National Standards Institute (ANSI)/Air-Conditioning, Heating, and Refrigeration Institute (AHRI) 1500–2015, “Standard for Performance Rating of Commercial Space Heating Boilers” (ANSI/AHRI Standard 1500–2015) in place of BTS–2000. AHRI developed ANSI/AHRI Standard 1500–2015 as a replacement for BTS–2000 in order to make the test procedure suitable for use with larger commercial packaged boilers, as well as improve and clarify the test method. Johnston claims that use of this ANSI/AHRI Standard 1500–2015 is necessary as it is compatible with the size of commercial packaged boilers they manufacture.

Additionally, for the large commercial packaged boilers capable of supplying either steam or hot water identified in this petition, Johnston requests that, when determining the combustion efficiency in hot water mode based on testing in steam mode only, the combustion efficiency rating be determined based on an adjusted combustion efficiency. Johnston requests that an adjustment be made to the measured stack temperature to be used in calculating combustion efficiency based on the relative difference between the flue gas temperature and the bulk fluid temperature when operating in steam mode as opposed to hot water using the following relationship:

\[ T_{\text{stack, bw}} = (T_{\text{stack, steam}} - T_{\text{sat}}) + T_{\text{bulk, bw}} \]

where \( T_{\text{stack, bw}} \) is the stack temperature to be used to determine the combustion efficiency in hot water mode, \( T_{\text{stack, steam}} \) is the measured stack temperature when testing on steam, \( T_{\text{sat}} \) is the saturation temperature of steam at the test pressure, and \( T_{\text{bulk, bw}} \) is the temperature of the outlet water when testing in hot water mode and is equal to 180 °F. According to Johnston, using this adjusted stack temperature to calculate combustion efficiency is a more accurate representation of the actual efficiency when operating as a hot water commercial packaged boiler than simply using combustion efficiency value for steam mode.

Johnston also requests to use the vertical stack arrangement shown on their “Drawing #327AO040 Johnston Boiler General Arrangement D.O.E. Efficiency Test (attachment B)” DOE’s existing test procedure incorporates section 7.0 “Apparatus” of BTS–2000 with respect to test setup including flue connection requirements. (DOE notes that the term “flue,” not “stack,” is used throughout its test procedure regulations as well as BTS–2000). The flue requirements differ depending on the characteristics of the commercial packaged boiler, including:

- Whether the unit is oil-fired or gas-fired, and if gas-fired;
- Whether the unit is direct vent;
- Whether the unit has an input rating of more than 400,000 Btu/h;
- Whether the unit is discharges vent gases horizontally or vertically; and
- Whether the unit is condensing.

According to Johnston, the large volume of flue gas in relation to the flue
diameter results in relatively high velocities and therefore creates turbulence. Johnston indicates that this straight stack arrangement is shown in their operating manual and in the American Boiler Manufacturer Association’s (ABMA) “Packaged Boiler Engineering Manual.” DOE requests comment on how turbulence affects measured efficiency under the current test procedure, and how use of the vertical stack arrangement shown in the drawing provided by Johnston would prevent turbulence.

In addition, Johnston stated that ANSI/AHRI Standard 1500–2015 does not clarify whether there is an upper limit for fuel input rate to which the standard applies. However, the scope of ANSI/AHRI Standard 1500–2015 is identified as “commercial space heating boilers” in section 1.1. (Note: The term “commercial space heating boiler” is not defined in ANSI/AHRI Standard 1500–2015.) Johnston suggested that the upper fuel input rate limit be established at 12,500,000 Btu/hr.

Johnston stated that the two major safety standards for the industry are American Society of Mechanical Engineers (ASME) CSD–1 Controls and Safety Devices for Automatically Fired Boilers (ASME CSD–1) and National Fire Protection Association (NFPA)–85–2015 Boiler and Combustion Systems Hazard Code (NFPA–85). Johnston further indicated that the scope of ASME CSD–1 is for commercial boilers with inputs from 400,000 to 12,500,000 Btu/hr and the scope for NFPA–85 is for industrial boilers over 2,500,000 Btu/hr. DOE notes that neither the existing DOE test procedure or energy standards establish an upper limit in terms of fuel input rate for which they apply. Consequently, DOE is declining to consider Johnston’s request for an upper limit for the fuel input rate which would limit the scope of applicability of the test procedure in this proceeding.

DOE notes that it has published a notice of proposed rulemaking (NOPR) to amend its test procedure for commercial packaged boilers prescribed in 10 CFR part 431 subpart E (March 2016 CPB TP NOPR), 81 FR 14641 (Mar. 17, 2016). The proposed amended test procedure addresses, among other changes, most of the issues raised in this waiver request by incorporating by reference ANSI/AHRI Standard 1500–2015 as a replacement for BTS–2000 in the DOE test procedure for commercial packaged boilers. In addition to adopting ANSI/AHRI Standard 1500–2015 as a replacement for BTS–2000, DOE further proposes several modifications to its test procedure that are not captured in ANSI/AHRI Standard 1500–2015 in order to improve repeatability, add clarification, and accommodate testing of some equipment that has experienced difficulty in testing to the existing DOE test procedure. Among these changes, DOE proposes to adopt the stack temperature adjustment described by Johnston when using the tested combustion efficiency of large steam commercial packaged boilers to represent the combustion efficiency of large commercial packaged boilers in hot water mode.

The following basic models are included in Johnston’s petition:

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III. Summary and Request for Comments

Through this notice, DOE is publishing Johnston’s petition for waiver pursuant to 10 CFR 431.401(b)(1)(iv). The petition contains no confidential information. The petition includes a suggested alternate test procedure applicable to measurement of energy efficiency of certain models of commercial packaged boilers manufactured by Johnston.

DOE solicits comments from interested parties on all aspects of the petition, including the suggested alternate test procedure. Pursuant to 10 CFR 431.401(d), any person submitting written comments to DOE must also send a copy of such comments to the petitioner. The contact information for the petitioner is: David C. Reinink, President, Johnston Boiler Company, 300 Pine Street, P.O. Box 300, Fergusby, MI 49409–0300. All submissions received must include the agency name and case number for this proceeding. Submit electronic comments in WordPerfect, Microsoft Word, Portable Document Format (PDF), or text (American Standard Code for Information Interchange (ASCII)) file format and avoid the use of special characters or any form of encryption. Wherever possible, include the electronic signature of the author. DOE does not accept telefacsimiles (faxes).
According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit two copies: One copy of the document including all the information believed to be confidential, and one copy of the document with the information believed to be confidential deleted. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Issued in Washington, DC, on June 3, 2016.

Kathleen B. Hogan,
Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

Johnston Boiler Company
300 Pine Street
P.O. Box 300
Ferrysburg, MI 49409–0300

Application for Waiver for the Efficiency Rating of Commercial Space Heating Boilers

In accordance with the provisions of the Code of Federal Regulations Part 431, paragraph 431.30(b), Johnston Boiler Company is hereby petitioning for a waiver from the following test procedures specified for Commercial Packaged Boilers:

1. Paragraph 431.86 Uniform test method for the measurement of energy efficiency of commercial packaged boilers. This section requires the boilers be tested using the provisions of HI BTS–2000. We propose to use the newly published AHRI 1500, 2015 Standard for Performance Rating of Commercial Space Heating Boilers. There are several issues that make BTS 2000 incompatible with the larger boilers that were identified in previous waiver requests. AHRI has worked diligently over the past year to revise BTS–2000 in order to address those issues and make BTS–2000 suitable for use with larger boilers. AHRI Standard 1500 is the result of that work. Use of this new standard is required as it is compatible with the size boilers we manufacture.

2. Paragraph 431.86(c)(1)(i)(v) The requirement to use test conditions specified in BTS–2000 specifically the requirements for the test pressure for steam boilers, the required water temperatures for hot water boilers and instrumentation requirements seem to refer back to the middle of the last century rather than the present day, for example:

- The 0 to 2 psig test pressure for steam boilers may be perfectly adequate for residential and small commercial (cast iron) boilers sized boilers, however is not compatible with large boilers as it will cause water carryover in large quantities, and an inability to meet design water flow rates and firing rates. Typically test pressures in range 10 to 12 psig are required.
- Test temperatures defined for hot water boilers are guaranteed to cause thermal shock problems in large boilers.
- The instrumentation chart, Table 1, has several problem areas, as follows:
  - Steam pressure cannot be measured by mercury manometer as the use of mercury in instruments and controls is banned. The correct instrument is a Bourdon Tube Gauge 0 to 30 psig
  - Large boilers typically fire into a positive pressure combustion chamber, thus gas pressure, firebox pressure and vent/flare pressure instruments all need to reflect this.
  - The use of scales to measure water/condensate/moisture flow rates is incompatible with the sheer volume of these fluids being used or generated by large boilers. Water flow meters should be used and in the case of moisture content, current practice is to use a throttling calorimeter.
  - The measurement of carbon dioxide as a means of calculating excess air or oxygen is considered obsolete in the large boiler industry. Direct measurement of excess oxygen is the preferred method as modern oxygen meters can easily be calibrated against the oxygen in the ambient air.
  - Carbon Monoxide levels are no longer measured as a percentage. The current preferred unit is ppm.
  - AHRI 1500 has taken into account these changes.

3. Paragraph 431.86(c)(2)(iii)(B) Rating. This paragraph specifies that for boilers capable of supplying either steam or hot water, that they are tested on steam only, the hot water efficiency shall be based on the testing in the steam mode. We propose to use an adjusted steam efficiency for hot water when testing on steam only. The adjustment is made to the measured stack temperature to be used in calculating efficiency based on the relative difference between the flue gas temperature and the bulk fluid temperature when operating on steam v hot water using the following relationship:

\[ T_{\text{stack}} = (T_{\text{stack, steam}} - T_{\text{sat}}) + T_{\text{bulk}} \]

Where:

- \( T_{\text{stack}} \) = Stack temperature to be used to determine the efficiency on hot water
- \( T_{\text{stack, steam}} \) = Measured stack temperature when testing on steam
- \( T_{\text{sat}} \) = Saturation temperature of steam at the test pressure
- \( T_{\text{bulk}} \) = \( 180^\circ \) F

The dominant heat transfer variable for both steam and hot water boilers is the gas side coefficient and there is very little difference in the overall heat transfer coefficient between steam and hot water boilers. It is possible therefore to determine what a hot water boiler stack temperature will be, based on a steam test and the bulk fluid temperature difference within the boiler. We believe that using this adjusted stack temperature to calculate efficiency is a more accurate representation of the actual efficiency when operating as a hot water boiler than simply using the steam efficiency value.

4. We will use the vertical stack arrangement shown on our Drawing #527A0040 Johnston Boiler General Arrangement D.O.E. Efficiency Test (attachment B). The large volume of our flue gas in relation to the flue diameter results in relatively high velocities with resulting turbulence. This straight stack arrangement is shown in our operating manual and ABMA’s “Packaged Boiler Engineering Manual”.

5. AHRI Standard 1500, Page 1, Section 2, Paragraph 1.1 and 2.2. It is not clear if there is an upper limit for input rating. However, the stated purpose of the AHRI standard 1500 is for Commercial Space Heating Boilers. We suggest that the upper input limit be established at 12,500,000 Btu/hr.

The two major safety standards for our industry are American Society of Mechanical Engineers (ASME CSD–1 Controls and Safety Devices for Automatically Fired Boilers) and National Fire Protection Association (2015 NFPA–85 Boiler and Combustion Systems Hazard Code). The scope of CSD–1 is for Commercial Boilers with inputs from 400,000 to 12,500,000 Btu/hr. The scope for NFPA–85 is for Industrial Boilers over 12,500,000 Btu/hr.

The basic models that this request is applicable to are as follows:

- See attachment A
- Other known Manufacturers of similar products are listed below. These manufacturers will be notified by Johnston Boiler Company of this waiver, if and when the deviation is granted, in accordance with paragraph 431.401(c).
- AESYS Technologies, LLC
- Bryan Steam
- Burnham Commercial
- Cleaver Brooks
- Easco
- Fulton Boiler Works
- Hurst
- Johnston Boiler Company
- Lattner Boiler Company
- Miura
- Precision Boilers LLC
- Superior Boiler Works
- Unilux
- Vapor Power International LLC
- Victory Energy Operations LLC
- Williams & Davis
- Best Regards,
- David C. Reinink,
- President, Johnston Boiler Company

Attachment A

Johnston Boiler Company—Ferrysburg, Michigan—Boiler Model Numbers

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Capacity</th>
<th>Btu/hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFT 50–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 75–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
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<tr>
<td>PFT 80–4S</td>
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<td>4-Pass Scotch Marine</td>
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<tr>
<td>PFT 100–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 125–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 150–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 200–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 250–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 300–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 350–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 400–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
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<td>PFT 500–4S</td>
<td>509 Series</td>
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</tr>
<tr>
<td>PFT 600–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
</tr>
<tr>
<td>PFT 750–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
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<tr>
<td>PFT 800–4S</td>
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<td>PFT 900–4S</td>
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<tr>
<td>PFT 1200–4S</td>
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<td>PFT 1500–4S</td>
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</tr>
<tr>
<td>PFT 1600–4S</td>
<td>509 Series</td>
<td>4-Pass Scotch Marine</td>
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</tbody>
</table>
DEPARTMENT OF ENERGY
Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC16–112–000.

Applicants: West Valley Power, LLC.

Description: West Valley Power, LLC response to Commission May 25, 2016 data request.

Filed Date: 6/5/16.

Accession Number: 20160603–5288.

Comments Due: 5 p.m. ET 6/13/16.


Applicants: Verso Corporation, Verso Maine Energy LLC, Rumford Paper
Company, NewPage Energy Services LLC.


Filed Date: 6/2/16.
Accession Number: 20160602–5481.
Comments Due: 5 p.m. ET 6/23/16.
Applicants: Electricity Maine, LLC, Electricity NH, LLC, Provider Power MASS, LLC, Spark Holdco, LLC.

Description: Application For Authorization Under Section 203 Of The Federal Power Act And Requests For Waiver Of Filing Requirements, Expedited Consideration And Shortened Comment Period Of Electricity Maine, LLC et al.

Filed Date: 6/2/16.
Accession Number: 20160602–5483.
Comments Due: 5 p.m. ET 6/23/16.
Applicants: Macquarie Wind Farm LLC.

Description: Application for Authorization for Disposition of Jurisdictional Facilities and Request for Expedited Action and Abbreviated Comment Period of Macquarie Wind Farm LLC.

Filed Date: 6/3/16.
Accession Number: 20160603–5271.
Comments Due: 5 p.m. ET 6/24/16.
Take notice that the Commission received the following exempt wholesale generator filings:

Applicants: Tyler Bluff Wind Project, LLC.

Description: Notice of Self-Certification of Exempt Wholesale Generator Status of Tyler Bluff Wind Project, LLC.

Filed Date: 6/6/16.
Accession Number: 20160606–5235.
Comments Due: 5 p.m. ET 6/27/16.
Take notice that the Commission received the following electric rate filings:


Description: Second Amendment to March 2, 2016 Notice of Non-Material Change in Status of TransCanada MBR Sellers, et al.

Filed Date: 6/3/16.
Accession Number: 20160603–5291.
Comments Due: 5 p.m. ET 6/24/16.
Docket Numbers: ER15–1535–002.
Applicants: Midcontinent Independent System Operator, Inc.

Description: Compliance filing: 2016–06–06 SA 6507 White Pine 1 SSR Agreement Compliance Filing to be effective 4/16/2015.

Filed Date: 6/6/16.
Accession Number: 20160606–5131.
Comments Due: 5 p.m. ET 6/27/16.


Filed Date: 6/6/16.
Accession Number: 20160606–5174.
Comments Due: 5 p.m. ET 6/27/16.


Filed Date: 6/6/16.
Accession Number: 20160606–5175.
Comments Due: 5 p.m. ET 6/27/16.
Docket Numbers: ER16–1879–000.
Applicants: New York State Electric & Gas Corporation.

Description: § 205(d) Rate Filing: Executed Interconnection Agreement and Notice of Cancellation to be effective 5/5/2016.

Filed Date: 6/3/16.
Accession Number: 20160603–5245.
Comments Due: 5 p.m. ET 6/24/16.
Docket Numbers: ER16–1880–000.
Applicants: Public Service Company of Colorado.

Description: § 205(d) Rate Filing: PSco PRPA LaPorte PPA 174 0.0.0 Filing to be effective 5/31/2016.

Filed Date: 6/6/16.
Accession Number: 20160606–5151.
Comments Due: 5 p.m. ET 6/27/16.
Applicants: Public Service Company of Colorado.

Description: § 205(d) Rate Filing: PSco SSC E&P 382 NOC Filing to be effective 6/7/2016.

Filed Date: 6/6/16.
Accession Number: 20160606–5152.
Comments Due: 5 p.m. ET 6/27/16.
Docket Numbers: ER16–1883–000.

Description: § 205(d) Rate Filing: 2016–06–06 SA 2787 MidAmerican-Interstate Power & Light WDS (George, IA) to be effective 9/1/2016.

Filed Date: 6/6/16.
Accession Number: 20160606–5197.
Comments Due: 5 p.m. ET 6/27/16.
Applicants: PJM Interconnection, LLC.

Description: § 205(d) Rate Filing: First Revised Service Agreement No. 1878, Queue No. AA–127 to be effective 5/6/2016.

Filed Date: 6/6/16.
Accession Number: 20160606–5198.
Comments Due: 5 p.m. ET 6/27/16.
Docket Numbers: ER16–1885–000.

Description: § 205(d) Rate Filing: 2016–06–06 SA 2902 MidAmerican-Interstate Power & Light WDS (St. Joseph, IA) to be effective 9/1/2016.

Filed Date: 6/6/16.
Accession Number: 20160606–5208.
Comments Due: 5 p.m. ET 6/27/16.
Docket Numbers: ER16–1886–000.

Description: § 205(d) Rate Filing: 2016–06–06 Tariff Amendment to Implement Pricing Enhancements to be effective 9/7/2016.

Filed Date: 6/6/16.
Accession Number: 20160606–5227.
Comments Due: 5 p.m. ET 6/27/16.

The filings are accessible in the Commission’s eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission’s Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date.

Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: http://www.ferc.gov/docs-filing/eFiling/filing-req.pdf. For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: June 6, 2016.

Nathaniel J. Davis, Sr.,
Deputy Secretary.
DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Number: PR16–56–000.
Applicants: Lobo Pipeline Company LLC.
Description: Tariff filing per 284.123(e) + (g); Lobo Pipeline Company LLC Revised Statement of Operating Conditions to be effective 6/1/2016; Filed Type: 1280.
Filed Date: 6/1/2016.
Accession Number: 201606015354.

Comments Due: 5 p.m. ET 6/22/16.

Docket Number: PR16–57–000.
Applicants: Columbia Gas of Ohio, Inc.
Description: Tariff filing per 284.123(b)(1)/: COH SOC effective 5–31–2016 to be effective 5/31/2016; Filing Type: 980.
Filed Date: 6/3/16.
Accession Number: 201606035209.
Comments/Protests Due: 5 p.m. ET 6/24/16.

Filed Date: 5/25/16.
Accession Number: 201606052586.
Comments Due: 5 p.m. ET 6/9/16.

Applicants: Transcontinental Gas Pipe Line Company.
Description: § 4(d) Rate Filing: Clean-Up Filing—June 2016 to be effective 7/3/2016.
Filed Date: 6/2/16.
Accession Number: 20160602–5223.
Comments Due: 5 p.m. ET 6/14/16.

Applicants: UGI Mt. Bethel Pipeline.
Description: Compliance filing New Tariff Compliance Filing to be effective 7/1/2016.
Filed Date: 6/2/16.
Accession Number: 20160602–5350.
Comments Due: 5 p.m. ET 6/14/16.

Applicants: Eastern Shore Natural Gas Company.
Description: § 4(d) Rate Filing: Annual Fuel Retention and Cash Out Adjustment to be effective 7/1/2016.
Filed Date: 6/2/16.
Accession Number: 20160602–5431.
Comments Due: 5 p.m. ET 6/14/16.

Applicants: Texas Eastern Transmission, L.P.
Description: § 4(d) Rate Filing: Non-Conforming Agreement PSEG Power 911359 to be effective 6/6/2016.
Filed Date: 6/3/16.
Accession Number: 20160603–5030.
Comments Due: 5 p.m. ET 6/15/16.

Applicants: EQT Energy, LLC,Statoil Natural Gas LLC.
Filed Date: 6/3/16.
Accession Number: 20160603–5287.
Comments Due: 5 p.m. ET 6/10/16.

Applicants: Alliance Pipeline L.P.
Description: § 4(d) Rate Filing: Seasonal Service June—September 2016 to be effective 6/1/2016.
Filed Date: 6/6/16.
Accession Number: 20160606–5172.
Comments Due: 5 p.m. ET 6/20/16.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission’s Regulations (18 CFR 385.211 and § 385.214) on or before 5:00 p.m. Eastern time on the specified date(s). Protests may be considered, but intervention is necessary to become a party to the proceeding.

Filings in Existing Proceedings

Applicants: Alliance Pipeline L.P.
Description: § 4(d) Rate Filing: Compressing facility New Tariff Compliance Filing to be effective 7/1/2016.
Filed Date: 6/2/16.
Accession Number: 20160602–5350.
Comments Due: 5 p.m. ET 6/14/16.

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Saguar0 Power Company; Notice of Petition for Waiver]

Take notice that on June 6, 2016, pursuant to section 292.205(c) of the Federal Energy Regulatory Commission’s (Commission or FERC) implementing the Public Utility Regulatory Policies Act of 1978, Saguar0 Power Company (Saguar0) filed a petition for limited waiver of FERC’s qualifying cogeneration facility operating and efficiency standards set forth in 18 CFR 292.205(a)(1)–(2) for calendar years 2016 and 2017, as more fully explained in the petition.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission’s Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Petitioner.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the “eFiling” link at http://www.ferc.gov. Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at http://www.ferc.gov, using the eFiling system by clicking on the links or querying the docket number.
Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Applicants: Algonquin Gas Transmission, LLC.
Description: § 4(d) rate filing per 154.204: Non-Conforming Agreement—Narragansett 510209 to be effective 6/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5289.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Columbia Gulf Transmission, LLC.
Description: § 4(d) rate filing per 154.204: GEH—Multi-Party Contracts to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5289.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Crossroads Pipeline Company.
Description: § 4(d) rate filing per 154.204: GEH—Multi-Party Contracts to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5289.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Crossroads Pipeline Company.
Description: § 4(d) rate filing per 154.204: Operational Sales at Pool to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5300.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Millennium Pipeline Company, LLC.
Description: § 4(d) rate filing per 154.204: Trans LA 46521 to be effective 6/2/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5124.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Gulf South Pipeline Company, LP.
Description: § 4(d) rate filing per 154.204: Cap Rel Neg Rate Agmt (QEP 37657 to Trans LA 46521) to be effective 6/2/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5181.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Equitrans, L.P.
Description: § 4(d) rate filing per 154.204: Negotiated Capacity Release Agreements—6/01/2016 to be effective 6/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5227.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) rate filing per 154.204: GEH—Multi-Party Contracts to be effective 7/1/2016.

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission received the following exempt wholesale generator filings:

Applicants: Kelly Creek Wind, LLC.
Description: Notice of Self-Certification of Exempt Wholesale Generator Status of Kelly Creek Wind, LLC.
Filed Date: 6/6/16.
Accession Number: 20160606–5238.
Comments Due: 5 p.m. ET 6/27/16.
Applicants: Great Western Wind Energy, LLC.
Description: Notice of Self-Certification of Exempt Wholesale Generator Status of Great Western Wind Energy, LLC.
Filed Date: 6/7/16.
Accession Number: 20160607–5173.
Comments Due: 5 p.m. ET 6/28/16.

Take notice that the Commission received the following electric rate filings:

Applicants: Elwood Energy, LLC, Exelon Generation Company, LLC.
Description: Informational filing of Elwood Energy, LLC and Exelon Generation Company, LLC regarding allocation of reactive revenue requirements.
Filed Date: 6/2/16.
Accession Number: 20160602–5491.
Comments Due: 5 p.m. ET 6/23/16.
Description: Compliance filing: NYISO compliance to remove certain RMR language to be effective 10/20/2015.

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. IC16–11–000]

Commission Information Collection Activities (FERC Form Nos. 6, 580, 1, 1–F, and 3–Q); Consolidated Comment Request; Extension

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of information collections and request for comments.

SUMMARY: In compliance with the requirements of the Federal Energy Regulatory Commission (Commission or FERC) is soliciting public comment on the requirements and burden of the information collections described below.

DATES: Comments on the collections of information are due August 12, 2016.

ADDRESSES: You may submit comments (identified by Docket No. IC16–11–000) by either of the following methods:

• eFiling at FERC’s Web site: http://www.ferc.gov/docs-filing/efiling.asp

• Mail/Hand Delivery/Courier: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE., Washington, DC 20426. Please reference the specific collection number and/or title in your comments.

Instructions: All submissions must be formatted and filed in accordance with submission guidelines at: http://www.ferc.gov/help/submission-guide.asp. For user assistance contact FERC Online Support by email at ferconlinesupport@ferc.gov, or by phone at (866) 208–3676 (toll-free), or (202) 502–8659 for TTY.

Docket: Users interested in receiving automatic notification of activity in this docket or in viewing/downloading comments and issuances in this docket may do so at http://www.ferc.gov/docs-filing/docs-filing.asp.

FOR FURTHER INFORMATION: Ellen Brown may be reached by email at DataClearance@FERC.gov, telephone at (202) 502–8663, and fax at (202) 273–0873.

SUPPLEMENTARY INFORMATION:

Type of Request: Three-year extension of the information collection requirements for all collections described below with no changes to the current reporting requirements. Please note that each collection is distinct from the next.

Comments: Comments are invited on: (1) whether the collections of information are necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) the accuracy of the agency’s estimates of the burden and cost of the collections of information, including the validity of the methodology and assumptions used; (3) ways to enhance
the quality, utility and clarity of the information collections; and (4) ways to minimize the burden of the collections of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

FERC Form No. 6, Annual Report of Oil Pipeline Companies 2

OMB Control No.: 1902–0022

Abstract: Under the Interstate Commerce Act (ICA), (Section 20, 54 Stat. 916), the Interstate Commerce Commission (ICC) was authorized and empowered to make investigations and to collect and record data to the extent considered necessary or useful for the purpose of carrying out the provisions of the ICA.

In 1977, the Department of Energy Organization Act transferred to the Commission from the ICC the responsibility to regulate oil pipeline companies. In accordance with the transfer of authority, the Commission was delegated the responsibility to require oil pipelines to file annual reports of information necessary for the Commission to exercise its statutory responsibilities.3 The transfer included the Form P, the predecessor to the FERC Form No. 6, Annual Report of Oil Pipeline Companies (Form 6).4

To reduce burden on industry, the FERC Form No. 6 has three tiers of reporting requirements:

1. Each oil pipeline carrier whose annual jurisdictional operating revenues has been $500,000 or more for each of the three previous calendar years must file FERC Form No. 6. Oil pipeline carriers submitting a complete FERC Form No. 6 must submit FERC Form 6–Q.5 Newly established entities must use projected data to determine whether FERC Form No. 6 must be filed.

2. Oil pipeline carriers exempt from filing FERC Form No. 6 whose annual jurisdictional operating revenues have been more than $350,000 but less than $500,000 for each of the three previous calendar years must prepare and file page 301, “Operating Revenue Accounts” (Account 600), and page 700, “Annual cost of Service Based Analysis Schedule,” of FERC Form No. 6. When submitting pages 301 and 700, each exempt oil pipeline carrier must include page 1 of the FERC Form No. 6, the Identification and Attestation schedules.

3. Oil pipeline carriers exempt from filing FERC Form No. 6 and page 301 and whose annual jurisdictional operating revenues were $350,000 or less for each of the three previous calendar years must prepare and file page 700, “Annual Cost of Service Based Analysis Schedule,” of FERC Form No. 6.

The Commission uses the FERC Form No. 6 information in:

- implementation of its financial audits and programs, the continuous review of the financial condition of regulated companies, and the assessment of energy markets
- various rate proceedings and economic analyses
- background research for use in litigation
- programs relating to the administration of the ICA
- computation of annual charges, which are required by Section 3401 of the Omnibus Budget Reconciliation Act of 1986.

Type of Respondent: Oil Pipelines.

Estimate of Annual Burden: The Commission estimates the annual public reporting burden 6 and cost 7 for the FERC Form No. 6 information collection as follows.

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<thead>
<tr>
<th>Number of respondents</th>
<th>Total number of responses per respondent</th>
<th>Average burden &amp; cost per response</th>
<th>Total annual burden &amp; total annual cost</th>
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<td>198</td>
<td>198</td>
<td>161.06 hrs.; $11,998.97</td>
<td>31,889.88 hrs.; $2,375,796.06</td>
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FERC Form No. 580, Interrogatory on Fuel and Energy Purchase Practices

OMB Control No.: 1902–0137

Abstract: FERC Form No. 580 is collected in even numbered years. The Public Utility Regulatory Policies Act (PURPA) 8 amended the Federal Power Act (FPA) and directed the Commission to make comprehensive biennial reviews of certain matters related to automatic adjustment clauses (AACs) in wholesale rate schedules used by public utilities subject to the Commission’s jurisdiction. Specifically, the Commission is required to examine whether the clauses effectively provide the incentives for efficient use of resources and whether the clauses reflect only those costs that are either “subject to periodic fluctuations” or “not susceptible to precise determinations” in rate cases prior to the time the costs are incurred.

2 The renewal request for the FERC Form No. 6 in this IC docket is for the current form, with no change to the reporting requirements.

The FERC Form No. 6 is also part of the Forms Refresh effort (started in Docket No. AD15–11), which is a separate activity and not addressed in this Notice.

In addition, there is a pending Docket No. RM15–19 which is a separate activity and is not addressed in this Notice.

3 Section 402(b) of the Department of Energy Organization Act (DOE Act). 42 U.S.C. 7172 provides that; “[t]here are hereby transferred to, and vested in, the Commission all functions and authority of the Interstate Commerce Commission or any officer or component of such Commission where the regulatory function establishes rates or charges for the transportation of oil by pipeline or established the valuation of any such pipeline.”

4 The ICC developed the Form P to collect information on an annual basis to enable it to carry out its regulation of oil pipeline companies under the Interstate Commerce Act. A comprehensive review of the reporting requirements for oil pipeline companies was performed on September 21, 1982, when the Commission issued Order 260 revising the former ICC Form P, “Annual Report of Carriers by Pipeline” and redesignating it as FERC Form No. 6, “Annual Report of Oil Pipeline Companies”.

5 FERC Form 6–Q is covered separately and is approved by OMB under OMB Control No. 1902–0022.

The Commission is also required to review the practices of each public utility under AACs “to insure efficient use of resources under such clauses.”

7 In response to the PURPA directive, the Commission (Docket Number IN79–6–000) established an investigation. Beginning in 1982, the Commission collected “Interrogatory on Fuel and Energy Purchase Practices” data every other year.

0206. It is not a subject of this Notice: FERC Form 6–Q is being addressed separately in Docket No. IC16–7–000.

4 The burden associated with the one-time re-filing of Page 700 data for Years 2009–2011 has been completed and is not included.

5 The cost is based on FERC’s 2016 average cost (salary plus benefits) of $74.50/hour. The Commission staff believes that the industry’s level and skill set is comparable to FERC.

8 Enacted November 8, 1978

9 The review requirement is set forth in two paragraphs of Section 208 of PURPA, 49 Stat.851; 16 U.S.C. 824d.
Based on filer comments in response to the new electronic form used in the 2014 collections, FERC recommends the following changes to the instructions. FERC is not changing the requirements of the information collection.

<table>
<thead>
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<th>Question 2a</th>
<th>Question 2a column changes</th>
</tr>
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<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>Docket number under which rate schedule containing AAC through which costs were passed during 2012 and/or 2013 was accepted for filing by FERC. Was rate schedule superseded or abandoned during 2012–2013? If so, provide dates.</td>
<td>Docket number under which rate schedule containing AAC through which costs were passed during 2014 and/or 2015 was accepted for filing by FERC. Was rate schedule superseded or abandoned during 2014–2015? If so, provide dates.</td>
</tr>
</tbody>
</table>

Question 2b
—Revise the paragraph under Question 2b to read:

<table>
<thead>
<tr>
<th>Question 2b</th>
<th>Question 2b column changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>If any of the Utility’s wholesale rate and/or service agreements containing an AAC listed in Question 2a, that was used during 2012 and/or 2013, was filed with the Commission before January 1, 1990, attach an electronic copy of it with this filing. List the documents you are submitting below. Note: Once this information is submitted electronically in a text-searchable format it will not be necessary to submit it in future Form 580 filings. See: <a href="http://www.ferc.gov/docs-filing/elibrary/accept-file-formats.asp">http://www.ferc.gov/docs-filing/elibrary/accept-file-formats.asp</a> for listing of Commission accepted document types.</td>
<td>If any of the Utility’s wholesale rate and/or service agreements containing an AAC listed in Question 2a, that was used during 2014 and/or 2015, was filed with the Commission before January 1, 1990, attach an electronic copy of it with this filing. List the documents you are submitting below. Note: Once this information is submitted electronically in a text-searchable format it will not be necessary to submit it in future Form 580 filings. See: <a href="http://www.ferc.gov/docs-filing/elibrary/accept-file-formats.asp">http://www.ferc.gov/docs-filing/elibrary/accept-file-formats.asp</a> for listing of Commission accepted document types.</td>
</tr>
</tbody>
</table>

Question 3
—Revise the paragraph under Question 3 to read:

<table>
<thead>
<tr>
<th>Question 3</th>
<th>Question 3 column changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>If during the 2012–2013 period, the Utility had any contracts or agreements for the purchase of either energy or capacity under which all or any portion of the purchase costs were passed through a fuel adjustment clause (FAC), for each purchase from a PURPA Qualifying Facility (QF) or Independent Power Producer (IPP) provide the information requested in the non-shaded columns of the table below. Provide the information separately for each reporting year 2012 and 2013. Do not report purchased power where none of the costs were recovered through an FAC. For each purchase where costs were flowed through an FAC, fill-in the non-shaded columns and either “Only energy charges” or “The total cost of the purchase of economic power” columns, whichever apply.</td>
<td>If during the 2014–2015 period, the Utility had any contracts or agreements for the purchase of either energy or capacity under which all or any portion of the purchase costs were passed through a fuel adjustment clause (FAC), for each purchase from a PURPA Qualifying Facility (QF) or Independent Power Producer (IPP) provide the information requested in the non-shaded columns of the table below. Provide the information separately for each reporting year 2014 and 2015. Do not report purchased power where none of the costs were recovered through an FAC. For each purchase where costs were flowed through an FAC, fill-in the non-shaded columns and either “Only energy charges” or “The total cost of the purchase of economic power” columns, whichever apply.</td>
</tr>
</tbody>
</table>

Question 4a
—Revise Question 4a columns as follows:

<table>
<thead>
<tr>
<th>Question 4a</th>
<th>Question 4a column changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>If emission allowance costs were incurred by the Utility in 2012 and/or 2013 and were recovered through a FAC, provide the following information. Dollar value of emission allowance cost passed through a FAC: 2012–2013.</td>
<td>If emission allowance costs were incurred by the Utility in 2014 and/or 2015 and were recovered through a FAC, provide the following information. Dollar value of emission allowance cost passed through a FAC: 2014–2015.</td>
</tr>
</tbody>
</table>

Question 5
—Revise the paragraph under Question 5 as follows:
Provide the information requested below regarding the Utility’s fuel procurement policies and practices in place during 2012 and/or 2013 for fuels whose costs were subject to 18 CFR 35.14. Note: Responses to this question may be filed as Privileged. To do so, skip this question now and answer it via the Fuel Procurement Policies and Practices Privileged Addendum provided. Otherwise, answer it here and your responses will be made public.

Provide the information requested below regarding the Utility’s fuel procurement policies and practices in place during 2014 and/or 2015 for fuels whose costs were subject to 18 CFR 35.14. Note: Responses to this question may be filed as Privileged. To do so, skip this question now and answer it via the Fuel Procurement Policies and Practices Privileged Addendum provided. Otherwise, answer it here and your responses will be made public.

Question 6
—Revise the paragraph under Question 6 as follows:

From

For each fuel supply contract, of longer than one year in duration, in force at any time during 2012 and/or 2013, where costs were subject to 18 CFR 35.14, (including informal agreements with associated companies), provide the requested information. Report the information individually for each contract, for each calendar year. [No response to any part of Question 6 for fuel oil no. 2 is necessary.] Report all fuels consumed for electric power generation and thermal energy associated with the production of electricity. Information for only coal, natural gas, and oil should be reported.

To

For each fuel supply contract, of longer than one year in duration, in force at any time during 2014 and/or 2015, where costs were subject to 18 CFR 35.14, (including informal agreements with associated companies), provide the requested information. Report the information individually for each contract, for each calendar year. [No response to any part of Question 6 for fuel oil no. 2 is necessary.] Report all fuels consumed for electric power generation and thermal energy associated with the production of electricity. Information for only coal, natural gas, and oil should be reported.

Question 7
—Revise the paragraph under Question 6 as follows:

From

For each fuel supply contract, including informal agreements with associated or affiliated companies in force at any time during 2012 or 2013 WHERE CONTRACT SHORTFALL COSTS WERE PASSED THROUGH an FAC subject to 18 CFR 35.14, provide for each contract separately the information requested below. Only report the information requested for shortfalls that occurred under your contracts during reporting years 2012 or 2013 and that are not under dispute i.e. parties agree there was indeed a shortfall.

To

For each fuel supply contract, including informal agreements with associated or affiliated companies in force at any time during 2014 or 2015 WHERE CONTRACT SHORTFALL COSTS WERE PASSED THROUGH an FAC subject to 18 CFR 35.14, provide for each contract separately the information requested below. Only report the information requested for shortfalls that occurred under your contracts during reporting years 2014 or 2015 and that are not under dispute i.e. parties agree there was indeed a shortfall.

Question 8
—Revise the paragraph under Question 8 as follows:

From

For each fuel supply contract that was bought-out or bought-down, including informal agreements with associated or affiliated companies in force at any time during 2012 or 2013 WHERE CONTRACT BUY-OUT AND/OR BUY-DOWN COSTS WERE PASSED THROUGH an FAC subject to 18 CFR 35.14, provide for each contract separately the information requested below. Only report the information requested for contract buy-downs and buy-outs that occurred under your contracts during reporting years 2012 or 2013 and that are not under dispute i.e. parties agree there was indeed a shortfall.

To

For each fuel supply contract that was bought-out or bought-down, including informal agreements with associated or affiliated companies in force at any time during 2014 or 2015 WHERE CONTRACT BUY-OUT AND/OR BUY-DOWN COSTS WERE PASSED THROUGH an FAC subject to 18 CFR 35.14, provide for each contract separately the information requested below. Only report the information requested for contract buy-downs and buy-outs that occurred under your contracts during reporting years 2014 or 2015 and that are not under dispute i.e. parties agree there was indeed a shortfall.

The attached form is for illustrative purposes only and does not include all the interactive features of the actual form.
**FERC FORM 580 (INTERROGATORY ON FUEL AND ENERGY PURCHASE PRACTICES)**

<table>
<thead>
<tr>
<th>Number of respondents</th>
<th>Annual number of responses per respondent</th>
<th>Total number of responses</th>
<th>Average burden &amp; cost per response</th>
<th>Total annual burden hours &amp; total annual cost</th>
<th>Annual per respondent ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents with FACs</td>
<td>37</td>
<td>0.5</td>
<td>18.5</td>
<td>$7,673.50</td>
<td>1,905.5 hrs.; $91,953.54</td>
</tr>
<tr>
<td>Respondents with AACs, but no FACs</td>
<td>10</td>
<td>0.5</td>
<td>5</td>
<td>$1,490</td>
<td>100 hrs.; $7,450</td>
</tr>
<tr>
<td>Respondents with no AACs nor FACs</td>
<td>35</td>
<td>0.5</td>
<td>17.5</td>
<td>$149</td>
<td>35 hrs.; $2,607.50</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>2,040.5 hrs.;</td>
<td>$152,017.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \text{Average per response } \times (1) \]

\[ \text{Total annual burden hours } \times (2) \]

\[ \text{Total annual cost } \times (3) \]

\[ \text{Annual per respondent } \times (4) \]

\[ \text{Total annual burden hours & total annual cost } \]

\[ \times (5) \]

**FERC Form No. 1, Annual Report of Major Electric Utilities, Licensees, and Others**

**OMB Control No.: 1902-0021**

**Abstract:** The FERC Form No. 1 (Form No.1) is a comprehensive financial and operating report submitted annually for electric rate regulation, market oversight analysis, and financial audits by Major electric utilities, licensees and others. Major is defined as having in each of the three previous calendar years, sales or transmission services that exceed one of the following: (1) One million megawatt hours of total annual sales; (2) 100 megawatt hours of annual sales for resale; (3) 500 megawatt hours of annual power exchanges delivered; or (4) 500 megawatt hours of annual wheeling for others (deliveries plus losses).14

The Form No.1 is designed to collect financial and operational information and is considered to be a non-confidential public use form. The Form No.1 includes a basic set of financial statements: Comparative Balance Sheet, Statement of Income, Statement of Retained Earnings, Statement of Cash Flows, Statements of Accumulated Comprehensive Income, Comprehensive Income, and Hedging Activities; and Notes to Financial Statements. Supporting schedules contain information on revenues and the related quantities of electric sales and electricity transmitted; account balances for all electric operation and maintenance expenses; selected plant cost data; and other statistical information.

**Type of Respondent:** Major electric utilities

**Estimate of Annual Burden:** The estimated annual burden and cost follow:

<table>
<thead>
<tr>
<th>Number of respondents</th>
<th>Annual number of responses per respondent</th>
<th>Total number of responses</th>
<th>Average burden hours &amp; cost per response</th>
<th>Total annual burden hours &amp; total annual cost</th>
<th>Cost per respondent ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>1</td>
<td>210</td>
<td>1,169 hrs.; $91,953.54</td>
<td>245,490 hrs.; $19,310,243.40</td>
<td>$91,953.54</td>
</tr>
</tbody>
</table>

13 The estimates for cost per response are derived using the 2016 FERC average salary plus benefits of $154,647/year (or $74.50/hour). Commission staff finds that the work done for this information collection is typically done by wage categories similar to those at FERC.

14 As detailed in 18 CFR 101 (Uniform System of Accounts Prescribed for Public Utilities) and 18 CFR 141.1.

15 The cost estimate (wages plus benefits) is based on figures from the Bureau of Labor Statistics National Industry-Specific Occupational and Employment Wage Estimates (May 2015 estimates at http://www.bls.gov/oes/current/naics2_22.htm) and is an average of the following:

- Management (code 11–0000) of $88.94/hour
- Business and financial operations occupations (code 13–0000) of $56.86/hour
- Legal (code 23–0000) of $128.94/hour
- Office and administrative support (code 43–0000) of $78.66/hour.

16 The estimated figures are based on the $88.94/hour wage rate for management and the $56.86/hour wage rate for business and financial operations occupations.

17 The Commission defines burden as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For further explanation of what is included in the information collection burden, reference 5 Code of Federal Regulations 1320.3.

18 The “Total Annual Burden Hours & Total Annual Cost” figures are all annual figures based on the biennial frequency assumption.

19 As detailed in 18 CFR 101 (Uniform System of Accounts Prescribed for Public Utilities) and 18 CFR 141.1.

20 The estimate (wages plus benefits) is based on figures from the Bureau of Labor Statistics National Industry-Specific Occupational and Employment Wage Estimates (May 2015 estimates at http://www.bls.gov/oes/current/naics2_22.htm) and is an average of the following: Management (code 11–0000) of $88.94/hour, business and financial operations occupations (code 13–0000) of $56.86/hour, legal (code 23–0000) of $128.94/hour, and office and administrative support (code 43–0000) of $78.66/hour.
FERC Form No. 1–F, Annual Report for Nonmajor Public Utilities and Licensees

OMB Control No.: 1902–0029

Abstract: The FERC Form No. 1–F (Form No. 1–F) is a financial and operating report submitted annually for electric rate regulation, market oversight analysis, and financial audits by Nonmajor electric utilities and licensees. Nonmajor is defined as having total annual sales of 10,000 megawatt-hours or more in the previous calendar year and not classified as Major.16

The Form No.1–F is designed to collect financial and operational information and is considered to be a non-confidential public use form. The Form No.1–F includes a basic set of financial statements: Comparative Balance Sheet, Statement of Retained Earnings, Statement of Cash Flows, Statement of Comprehensive Income and Hedging Activities, and Notes to Financial Statements. Supporting schedules contain supplementary information and include revenues and the related quantities of electric sales and electricity transmitted; account balances for all electric operation and maintenance expenses; selected plant cost data; and other statistical information.

Type of Respondent: Nonmajor electric utilities

Estimate of Annual Burden: The estimated annual burden and cost follow. (The estimated hourly cost used for the Form No. 1–F is $78.66 (wages plus benefits) and is described above, under the Form No. 1.):

| FORM NO. 1–F |
|-----------------|-----------------|--------------------|-----------------|-----------------|-----------------|
| Number of respondents | Annual number of responses per respondent | Total number of responses | Average burden hours & cost per response | Total annual burden hours & total annual cost | Cost per respondent ($) |
| (1) | (2) | (1) * (2) = (3) | (4) | (3) * (4) = (5) | (5) ÷ (1) |
| 5 | 1 | 5 | 123 hrs.; $9,675.18 | $48,375.90 | $9,675.18 |

FERC Form No. 3–Q, Quarterly Financial Report of Electric Utilities, Licensees, and Natural Gas Companies

OMB Control No.: 1902–0205

Abstract: The FERC Form No. 3–Q (Form No. 3–Q) is a quarterly financial and operating report for rate regulation, market oversight analysis, and financial audits which supplements the (a) Form Nos. 1 and 1–F for the electric industry, or the (b) Form No. 2 (Major Natural Gas Pipeline Annual Report; OMB Control No. 1902–0028) and Form No. 2–A (Nonmajor Natural Gas Pipeline Annual Report; OMB Control No. 1902–0030) (for the natural gas industry). The Form No. 3–Q is submitted for all Major and Nonmajor electric utilities and licensees; and natural gas companies17.

Form No. 3–Q includes a basic set of financial statements: Comparative Balance Sheet, Statement of Income and Statement of Retained Earnings, Statement of Cash Flows, Statement of Comprehensive Income and Hedging Activities and supporting schedules containing supplementary information. Electric respondents report revenues and the related quantities of electric sales and electricity transmitted; account balances for all electric operation and maintenance expenses; selected plant cost data; and other statistical information. Natural gas respondents include monthly and quarterly quantities of gas transported and associated revenues; storage, terminaling and processing services; natural gas customer accounts and details of service; and operational expenses, depreciation, depletion and amortization of gas plant.

Type of Respondent: Major and nonmajor electric utilities and natural gas pipelines.

Estimate of Annual Burden: The estimated annual burden and cost (as rounded) follow. (The estimated hourly cost used for the Form No. 3–Q is $78.66 (wages plus benefits) and is described above, under the Form No. 1.):

| FORM NO. 3–Q |
|-----------------|-----------------|--------------------|-----------------|-----------------|-----------------|
| Number of respondents | Annual number of responses per respondent | Total number of responses | Average burden hours & cost per response | Total annual burden hours & total annual cost | Annual cost per respondent ($) |
| (1) | (2) | (1) * (2) = (3) | (4) | (3) * (4) = (5) | (5) ÷ (1) |
| FERC 3–Q (electric) | 21318 | 3 | 639 | 168 hrs.; $13,214.88 | $107,352 hrs.; $39,644.64 |
| FERC 3–Q (gas) | 167 | 3 | 501 | 167 hrs.; $13,196.22 | $91,019 hrs.; $39,408.66 |
| Total for FERC 3–Q | | 1,140 | | |

16The estimated number of electric filers of the Form No. 3–Q is 213 (rather than the 215 total for the number of filers of the Form Nos. 1 and 1–F) due to standing waivers for two coops who do not file the Form No. 3–Q.

1718 CFR § 260.1(b) states that for natural gas companies, Major, as defined by the Natural Gas Act, pertains to a company whose combined gas transported or stored for a fee exceed 50 million Dth in each of the three previous calendar years. 18 CFR § 260.2(b) states that for natural gas companies, Nonmajor as defined by the Natural Gas Act, pertains to a company not meeting the filing threshold for Major, but having total gas sales or volume transactions exceeding 200,000 Dth in each of the three previous calendar years.
DEPARTMENT OF ENERGY
Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Kentucky Power to be effective 6/1/2016.
Filed Date: 5/31/16.
Accession Number: 20160531–5595.
Comments Due: 5 p.m. ET 6/13/16.
Docket Numbers: RP16–1000–000.
Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Narragansett to be effective 6/1/2016.
Filed Date: 5/31/16.
Accession Number: 20160531–5595.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Narragansett to be effective 6/1/2016.
Filed Date: 5/31/16.
Accession Number: 20160531–5595.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Kentucky Power to be effective 6/1/2016.
Filed Date: 5/31/16.
Accession Number: 20160531–5595.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Columbia Gulf Transmission, LLC.
Description: § 4(d) Rate Filing: GEH—Multi-Party Contracts to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5289.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: UGI Sunbury, LLC.
Description: Compliance Tariff Filing [of Pro Forma tariff sheets—CP15–525] and Request for Waiver of UGI Sunbury, LLC.
Filed Date: 5/31/16.
Accession Number: 20160531–5607.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Millennium Pipeline Company.
Description: § 4(d) Rate Filing: GEH—Multi-Party Contracts to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5293.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Central Kentucky Transmission Company.
Description: § 4(d) Rate Filing: GEH—Multi-Party Contracts to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5300.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Millennium Pipeline Company, LLC.
Description: § 4(d) Rate Filing: Operational Sales at Pool Filing to be effective 7/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5301.
Comments Due: 5 p.m. ET 6/13/16.
Docket Numbers: RP16–1012–000.
Applicants: Rockies Express Pipeline LLC.
Description: § 4(d) Rate Filing: Negotiated Capacity Release Agmt (QEP 37657) to Trans LA 46521 to be effective 6/2/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5124.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Gulf South Pipeline Company, LP.
Description: § 4(d) Rate Filing: Cap Rel Neg Rate Agmt (QEP 37657 to Trans LA 46521) to be effective 6/2/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5124.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Gulf South Pipeline Company, LP.
Description: § 4(d) Rate Filing: Negotiated Capacity Release Agmt—Columbia Gas Pipeline LLC.
Filed Date: 6/1/16.
Accession Number: 20160601–5227.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Equitrans, L.P. to be effective 6/1/2016.
Filed Date: 6/1/16.
Accession Number: 20160601–5227.
Comments Due: 5 p.m. ET 6/13/16.
Docket Numbers: RP16–1000–000.
Applicants: Columbia Gas Transmission, LLC.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Equitrans, L.P.
Filed Date: 6/1/16.
Accession Number: 20160601–5227.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Millennium Pipeline Company.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Columbia Gas Pipeline LLC.
Filed Date: 6/1/16.
Accession Number: 20160601–5227.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Millennium Pipeline Company.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Equitrans, L.P.
Filed Date: 6/1/16.
Accession Number: 20160601–5227.
Comments Due: 5 p.m. ET 6/13/16.
Applicants: Millennium Pipeline Company.
Description: § 4(d) Rate Filing: Negotiated & Non-Conforming Service Agreement—Equitrans, L.P.
ACTION: Notice of Final NPDES General Permit.

SUMMARY: The Director of the Caribbean Environmental Protection Division (CEPD), Environmental Protection Agency—Region 2 (EPA), is issuing this Notice of a Final National Pollutant Discharge Elimination System (NPDES) general permit, PRR040000/PRR04000F, for discharges from small municipal separate storm sewer systems (small MS4s) from urbanized areas within the Commonwealth of Puerto Rico to waters of the United States. This NPDES general permit establishes Notice of Intent (NOI) requirements, standards, prohibitions and management practices for discharges of storm water from small MS4s urbanized areas. A prior Notice of Availability of a general permit was issued by EPA in November 2006. EPA has substantially modified and reissuing the general permit pursuant to 40 CFR part 124. The EPA is issuing this permit for five years.

DATES: The general permit will become effective on July 1, 2016. This effective date is necessary to provide dischargers with the immediate opportunity to comply with Clean Water Act requirements in light of the expiration of the 2006 Small MS4 General Permit on November 5, 2011. In accordance with 40 CFR part 23, this permit shall be considered issued for the purpose of judicial review on July 1, 2016. Under section 509(b) of the Clean Water Act, judicial review of this general permit can be requested by filing a petition for review in the United States Court of Appeals within 120 days after the permit is considered issued. Under section 509(b)(2) of the Clean Water Act, the requirements in this permit may not be challenged in civil or criminal proceedings to enforce these requirements. In addition, this permit may not be challenged in other agency proceedings. Deadlines for submittal of notices of intent are provided in Section 1.2 of the 2016 Small MS4 General Permit. The 2016 Small MS4 General Permit also provides additional dates for compliance with the terms of these permits.

FOR FURTHER INFORMATION CONTACT: For further information, please call the Multimedia Permits and Compliance Branch, Caribbean Environmental Protection Division, US EPA Region 2, City View Plaza II, Suite 7000, 48 Road 165 Km 1.2, Guaynabo, Puerto Rico 00966–8069; telephone: 787–977–5870; or by email: bosques.sergio@epa.gov.

The general permit is based on an administrative record available at EPA—Region 2, Caribbean Environmental Protection Division, at the above mentioned address. A reasonable fee may be charged for copying requests. However, the general permit and fact sheet are available at EPA’s updated Web site posting of June 11, 2014: www.epa.gov/region02/water/permits.html.

SUPPLEMENTARY INFORMATION: EPA is issuing the NPDES general permit for the discharge of storm water from small MS4s to waters within the Commonwealth of Puerto Rico. The permit describes four distinct small MS4s. These are the Conventional cities and towns; Non-Conventional State, Federal and other publicly owned systems; Non-Conventional transportation systems; and Non-Conventional State flood control pump station.

The conditions in the general permit are established pursuant to Clean Water Act (CWA) Part 402(p)(3)(ii) to ensure that pollutant discharges from small municipal separate storm sewer systems (small MS4s) are reduced to the maximum extent practicable (MEP), protect water quality, and satisfy the appropriate water quality requirements of the CWA. The term small municipal separate storm sewer system is available in 40 CFR part 122.26(b). In addition, this term also includes systems similar to separate storm sewer systems and flood management conveyances in municipalities such as military bases, large hospital, highways, and flood control pump stations, and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. For example, an armory located in an urbanized area would not be considered a regulated small MS4.

The general permit sets forth the requirements for the small MS4 to “reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design and engineering methods” (See Section 402(p)(3)(B)(iii) of the CWA). MEP is the statutory standard that establishes the level of pollutant reductions that MS4 operators must achieve. EPA believes that implementation of best management practices (BMPs) designed to control storm water runoff from MS4 is generally the most appropriate approach for reducing pollutants to satisfy the MEP standard. Pursuant to 40 CFR 122.44(k), the permit contains BMPs, including a detailed nutrient and implementation of a comprehensive stormwater management program (SWMP) as the mechanism to achieve the required pollutant reductions.

Section 402(p)(3)(B)(iii) of CWA also authorizes EPA to include in an MS4 permit “such other provisions as [EPA] determine[s] appropriate for control of . . . pollutants.” This provision forms a basis for imposing water quality-based effluent limitations (WQBELs), consistent with the authority in Section 301(b)(1)(C) of the CWA. See Defendants of Wildlife v. Browner, 191 F.3d 1159, 1166–67 (9th Cir. 1999); 64 FR 68722, 68753, 68788 (Dec. 8, 1999).

Accordingly, the permit contains the water quality-based effluent limitations, expressed in terms of BMPs, which EPA has determined are necessary and appropriate under the CWA.

EPA issued a final general permit to address stormwater discharges from small MS4s on November 6, 2006. The 2006 general permit required small MS4s to develop and implement a SWMP designed to control pollutants to the maximum extent practicable and protect water quality. The 2016 general permit builds on the requirements of the previous general permit.

EPA views the MEP standard in the CWA as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness. Compliance with the requirements of this general permit will meet the MEP standard. The iterative process of MEP consists of a conventional and/or a non-conventional municipality developing a program consistent with specific permit requirements, implementing the program, evaluating the effectiveness of the BMPs included as part of the program, then revising those parts of the program that are not effective at controlling pollutants, then implementing the revisions, and evaluating again. The changes contained in the general permit reflect the iterative process of MEP. Accordingly, the general permit contains more specific tasks and details than the 2006 general permit.

EPA has explained in the general permit fact sheet a summary of permit conditions. The general permit and fact sheet are available at EPA’s Web site posting of June 11, 2014: www.epa.gov/region02/water/permits.html.

Other Legal Requirements
A. Endangered Species Act (ESA)

The provisions related to the ESA have been enhanced from those in the 2006 permit. EPA consulted with the appropriate Federal services (U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service
(NMFS)) in connection with the 2014 draft Small MS4 General Permit.

On July 8, 2014, EPA initiated an informal consultation with the USFWS and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) pursuant to Section 7 of the ESA, for the reissuance of a proposed 2014 NPDES Small MS4 General Permit. Based on the information, EPA believes that the issuance of the NPDES Small MS4 General Permit (PRR040000), may affect, but is not likely to adversely affect any threatened or endangered species.

On August 22, 2014, the USFWS indicated that the Antillean manatee may be affected. This species is found near shore waters around Puerto Rico where stormwater may be discharged. In addition, USFWS indicated they concur with EPA’s determination.

On August 28, 2014, NMFS had questions regarding EPA’s proposed 2014 NPDES Small MS4 General Permit. EPA ensured to provide a response to each of NMFS’s questions by October 1, 2014. A follow up conference call was held on October 7, 2014 to discuss the responses. On December 18, 2014, EPA held another conference call where the NMFS requested to see examples of EPA inspection reports performed to MS4s and Municipal Stormwater Management Program. EPA provided six (6) documents of coastal municipalities on December 19, 2014. EPA followed up with a letter dated July 24, 2015 seeking NMFS to concur on EPA’s determination that stormwater discharges from MS4s and discharge related activities are not likely to adversely affect any federal threatened or endangered listed species or designated habitat.

EPA’s decision to issue this general permit is consistent with section 7(d) because it does not forecast either the formulation by the NMFS, or the implementation by EPA, of any alternatives that might be determined in the consultation to be needed to comply with section 7(a)(2). If the completion of consultation results in new information warranting modifications or conditions to protect listed species or critical habitat, EPA will modify this permit under 40 CFR 122.62(a)(2) to incorporate those non-numerical effluent limits or conditions.

B. Executive Order 12866

EPA has determined that this general permit is not a “significant regulatory action” under the terms of Executive Order 12866 and is therefore not subject to OMB review.

C. Paperwork Reduction Act

The information collection requirements of this permit were previously approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and assigned OMB control number 2040–0004.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), 5 U.S.C. 601 et seq., requires that EPA prepare a regulatory flexibility analysis for rules subject to the requirements of 5 U.S.C. 553(b) that have a significant impact on a substantial number of small entities. However, general NPDES permits are not “rules” subject to the requirements of 5 U.S.C. 553(b) and are therefore not subject to the RFA.

E. Unfunded Mandates Reform Act

Section 201 of the Unfunded Mandates Reform Act (UMRA), Public Law 104–4, generally requires Federal agencies to assess the effects of their “regulatory actions” (defined to be both as “rules” subject to the RFA on Tribal, State, and local governments and the private sector. However, general NPDES permits are not “rules” subject to the requirements of 5 U.S.C. 553(b) and are therefore not subject to the RFA or the UMRA.

Authority: This action is being taken under the Clean Water Act, 33 U.S.C. 1251 et seq.

Dated: May 18, 2016,
José C. Font,
Director, Caribbean Environmental Protection Division.

[FR Doc. 2016–13993 Filed 6–10–16; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–9947–58–Region 3]

Delegation of Authority to the Commonwealth of Virginia To Implement and Enforce Additional or Revised National Emission Standards for Hazardous Air Pollutants Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of delegation of authority.

SUMMARY: On April 7, 2016, the Environmental Protection Agency (EPA) sent the Commonwealth of Virginia (Virginia) a letter acknowledging that Virginia’s delegation of authority to implement and enforce the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) had been updated, as provided for under previously approved delegation mechanisms. To inform regulated facilities and the public, EPA is making available a copy of EPA’s letter to Virginia through this notice.

DATES: On April 7, 2016, EPA sent Virginia a letter acknowledging that Virginia’s delegation of authority to implement and enforce federal NESHAPs had been updated.

ADDRESSES: Copies of documents pertaining to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103–2029. Copies of Virginia’s submittals are also available at the Virginia Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.

FOR FURTHER INFORMATION CONTACT: Ray Chalmers, (215) 814–2061, or by email at chalmers.ray@epa.gov.

SUPPLEMENTARY INFORMATION: On February 10, 2016, Virginia notified EPA that Virginia had updated its incorporation by reference of federal NESHAPs to include many such standards, as they were published in final form in the Code of Federal Regulations dated July 1, 2015. On April 7, 2016, EPA sent Virginia a letter acknowledging that Virginia has the authority to implement and enforce the NESHAPs as specified by Virginia in its notice to EPA, as provided for under previously approved automatic delegation mechanisms. All notifications, applications, reports and other correspondence required pursuant to the delegated NESHAPs must be submitted to both the US EPA Region III and to the Virginia Department of Environmental Quality, unless the delegated standard specifically provides that such submittals may be sent to EPA or a delegated State. In such cases, the submittals should be sent only to the Virginia Department of Environmental Quality. A copy of EPA’s letter to Virginia follows: “Michael G. Dowd, Director Air Division Virginia Department of Environmental Quality 629 East Main Street P.O. Box 1105 Richmond, Virginia 23218 Dear Mr. Dowd: The United States Environmental Protection Agency (EPA) has previously delegated to the Commonwealth of Virginia (Virginia) the authority to implement and enforce various federal

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National Emissions Standards for Hazardous Air Pollutants (NESHAPs) found at 40 CFR parts 61 and 63. In those actions, EPA also delegated to Virginia the authority to implement and enforce any future EPA NESHAPs on the condition that Virginia legally adopt the future standards, make only allowed wording changes, and provide specified notice to EPA.

In a letter dated February 10, 2016, Virginia informed EPA that Virginia had updated its incorporation by reference of federal NESHAPs to include many such updates that were published in final form in the Code of Federal Regulations dated July 1, 2015. Virginia explained that its intent in updating its incorporation by reference of the NESHAPs was to retain the authority to enforce all standards included in the revisions, as per the provisions of EPA’s previous delegation actions. Virginia committed to enforcing the federal standards in conformance with the terms of EPA’s previous delegations of authority. Virginia made only allowed wording changes.

EPA notes that Virginia provided a copy of the State’s regulatory action that states: “[t]he amendments update state regulations that incorporate by reference certain U.S. Environmental Protection Agency regulations to reflect the Code of Federal Regulations as published on July 1, 2015. No new NESHAPs or MACTs are being incorporated. The date of the Code of Federal Regulations book being incorporated by reference is being updated to the latest version.” Virginia’s regulatory action indicates that “[t]he revised regulations have an effective date of February 10, 2016.”

EPA also notes that Virginia provides in its regulatory action that “[t]he Environmental Protection Agency National Emission Standards for Source Categories (Maximum Achievable Control Technologies, or MACTs) as promulgated in 40 CFR part 63 and designated in 9VAC5–60–70 are, unless indicated otherwise, incorporated by reference into the regulations of the board as amended by the word or phrase substitutions given in 9VAC5–60–80. The complete text of the subparts in 9VAC5–60–70 incorporated herein by reference is contained in 40 CFR part 61. The 40 CFR section numbers appearing under each subpart in 9VAC5–60–70 identify the specific provisions of the subpart incorporated by reference. The specific version of the provision adopted by reference shall be that contained in the CFR 2015 in effect July 1, 2015.”

In response to Virginia’s submittal, EPA acknowledges that Virginia now has the authority, as provided for under the terms of EPA’s previous delegation actions, to implement and enforce the NESHAP standards which Virginia has adopted by reference in Virginia’s revised regulations 9 VAC 5–60–100 and 9 VAC 5–60–70, both effective on February 10, 2016.

Please note that on December 19, 2008, in Sierra Club v. EPA, the United States Court of Appeals for the District of Columbia Circuit vacated certain provisions of the General Provisions of 40 CFR part 63 relating to exemptions for startup, shutdown, and malfunction (SSM). On October 16, 2009, the Court issued a mandate vacating these SSM exemption provisions, which are found at 40 CFR 63.6(f)(1) and (h)(1).

Accordingly, EPA no longer allows sources the SSM exemption as provided for in the vacated provisions at 40 CFR 63.6(f)(1) and (h)(1), even though EPA has not yet formally removed these SSM exemption provisions from the General Provisions of 40 CFR part 63. Because Virginia incorporated 40 CFR part 63 by reference, Virginia should also no longer allow sources to use the former SSM exemption from the General Provisions of 40 CFR part 63 due to the Court’s ruling in Sierra Club vs. EPA.

EPA appreciates Virginia’s continuing NESHAP enforcement efforts, and also Virginia’s decision to take automatic delegation of more recent NESHAP by adopting them by reference. Sincerely,

Nikos Singelis, Acting Director Air Protection Division”

This notice acknowledges the update of Virginia’s delegation of authority to implement and enforce NESHAP and NSPS.

[Federal Register: Vol. 81, No. 113 / Monday, June 13, 2016 / Notices]

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission (FCC or Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collections.

Comments are requested concerning: Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission’s burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid OMB control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written PRA comments should be submitted on or before August 12, 2016. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email to PRA@fcc.gov and to Cathy.Williams@fcc.gov.
FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060–0599.

Title: Section 90.187, Trunking in the Bands Between 150–512 MHz; and Sections 90.425 and 90.647, Station Identification.

Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit, not-for-profit institutions, and state, local or tribal government.

Number of Respondents and Responses: 4,757 respondents and 4,757 responses.

Estimated Time per Response: 0.25–3 hours.

Frequency of Response: On occasion reporting requirement.

Obligation to Respond: Required to obtain or retain benefits. Statutory authority for this collection of information is contained in 47 U.S.C. 154(i), 309(j) and 332, as amended. Total Annual Burden: 5,242 hours.

Annual Cost Burden: No cost.

Privacy Act Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: There is no need for confidentiality with this collection of information.

Needs and Uses: The information contained in this collection sets forth frequency coordination requirements under Section 90.187, and station identification requirements under Section 90.647 and 90.425. The information requested in this collection is used by the Commission staff to enable the FCC to evaluate the accuracy of frequency coordination pursuant to its rule under 47 CFR 90.187, 90.425 and 90.647.

Federal Communications Commission.

Sheryl D. Todd,
Deputy Secretary, Office of the Secretary.

[Fed. Reg. 2016–13885 Filed 6–10–16; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 et seq.) (BHC Act), Regulation Y (12 CFR part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than July 7, 2016.

A. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309. Comments can also be sent electronically to Applications.Comments@atl.frb.org:

1. Saints Avenue Bancshares, Inc., St. Charles, Missouri; to become a bank holding company by acquiring 43.90 percent of New London Bancshares, Inc., and thereby indirectly acquire RCSBank, both in New London, Missouri.

Board of Governors of the Federal Reserve System, June 8, 2016.

Michele Taylor Fennell,
Assistant Secretary of the Board.

[Fed. Reg. 2016–13885 Filed 6–10–16; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notices listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)(ii)) and § 225.41 of the Board’s Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(ii)). The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than June 27, 2016.
A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60600–1414:

1. Ruth A. Kehl S-T Declaration of Trust, Ruth A. Kehl, Trustee, both of Dubuque, Iowa; to join the previously approved Kehl Family Control Group and retain 25 percent or more of the voting shares of Savannah-Thomson Investment, Inc., Savannah, Illinois, and thereby indirectly retain voting shares of Savannah-Thomson State Bank, Thomson, Illinois.

B. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309. Comments can also be sent electronically to Applications.Comments@atl.frb.org:

1. Edgar Ray Smith III, William K. Hood, Savannah K. Conti, William K. Conti, Amite Mini Storage, LLC, Hood Investments, LLC, and WKH Management, Inc., each of Amite, Louisiana; Sophia M. Pray and Hudson M. Pray, both of Hammond, Louisiana; and Big 4 Investments, LLC, Roseland, Louisiana; to acquire 10 percent or more of the shares of First Guaranty Bancshares, Inc., and thereby indirectly acquire voting shares of First Guaranty Bank, both in Hammond, Louisiana.


Michele Taylor Fennell, Assistant Secretary of the Board.

[F.R. Doc. 2016–13819 Filed 6–10–16; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Savings and Loan Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Home Owners’ Loan Act (12 U.S.C. 1461 et seq.) (HOLA), Regulation LL (12 CFR part 238), and Regulation MM (12 CFR part 239), and all other applicable statutes and regulations to become a savings and loan holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a savings association and nonbanking companies owned by the savings and loan holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The application also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the HOLA (12 U.S.C. 1467a(e)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 10(c)(4)(B) of the HOLA (12 U.S.C. 1467a(c)(4)(B)). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than July 7, 2016.

A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60600–1414:

1. Ottawa Savings Bancorp, MHC, Ottawa, Illinois; to convert to stock form and merge with and into Ottawa Savings Bancorp, Inc., Ottawa, Illinois. In connection with this application, Ottawa Savings Bancorp, Inc. will be merged into Ottawa Bancorp, Inc., which has applied to become a savings and loan holding company by acquiring 100 percent of the voting shares of Ottawa Savings Bank, Ottawa, Illinois.

B. Federal Reserve Bank of Dallas (Robert L. Triplett III, Senior Vice President) 2200 North Pearl Street, Dallas, Texas 75201–2272:

1. Bancorp 34, Inc.; to become a savings and loan holding company by acquiring 100 percent of Bank 34, both in Alamogordo, New Mexico. Upon the conversion of AF Mutual Holding Company to stock form, AF Mutual Holding Company and Alamogordo Financial Corp, both in Alamogordo, New Mexico, will cease to exist, and Bank 34 will become a wholly-owned subsidiary of Bancorp 34, Inc.

Board of Governors of the Federal Reserve System, June 8, 2016.

Michele Taylor Fennell, Assistant Secretary of the Board.

[F.R. Doc. 2016–13884 Filed 6–10–16; 8:45 am]

BILLING CODE 6210–01–P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000–0045; Docket 2016–0053; Sequence 19]

Submission for OMB Review; Bid Guarantees, Performance and Payment Bonds, and Alternative Payment Protections

AGENCY: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Notice of request for comment regarding an extension to an existing OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act, the Regulatory Secretariat Division will be submitting to the Office of Management and Budget (OMB) a request to review and approve an extension of a previously approved information collection requirement concerning bid guarantees, performance and payment bonds, and alternative payment protections.

DATES: Submit comments on or before August 12, 2016.

ADDRESSES: Submit comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for GSA, Room 10236, NEOB, Washington, DC 20503. Additionally submit a copy to GSA by mail: General Services Administration, Regulatory Secretariat Division, MVCB, 1800 F Street, NW., Washington, DC 20405; ATTN: Ms. Flowers/IC 9000–0045, Bid Guarantees.
Performance, and Payment Bonds, and Alternative Payment Protections.

**Instructions:** Please submit comments only and cite Information Collection 9000–0045, Bid Guarantees, Performance, and Payment Bonds, and Alternative Payment Protections, in all correspondence related to this collection. Comments received generally will be posted without change to http://www.regulations.gov, including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check www.regulations.gov, approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

**FOR FURTHER INFORMATION CONTACT:** Ms. Kathlyn Hopkins, Procurement Analyst, Contract Policy Division, at 202–969–7226 or email kathlyn.hopkins@gsa.gov.

**SUPPLEMENTARY INFORMATION:**

**A. Purpose**

FAR Subparts 28.1 and 28.2; FAR clauses at 52.228–1, 52.228–2, 52.228–13, 52.228–15, 52.228–16; and associated FAR standard forms implement the statutory requirements of the Miller Act (40 U.S.C. 3131 et seq.), which requires performance and payment bonds for any construction contract exceeding $150,000, unless it is impracticable to require bonds for work performed in a foreign country, or it is otherwise authorized by law. In addition, the note to 40 U.S.C. 3132, entitled “Alternatives to Payment Bonds Provided by the Federal Acquisition Regulation,” is implemented in the FAR, which requires alternative payment protection for construction contracts that exceed $30,000 but do not exceed $150,000.

Although not required by statute, under certain circumstances the FAR permits the Government to require bonds on other than construction contracts. In addition to the contract clauses at FAR 52.228–1, 52.228–2, 52.228–13, 52.228–15, 52.228–16, this information collection covers the following FAR standard forms (SF) as prescribed at FAR Subparts 28.1 and 28.2: SF 25, Performance Bond; SF 25A, Payment Bond; SF 273, Reinsurance Agreement for a Miller Act Performance Bond; SF 274, Reinsurance Agreement for a Bonds Statute Payment Bond; SF 24, Bid Bond; SF 25B, Continuation Sheet (For Standard Forms 24, 25, and 25A); Standard Form 34, Annual Bid Bond; Standard Form 275, Reinsurance Agreement in Favor of the United States; Standard Form 1416, Payment Bond for Other Than Construction Contracts; Standard Form 1418, Performance Bond for Other Than Construction Contracts; and Standard Form 35, Annual Performance Bond.

The information collected under this clearance provides the Government with a form of security that the contractor will not withdraw a bid or assures that the contractor will perform its obligations under a contract. A notice published in the Federal Register at 81 FR 15304 on March 22, 2016. No comments were received.

**B. Annual Reporting Burden**

**Respondents:** 974.

**Responses per Respondent:** 1.

**Total Responses:** 974.

**Hours per Response:** 1.

**Total Burden Hours:** 974.

**C. Public Comments**

Public Comments are particularly invited on: Whether this collection of information is necessary for the proper performance of functions of the FAR; and whether it will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

**Obtaining Copies of Proposals:** Requesters may obtain a copy of the information collection documents from the General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405, telephone 202–501–4755.

**Please cite OMB Control No. 9000–0045, Bid Guarantees, Performance, and Payment Bonds, and Alternative Payment Protections, in all correspondence.**

**Dated:** June 8, 2016.

Lorin S. Curit,

Director, Federal Acquisition Policy Division,
Office of Governmentwide Acquisition Policy,
Office of Acquisition Policy, Office of Governmentwide Policy.

[FR Doc. 2016–13860 Filed 6–10–16; 8:45 am]

**BILLING CODE 6820–EP–P**

DEPARTMENT OF HEALTH AND HUMAN SERVICES

**Agency for Healthcare Research and Quality**

**Opportunity To Co-Sponsor Two AHRQ Research Conferences**

**AGENCY:** Agency for Healthcare Research and Quality (AHRQ), HHS.

**ACTION:** Notice of opportunity to co-sponsor AHRQ conferences.

**SUMMARY:** AHRQ announces the opportunity for non-Federal public and private-sector entities to co-sponsor two AHRQ research conferences in the DC area: One in the fall of 2017 and one in the fall of 2019. Potential co-sponsors must have a demonstrated interest and experience in health services research, implementation, and evaluation. Potential co-sponsors must also be capable of managing the day-to-day operations associated with the conference and be willing to participate substantively in the co-sponsored activity.

**DATES:** To receive consideration for this opportunity, a proposal to participate as a co-sponsor must be received by AHRQ by 5 p.m. EDT no later than 30 days after the date of publication at the address listed below. Requests may also be emailed to Jaime.zimmerman@ahrq.hhs.gov. Emails should be received no later than 30 days after publication.

**ADDRESSES:** Requests for co-sponsorship should be sent to Ms. Jaime Zimmerman, Agency for Healthcare Research and Quality, 5600 Fishers Lane, Mail Stop 06E37A, Rockville, MD 20857. Requests may also be emailed to Jaime.zimmerman@ahrq.hhs.gov. Please cite OMB Control No. 9000–0045, Bid Guarantees, Performance, and Payment Bonds, and Alternative Payment Protections, in all correspondence.

**Dated:** June 8, 2016.

Lorin S. Curit,

Director, Federal Acquisition Policy Division,
Office of Governmentwide Acquisition Policy,
Office of Acquisition Policy, Office of Governmentwide Policy.

[FR Doc. 2016–13860 Filed 6–10–16; 8:45 am]

**BILLING CODE 6820–EP–P**

**Opportunity To Co-Sponsor Two AHRQ Research Conferences**

**AGENCY:** Agency for Healthcare Research and Quality (AHRQ), HHS.

**ACTION:** Notice of opportunity to co-sponsor AHRQ conferences.

**SUMMARY:** AHRQ announces the opportunity for non-Federal public and private-sector entities to co-sponsor two AHRQ research conferences in the DC area: One in the fall of 2017 and one in the fall of 2019. Potential co-sponsors must have a demonstrated interest and experience in health services research, implementation, and evaluation. Potential co-sponsors must also be capable of managing the day-to-day operations associated with the conference and be willing to participate substantively in the co-sponsored activity.

**DATES:** To receive consideration for this opportunity, a proposal to participate as a co-sponsor must be received by AHRQ by 5 p.m. EDT no later than 30 days after the date of publication at the address listed below. Requests may also be emailed to Jaime.zimmerman@ahrq.hhs.gov. Emails should be received no later than 30 days after publication.

**ADDRESSES:** Requests for co-sponsorship should be sent to Ms. Jaime Zimmerman, Agency for Healthcare Research and Quality, 5600 Fishers Lane, Mail Stop 06E37A, Rockville, MD 20857; (301) 427–1456; Jaime.zimmerman@ahrq.hhs.gov.

**SUPPLEMENTARY INFORMATION:**

**Description**

AHRQ was originally created as the Agency for Health Care Policy and Research on December 19, 1989, under the Omnibus Budget Reconciliation Act of 1989, as a Public Health Service Agency in the U.S. Department of Health and Human Services (HHS). The agency was reauthorized on December 6, 1999, by the Healthcare Research and
Quality Act of 1999 and re-named the Agency for Healthcare Research and Quality (AHRQ). AHRQ’s mission is to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within HHS and other partners to make sure that the evidence is understood and used.

Three areas in which AHRQ makes a difference:
- AHRQ invests in research and evidence to understand how to make health care safer and improve quality.
- AHRQ creates materials to teach and train health care systems and professionals how to catalyze improvements in care.
- AHRQ generates measures and data used to track and improve performance and to evaluate the progress of the U.S. health system.

The purpose of the conference, consistent with AHRQ’s mission, is to bring together grantees, contractors, and others who produce AHRQ-supported research and products with stakeholders who can use them to achieve measurable improvements in the health care that patients receive. The conference provides additional opportunities to ensure that AHRQ-supported research delivers anticipated results. More specifically, the conference’s goal is to share best practices based on AHRQ-supported research, and to demonstrate how these research findings and best practices provide solutions for the challenges facing today’s health care system. The conference also offers time for interaction among grantees, contractors, and users who can implement research-based solutions to improve care.

The co-sponsors will assist with conference and agenda development, strategic messaging, coordination, financial management, and meeting logistics in conjunction with AHRQ staff. The co-sponsors can charge registration fees to recover their share of the event’s costs; however, registration fees may not be set at an amount higher than necessary to recover related conference expenses.

Eligibility for Co-Sponsorship

To be eligible, a potential co-sponsor shall: (1) Have a demonstrated understanding, commitment, and experience in conducting and/or sponsoring health services research, especially as it relates to one or more of AHRQ’s priority areas; (2) be knowledgeable about strategies for disseminating and implementing research findings, products, and tools and fostering changes in practice and health care policy; (3) have a track record in using a variety of methods for evaluating research impact; (4) participate substantively in the co-sponsored activity, not just provide funding or logistical support; and (5) have an organizational mission that is consistent with AHRQ and HHS.

The selected co-sponsoring organization shall furnish the necessary personnel, materials, services, and facilities to administer its responsibility for the conference. These duties will be outlined in a cosponsorship agreement with AHRQ that will set forth the details of the cosponsored activity, including the requirements that any fees collected by the co-sponsor shall be limited to the amount necessary to cover the co-sponsor’s related conference expenses.

Co-Sponsorship Proposal

Each co-sponsorship proposal shall contain a description of: (1) The entity or organization’s background and history, (2) its ability to satisfy the cosponsorship criteria detailed above, and (3) its proposed involvement in the co-sponsored activity.

Evaluation Criteria

After engaging in exploratory discussions with potential co-sponsors that respond to this notice, representatives of AHRQ will select the co-sponsor or co-sponsors using the following evaluation criteria:
- Qualifications and capability to fulfill cosponsorship responsibilities;
- Creativity related to enhancing the conference, including options for interactive sessions and ideas for improving the event based on the 2015 conference offerings;
- Potential for reaching and generating attendees from among key stakeholders, including Federal, State and local policymakers, health care providers, consumers and patients, purchasers and payers, and other health officials and underserved/special populations;
- Experience administering conferences;
- Past or current work specific to health services research;
- Personnel names, professional qualifications, and specific expertise with conference planning;
- Availability and description of facilities needed to participate in and support the conference planning process, including office space, information technology, and telecommunication resources;
- Description of financial management expertise, including demonstration of experience in developing a budget and collecting and managing monies from organizations and individuals; and
- Proposed plan for managing a conference with AHRQ.

Summary:

The Centers for Disease Control and Prevention (CDC), as part of its continuing efforts to reduce public burden and maximize the utility of government information, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995. This notice invites comment on a proposed information collection entitled “TRAUMATIC BRAIN INJURY (TBI) SURVEILLANCE SYSTEM.” CDC will use the information collected to determine how many children and adults experience a traumatic brain injury (TBI) each year in the United States, and to collect information about the circumstances that identifies groups most at risk for TBI.

Dates: Written comments must be received on or before August 12, 2016.

Addresses: You may submit comments, identified by Docket No. CDC–2016–0049 by any of the following methods:
- Federal eRulemaking Portal: Regulations.gov. Follow the instructions for submitting comments.
- Mail: Leroy A. Richardson, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS–D74, Atlanta, Georgia 30329.

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to Regulations.gov, including any personal information provided. For
access to the docket to read background documents or comments received, go to Regulations.gov.

Please note: All public comment should be submitted through the Federal eRulemaking portal (Regulations.gov) or by U.S. mail to the address listed above.

FOR FURTHER INFORMATION CONTACT: To request more information on the proposed project or to obtain a copy of the information collection plan and instruments, contact the Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS–D74, Atlanta, Georgia 30329; phone: 404–639–7570; Email: omb@cdc.gov.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3520), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. In addition, the PRA also requires Federal agencies to provide a 60-day notice in the Federal Register concerning each proposed collection of information, including each new proposed collection, each proposed extension of existing collection of information, and each reinstatement of previously approved information collection before submitting the collection to OMB for approval. To comply with this requirement, we are publishing this notice of a proposed data collection as described below.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency’s estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information; and to transmit or otherwise disclose the information.

Proposed Project
TRAUMATIC BRAIN INJURY (TBI) SURVEILLANCE SYSTEM—New—National Center for Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention (CDC).

Background and Brief Description
The CDC requests a three-year OMB approval for a new Traumatic Brain Injury (TBI) Surveillance System data collection. TBI is a significant public health concern in the United States, contributing to an estimated 2.2 million Emergency Department (ED) visits, 280,000 hospitalizations, and 50,000 deaths in 2010. These numbers, however, underestimate the true public health and economic burden of TBI in the U.S. because they are based on healthcare administrative data that only capture information on the number of ED visits, hospitalizations, and deaths identified as TBI-related.

A surveillance system will accurately determine how many children and adults experience a TBI each year in the United States, and will collect information about the circumstances that identifies groups most at risk for TBI. By administering the surveillance system over time, the surveillance system can monitor trends and allow for an understanding of whether TBIs are increasing or decreasing, and whether prevention efforts are effective.

Data will be collected through household survey conducted as a random digit dial telephone survey utilizing both landline and cellphones; adult respondents will be asked about their own TBI history while adult respondents with children 5–17 years of age will serve as proxies and answer questions about their children’s TBI history.

Information collected will produce nationally representative incidence estimates of all TBI, with a particular focus on the incidence of sports- and recreation-related TBI (SRR–TBI) among youth 5–21 years of age. Another use of the data is to produce nationally-representative estimates of TBI-related disability.

Participation in the information collection is voluntary. The survey will be conducted among English or Spanish speaking participants living in the United States. The estimated annual burden hours are 3,979. There are no costs to respondents other than their time.

<table>
<thead>
<tr>
<th>Type of respondents</th>
<th>Form name</th>
<th>Number of respondents</th>
<th>Number of responses per respondent</th>
<th>Average burden per response (in hours)</th>
<th>Total burden (in hours)</th>
</tr>
</thead>
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<tr>
<td>Adults 18 or older</td>
<td>Adult Eligibility Screener</td>
<td>2,611</td>
<td>1</td>
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<td>Adult Screener</td>
<td>14,164</td>
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<td>Adult Survey</td>
<td>2,500</td>
<td>1</td>
<td>18/60</td>
<td>750</td>
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<tr>
<td>Adolescent 12 to 17 years of age</td>
<td>Adolescent Screener</td>
<td>2,058</td>
<td>1</td>
<td>5/60</td>
<td>172</td>
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<td></td>
<td>Adolescent Survey</td>
<td>686</td>
<td>1</td>
<td>12/60</td>
<td>137</td>
</tr>
<tr>
<td>Total Annual Burden Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,979</td>
</tr>
</tbody>
</table>
LEOROY A. RICHARDSON,
Chief Information Collection Review Office,
Office of Scientific Integrity, Office of the Associate Director for Science, Office of the Director, Centers for Disease Control and Prevention.

[FR Doc. 2016–13848 Filed 6–10–16; 8:45 am] BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30Day—16–0974]

Agency Forms Undergoing Paperwork Reduction Act Review

As part of a Federal Government-wide effort to streamline the process to seek feedback from the public on service delivery, the Centers for Disease Control and Prevention (CDC) has submitted a Generic Information Collection Request (Generic ICR): “Generic Clearance for the Collection of Qualitative Feedback on Agency Service Delivery” to the Office of Management and Budget (OMB) for review and approval under the Paperwork Reduction Act (PRA) (44 U.S.C. 3501 et seq.). The notice for the proposed information collection is published to obtain comments from the public and affected agencies.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address any of the following: (a) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) Evaluate the accuracy of the agencies estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) Enhance the quality, utility, and clarity of the information to be collected; (d) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses; and (e) Assess information collection costs.

To request additional information on the proposed project or to obtain a copy of the information collection plan and instruments, call (404) 639–7570 or send an email to omb@cdc.gov. Written comments and/or suggestions regarding the items contained in this notice should be directed to the Attention: CDC Desk Officer, Office of Management and Budget, Washington, DC 20503 or by fax to (202) 395–5806. Written comments should be received within 30 days of this notice.

Proposed Project

Generic Clearance for the Collection of Qualitative Feedback on Agency Service Delivery (OMB Control No. 0920–0974, Expiration Date June 30, 2016)—Revision—Center for Surveillance, Epidemiology, and Laboratory Sciences, Centers for Disease Control and Prevention (CDC).

Background and Brief Description

This revision in the information collection activity is being requested primarily to reflect a simultaneous increase in (1) the number of programs in the Center due to a reorganization in 2014, (2) interest in electronic survey methods, and (3) need for customer input to and satisfaction with program Web sites and materials. The activity will garner increased qualitative customer and stakeholder feedback in an efficient, timely manner, in accordance with the Administration’s commitment to improving service delivery. By qualitative feedback we mean information that provides useful insights on perceptions and opinions, but are not statistical surveys that yield quantitative results that can be generalized to the population of study.

This feedback will provide insights into customer or stakeholder perceptions, experiences and expectations, provide an early warning of issues with service, or focus attention on areas where communication, training or changes in operations might improve delivery of products or services. These collections will allow for ongoing, collaborative and actionable communications between the Agency and its customers and stakeholders. It will also allow feedback to contribute directly to the improvement of program management.

Feedback collected under this generic clearance will provide useful information, but it will not yield data that can be generalized to the overall population. This type of generic clearance for qualitative information will not be used for quantitative information collections that are designed to yield reliably actionable results, such as monitoring trends over time or documenting program performance. Such data uses require more rigorous designs that address: The target population to which generalizations will be made, the sampling frame, the sample design (including stratification and clustering), the precision requirements or power calculations that justify the proposed sample size, the expected response rate, methods for assessing potential nonresponse bias, the protocols for data collection, and any testing procedures that were or will be undertaken prior fielding the study. Depending on the degree of influence the results are likely to have, such collections may still be eligible for submission for other generic mechanisms that are designed to yield quantitative results.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget control number. There is no cost to respondents other than their time. The estimated annualized burden hours for this data collection activity are 16,957.

### Estimated Annualized Burden Hours

<table>
<thead>
<tr>
<th>Type of respondents</th>
<th>Form name</th>
<th>Number of respondents</th>
<th>Number of responses per respondent</th>
<th>Average burden per response (in hours)</th>
</tr>
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<tbody>
<tr>
<td>Users of CSELS products</td>
<td>Online survey</td>
<td>5,665</td>
<td>11</td>
<td>16/60</td>
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<tr>
<td>Users of CSELS products</td>
<td>Individual interview</td>
<td>15</td>
<td>7</td>
<td>55/60</td>
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<tr>
<td>Users of CSELS products</td>
<td>Focus group</td>
<td>54</td>
<td>3</td>
<td>90/60</td>
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</table>
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention (CDC)

Requirements and Registration for Healthcare Associated Venous Thromboembolism Prevention Challenge; Amendment of Notice


AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

AWARD APPROVING OFFICIAL: Thomas R. Frieden, MD, MPH, Director, Centers for Disease Control and Prevention, and Administrator, Agency for Toxic Substances and Disease Registry.

ACTION: Notice.

SUMMARY: The Centers for Disease Control and Prevention (CDC) located within the Department of Health and Human Services (HHS) announces an amendment to its notice entitled, Announcement of Requirements and Registration for Healthcare Associated Venous Thromboembolism Prevention Challenge. This amendment is being made to reflect an increase in the number of Champions and change the maximum total prize disbursement. There are no other changes to the September 22, 2015 notice.

FOR FURTHER INFORMATION CONTACT: Michele Beckman, Division of Blood Disorders, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention, 1600 Clifton Road NE., Mailstop E-64, Atlanta, GA 30329, Telephone: 404–498–6474, Fax: 404–498–6799, Attention: HA–VTE Prevention Challenge, Email: havtechallenge@cdc.gov.

SUPPLEMENTARY INFORMATION:

Subject of Challenge Competition: On September 22, 2015 CDC announced the Requirements and Registration for Healthcare Associated Venous Thromboembolism Prevention Challenge (80 FR 57187). This notice announces an increase in the number of Champions, from 7 to 8. The Champions were selected from the highest scoring U.S. hospitals, multi-hospital systems, hospital networks, and managed care organizations. Champions were recognized as HA–VTE Prevention Champions and will receive a cash award of $10,000. A maximum of $80,000 will now be awarded in this challenge, an increase of $10,000. Additional honorable mention awards were also made to deserving entries. Federal and international winners received non-monetary recognition but no prize.

Dated: June 7, 2016.

Sandra Cashman,
Executive Secretary, Centers for Disease Control and Prevention.

[FR Doc. 2016–13850 Filed 6–10–16; 8:45 am]
BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30-Day–16–16CA]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The notice for the proposed information collection is published to obtain comments from the public and affected agencies.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address any of the following: (a) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) Enhance the quality, utility, and clarity of the information to be collected; (d) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses; and (e) Assess information collection costs.

To request additional information on the proposed project or to obtain a copy of the information collection plan and instruments, call (404) 639–7570 or send an email to omb@cdc.gov. Written comments and/or suggestions regarding the items contained in this notice should be directed to the Attention: CDC Desk Officer, Office of Management and Budget, Washington, DC 20503 or by fax to (202) 395–5806. Written comments should be received within 30 days of this notice.

Proposed Project

Update seat belt fit recommendation for children—New—National Center for Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

The Centers for Disease Control and Prevention (CDC) is seeking OMB approval to conduct a new information collection for a study entitled, “Update Seat Belt Fit Recommendation for Children,” over a period of three years. CDC seeks to measure how seat belts fit children in vehicles with and without booster seats. The scientific basis for the current height recommendation for when children can transition from using a booster seat to just a seat belt is from a 1993 study that is outdated (Durbin et al., 2011; Reed et al., 2013). The goal of the new collection is to use the latest technology among the largest sample of children to date to help inform when children can safely transition from using a booster seat with a seat belt to using only a seat belt.

Findings from this data collection will inform CDC’s child passenger safety recommendation regarding when children can safely transition from using a booster seat with the seat belt to using only the seat belt. This study will also provide information on ways to further reduce motor vehicle-related injuries and deaths among children.

Prospective study participants will be children aged 6–12 years old in the greater District of Columbia (DC) area. Parents of prospective study participants will answer a series of screening questions to determine eligibility. Children who meet the screening criteria and are willing to participate will complete an in-person measurement session. Data will be analyzed using descriptive statistics, mean, standard deviation, and logistic regression. Selected findings will eventually be published in a peer-reviewed journal. The estimated annual burden hours are 466. There are no costs to respondents other than their time.
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services


Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Centers for Medicare & Medicaid Services, HHS.

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing an opportunity for the public to comment on CMS’ intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (the PRA), federal agencies are required to publish notice in the Federal Register concerning each proposed collection of information (including each proposed extension or reinstatement of an existing collection of information) and to allow 60 days for public comment on the proposed action. Interested persons are invited to send comments regarding our burden estimates or any other aspect of this collection of information, including any of the following subjects: (1) The necessity and utility of the proposed information collection for the proper performance of the agency’s functions; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments must be received by August 9, 2016.

ADDRESSES: When commenting, please reference the document identifier or OMB control number. To be assured consideration, comments and recommendations must be submitted in any one of the following ways:

1. Electronically. You may send your comments electronically to http://www.regulations.gov. Follow the instructions for “Comment or Submission” or “More Search Options” to find the information collection document(s) that are accepting comments.

2. By regular mail. You may mail written comments to the following address: CMS, Office of Strategic Operations and Regulatory Affairs, Division of Regulations Development, Attention: Document Identifier/OMB Control Number____, Room C4–26–05, 7500 Security Boulevard, Baltimore, Maryland 21244–1850.

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, you may make your request using one of following:


2. Email your request, including your address, phone number, OMB number, and CMS document identifier, to Paperwork@cms.hhs.gov.

3. Call the Reports Clearance Office at (410) 786–1326.

FOR FURTHER INFORMATION CONTACT: Reports Clearance Office at (410) 786–1326.

SUPPLEMENTARY INFORMATION:

Contents

This notice sets out a summary of the use and burden associated with the following information collections. More detailed information can be found in each collection’s supporting statement and associated materials (see ADDRESSES).

CMS–R–142 Examination and Treatment for Emergency Medical Conditions and Women in Labor;

CMS–588 Electronic Funds Transfer Authorization Agreement

Under the PRA (44 U.S.C. 3501–3520), federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. The term “collection of information” is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA requires federal agencies to publish a 60-day notice in the Federal Register concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice.

1. Type of Information Collection Request: Extension of a currently approved collection; Title of Information Collection: Examination and Treatment for Emergency Medical Conditions and Women in Labor; Use: In accordance with to regulation sections 488.18, 489.20 and 489.24, during Medicare surveys of hospitals and State agencies CMS will review hospital records for lists of on-call physicians, and will review and obtain the information which must be recorded on hospital medical records for individuals with emergency medical conditions and women in labor, and the emergency department reporting information Medicare participating hospitals and Medicare State survey agencies must pass on to CMS. Additionally, CMS will use the QIO Report assessing whether an individual had an emergency condition and whether the individual was stabilized to determine whether to impose a CMP or physician exclusion sanctions. Without such information, CMS will be unable to make the hospital emergency services compliance determinations that Congress expects CMS to make under sections 1154, 1866 and 1867 of the Act. Form Number: CMS–R–142 (OMB control number: 0938–0667); Frequency: Occasionally; Affected Public: Private Sector; Number of Respondents: 6,149; Total Annual Responses: 6,149; Total Annual Hours: 1. (For policy questions regarding this collection contact Renate Dombrowski at 410–786–4645.)

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### Table: Estimated Annualized Burden Hours

<table>
<thead>
<tr>
<th>Type of respondent</th>
<th>Form name</th>
<th>Number of respondents</th>
<th>Number of responses per respondent</th>
<th>Average burden per response (in hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent/guardian of children aged 6–12 years</td>
<td>Screener Script Guide</td>
<td>667</td>
<td>1</td>
<td>10/60</td>
</tr>
<tr>
<td>Child participants aged 6–12 years</td>
<td>Seat Belt Fit Measurements</td>
<td>124</td>
<td>1</td>
<td>2.5</td>
</tr>
</tbody>
</table>
2. Type of Information Collection Request: Revision of a currently approved collection; Title of Information Collection: Electronic Funds Transfer Authorization Agreement; Use: The information is needed to allow providers to receive funds electronically in their bank accounts. Form Number: CMS–588 (OMB control number: 0938–0626); Frequency: On occasion; Affected Public: Business or other for-profit, Not-for-profit institutions; Number of Respondents: 45,807; Total Annual Responses: 45,807; Total Annual Hours: 22,543. (For policy questions regarding this collection contact Kimberly McPhillips at 410–786–4645.)

Dated: June 7, 2016.

William N. Parham, III,
Director, Paperwork Reduction Staff, Office of Strategic Operations and Regulatory Affairs.

[FR Doc. 2016–13800 Filed 6–10–16; 8:45 am]
BILLING CODE 4120–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services


Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Centers for Medicare & Medicaid Services, HHS.

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing an opportunity for the public to comment on CMS’ intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (the PRA), federal agencies are required to publish notice in the Federal Register concerning each proposed collection of information (including each proposed extension or reinstatement of an existing collection of information) and to allow 60 days for public comment on the proposed action. Interested persons are invited to send comments regarding our burden estimates or any other aspect of this collection of information, including any of the following subjects: (1) The necessity and utility of the proposed information collection for the proper performance of the agency’s functions; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments must be received by August 12, 2016.

ADDRESSES: When commenting, please reference the document identifier or OMB control number. To be assured of consideration, comments and recommendations must be submitted in any one of the following ways:

1. Electronically. You may send your comments electronically to http://www.regulations.gov. Follow the instructions for “Comment or Submission” or “More Search Options” to find the information collection document(s) that are accepting comments.

2. By regular mail. You may mail written comments to the following address: CMS, Office of Strategic Operations and Regulatory Affairs, Division of Regulations Development.

Attention: Document Identifier/OMB Control Number, Room C4–26–05, 7500 Security Boulevard, Baltimore, Maryland 21244–1850.

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, you may make your request using one of following:


2. Email your request, including your address, phone number, OMB number, and CMS document identifier, to Paperwork@cms.hhs.gov.

3. Call the Reports Clearance Office at (410) 786–1326.

FOR FURTHER INFORMATION CONTACT: Reports Clearance Office at (410) 786–1326.

SUPPLEMENTARY INFORMATION:

Contents

This notice sets out a summary of the use and burden associated with the following information collections. More detailed information can be found in each collection’s supporting statement and associated materials (see ADDRESSES).

CMS–10105 National Implementation of In-Center Hemodialysis CAHPS Survey
CMS–10191 Medicare Parts C and D Program Audit Protocols and Data Requests
CMS–10525 Program of all-Inclusive Care for the Elderly (PACE) Quality Data Entry in CMS Health Plan Monitoring System
CMS–10623 Testing Experience and Functional Tools Demonstration:

Personal Health Record (PHR) User Survey

Under the PRA (44 U.S.C. 3501–3520), federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. The term “collection of information” is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA requires federal agencies to publish a 60-day notice in the Federal Register concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice.

1. Type of Information Collection Request: Revision of a currently approved collection; Title of Information Collection: National Implementation of the In-Center Hemodialysis CAHPS Survey; Use: Data collected in the national implementation of the In-center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey will be used to: (1) Provide a source of information from which selected measures can be publicly reported to beneficiaries as a decision aid for dialysis facility selection, (2) aid facilities with their internal quality improvement efforts and external benchmarking with other facilities, (3) provide CMS with information for monitoring and public reporting purposes, and (4) support the end-stage renal disease value-based purchasing program. Form Number: CMS–10105 (OMB control number: 0938–0926), Frequency: Occasionally; Affected Public: Individuals or households; Number of Respondents: 109,328; Total Annual Responses: 109,328; Total Annual Hours: 59,037. (For policy questions regarding this collection contact Elizabeth Goldstein at 410–786–6665.)

2. Type of Information Collection Request: Revision of a currently approved collection; Title of Information Collection: Medicare Parts C and D Program Audit Protocols and Data Requests: Use: Under the Medicare Prescription Drug, Improvement, and
Modernization Act of 2003 and implementing regulations at 42 CFR parts 422 and 423, Medicare Part D plan sponsors and Medicare Advantage organizations are required to comply with all Medicare Parts C and D program requirements. In 2010, the explosive growth of these sponsoring organizations forced CMS to develop an audit strategy to ensure we continue to obtain meaningful audit results. As a result, CMS’ audit strategy reflects a move to a more targeted, data-driven and risk-based audit approach. We focused on high-risk areas that have the greatest potential for beneficiary harm.

To maximize resources, CMS will focus on assisting the industry to improve their operations to ensure beneficiaries receive access to care. One way to accomplish this is CMS will develop an annual audit strategy which describes how sponsors will be selected for audit and the areas that will be audited. CMS has developed several audit protocols and these are posted to the CMS Web site each year for use by sponsors to prepare for their audits. Currently CMS utilizes the following 7 protocols to audit sponsor performance: Formulary Administration (FA), Coverage Determinations, Appeals & Grievances (CDAG), Organization Determination, Appeals and Grievances (ODAG), Special Needs Model of Care (SNPMOC) (only administered on organizations who operate SNPs), Compliance Program Effectiveness (CPE), Medication Therapy Management (MTM) and Provider Network Accuracy (PNA). The data collected is detailed in each of these protocols and the exact fields are located in the record layouts, at the end of each protocol. In addition, questionnaires are distributed as part of our CDAG, ODAG and CPE audits. These questionnaires are also included in this package.

As part of a robust audit process, CMS also requires sponsors who have been audited and found to have deficiencies to undergo a validation audit to ensure correction. The validation audit utilizes the same audit protocols, but only tests the elements where deficiencies were found, as opposed to re-administering the entire audit. Finally, to assist in improving the audit process, CMS sends sponsors a link to a survey (Appendix D) at the end of each audit to complete in order to obtain the sponsors’ feedback. The sponsor is not required to complete the survey. Form Number: CMS–10191 (OMB control number: 0938–1000); Frequency: Yearly; Affected Public: Private Sector (business or other for-profits and Not-for-profit institutions); Number of Respondents: 40; Total Annual Responses: 40; Total Annual Hours: 13,640. (For policy questions regarding this collection contact Dawn Johnson at 410–786–3159.)

3. Type of Information Collection Request: Revision of a currently approved collection; Title of Information Collection: Program of all-Inclusive Care for the Elderly (PACE) Quality Data Entry in CMS Health Plan Monitoring System; Use: PACE organizations coordinate the care of each participant enrolled in the program based on his or her individual needs with the goal of enabling older individuals to remain in their community. To be eligible to enroll in PACE, an individual must: be 55 or older, live in the service area of a PACE organization (PO), need a nursing home-level of care (as certified by the state in which he or she lives), and be able to live safely in the community with assistance from PACE (42 CFR 460.150(b)).

The PACE program provides comprehensive care whereby an interdisciplinary team of health professionals provides individuals with coordinated care. The overall quality of care is analyzed by information collected and reported to CMS related to specific quality indicators that may cause potential or actual harm. CMS analyzes the quality data to identify opportunities to improve the quality of care, safety and PACE sustainability and growth.

Previously, quality reporting was identified as Level I or Level II reporting. Level I reporting requirements refer to those data elements that POs regularly report to CMS via the CMS Health Plan Management System (HPMS) PACE monitoring module. (Please see Appendix A for the list of data elements.) POs have been collecting, submitting and reporting data to CMS and State administering agencies (SAA) since 1999.

When analyzing the Level I data, findings may or may not trigger a Quality Improvement (QI) process of analysis (e.g., Plan, Do, Study, Act known as PDSA). Findings may indicate the need for a change in policies, procedures, systems, clinical practice or training. Level II reporting requirements apply specifically to unusual incidents that result in serious adverse participant outcomes, or negative national or regional notoriety related to PACE.

In this PRA package, we are making title changes from Level I and Level II to PACE Quality Data. We are requesting to update and implement previously existing Level I and II elements known as Level I and Level II into PACE quality data. Additionally, we are establishing three PACE Quality measures adopted from the National Quality Forum (NQF) and modified for PACE use. These modified PACE quarterly measures are Falls, Falls with Injury, and Pressure Injury Prevalence/Prevention. Currently, the existing Level I and Level II elements have not been tested for reliability or feasibility. By adopting NQF defined reliable data collection process for these elements, certain existing Level I and Level II elements will then officially meet quality measures collection standards. These measures will be used to improve quality of care for participants in PACE. PACE Quality measures will be implemented via the existing HPMS. POs will be educated on data criteria, entry and will report quarterly. Form Number: CMS–10525 (OMB control number: 0938–1264); Frequency: Quarterly and occasionally; Affected Public: Private sector (Business or other for-profits and Not-for-profit institutions); Number of Respondents: 100; Total Annual Responses: 29,500; Total Annual Hours: 211,500. (For policy questions regarding this collection contact Tamika Gladney at 410–786–0648.)

4. Type of Information Collection Request: New collection (Request for a new OMB control number); Title of Information Collection: Testing Experience and Functional Tools Demonstration: Personal Health Record (PHR) User Survey; Use: The PHR user survey is important to the TEFT Program Evaluation and understanding the impact of the TEFT PHR on Medicaid CB–LTSS beneficiaries. The TEFT evaluation team’s approach includes monitoring state PHR implementation efforts and fielding a follow-up questionnaire to CB–LTSS program participants that asks about their experiences using the PHR. The evaluation seeks to measure the degree to which the PHR is implemented in an accessible manner for Medicaid beneficiaries of CB–LTSS. The survey also is designed to assess the user experience of the PHR, including access and usability, as well as some measures of user satisfaction and perceived impacts of PHR use. Form Number: CMS–10623 (OMB control number: 0938–New); Frequency: Once; Affected Public: Individuals and households; Number of Respondents: 824; Total Annual Responses: 824; Total Annual Hours: 192,113 (For policy questions regarding this collection contact Kerry Lida at 410–786–4828).

5. Type of Information Collection Request: Revision of a currently approved collection; Title of Information Collection: Medicare
Advantage, Medicare Part D, and Medicare Fee-For-Service Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey; Use: The primary purpose of the Medicare consumer assessment of healthcare providers and systems (CAHPS) surveys is to provide information to Medicare beneficiaries to help them make more informed choices among health and prescription drug plans available to them. The surveys also provides data to help CMS and others monitor the quality and performance of Medicare health and prescription drug plans and identify areas to improve the quality of care and services provided to enrollees of these plans. Form Number: CMS–R–246 (OMB control number: 0938–0732); Frequency: Yearly; Affected Public: Individuals and households; Number of Respondents: 799,650; Total Annual Responses: 799,650; Total Annual Hours: 192,113 (For policy questions regarding this collection contact Sarah Gaillot at 410–786–4637).

Dated: June 8, 2016.

William N. Parham, III,
Director, Paperwork Reduction Staff, Office of Strategic Operations and Regulatory Affairs.

[FR Doc. 2016–13917 Filed 6–10–16; 8:45 am]
BILLING CODE 4120–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services


Agency Information Collection Activities: Submission for OMB Review; Comment Request

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing an opportunity for the public to comment on CMS’ intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (PRA), federal agencies are required to publish a notice in the Federal Register concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, and to allow a second opportunity for public comment on the notice. Interested persons are invited to send comments regarding the burden estimate or any other aspect of this collection of information, including any of the following subjects: (1) The necessity and utility of the proposed information collection for the proper performance of the agency’s functions; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments on the collection(s) of information must be received by the OMB desk officer by July 13, 2016.

ADDRESSES: When commenting on the proposed information collections, please reference the document identifier or OMB control number. To be assured consideration, comments and recommendations must be received by the OMB desk officer via one of the following transmissions: OMB, Office of Information and Regulatory Affairs, Attention: CMS Desk Officer, Fax Number: (202) 395–5806 Or Email: OIRA_submission@omb.eop.gov.

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, you may make your request using one of following:


2. Email your request, including your address, phone number, OMB number, and CMS document identifier, to Paperwork@cms.hhs.gov.

3. Call the Reports Clearance Office at (410) 786–1326.

FOR FURTHER INFORMATION CONTACT: Reports Clearance Office at (410) 786–1326.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3520), federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. The term “collection of information” is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)) requires federal agencies to publish a 30-day notice in the Federal Register concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice that summarizes the following proposed collection(s) of information for public comment:

1. Type of Information Collection Request: Extension of a currently approved collection; Title of Information Collection: Detailed Notice of Discharge (DND) and Supporting Regulations in 42 CFR 405.1206 and 422.622; Use: A beneficiary or enrollee who wishes to appeal a determination by a Medicare health plan (for a managed care enrollee) or hospital (for an original Medicare beneficiary) that inpatient care is no longer necessary may request Quality Improvement Organization (QIO) review of the determination. On the date the QIO receives the beneficiary’s/enrollee’s request, it must notify the plan and hospital that the beneficiary/enrollee has filed a request for an expedited determination. The plan or hospital, in turn, must deliver a DND to the enrollee/beneficiary. In this iteration the DND has been minimally changed to include language informing beneficiaries of their rights under the Rehabilitation Act of 1973 (section 504), by alerting the beneficiary to CMS’s nondiscrimination practices and the availability of alternate forms of this notice if needed. There are no substantive changes to the DND form and instructions. Form Number: CMS–10066 (OMB control number: 0938–1019); Frequency: Occasionally; Affected Public: Private sector (Business or other for-profit and Not-for-profit institutions); Number of Respondents: 6,137; Total Annual Responses: 22,515; Total Annual Hours: 22,515. (For policy questions regarding this collection contact Janet Miller at 404–562–1799.)

2. Type of Information Collection Request: Extension of a currently approved collection; Title of Information Collection: Important Message from Medicare (IM); Use: Hospitals have used the IM to inform original Medicare, Medicare Advantage, and other Medicare plan beneficiaries who are hospital inpatients about their hospital rights and discharge rights. In particular, the IM provides information about when a beneficiary will and will not be liable for charges for a continued stay in a hospital and offers a detailed description of the Quality Improvement Organization review process. Please note that this iteration proposes non-substantive changes to the form. Form Number: CMS–R–193 (OMB control number: 0938–0692). Frequency: Yearly; Affected Public: Private sector (Business or other for-profit and Not-for-profit institutions); Number of Respondents: 6,142; Total Annual Responses: 23,680,000; Total Annual Hours: 3,404,000. (For policy questions
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

[OMB No.: 0970–0307]

Submission for OMB Review; Comment Request; State Court Improvement Program

The Court Improvement Program (CIP) is a mandatory formula grant funded under section 438 of the Social Security Act, and most recently reauthorized under the Child and Family Services Improvement and Innovation Act of 2012 (Pub. L. 112–34). The purpose of the CIP is to facilitate the handling of child welfare cases in the courts. All 50 states, Puerto Rico, and the District of Columbia receive grants under the program. The program requires two submissions annually from grantees that constitute information collections under the Paperwork Reduction Act.

The purpose of this notice is to request an extension of the Office of Management and Budget Control Number 0907–0307 permitting continued use of the information collections required by ACF–CB–PI–12–02. The burden estimates are provided below. The Administration on Children, Youth, and Families anticipates issuing a new Program Instruction for federal fiscal year 2017. Following the publication of the first Federal Register notice, the Children’s Bureau engaged in a number of outreach activities to seek additional input from grantees and experts in the field on how best to reduce grantees burden, ensure that the reporting process was useful to grantees, and maximize the ability to evaluate the program overall. These efforts have resulted in the decision to require one annual submission, as opposed to two submissions.

The annual submission will include: (1) A self-assessment, and (2) a strategic plan. The self-assessment requires the grantees to identify the topical work areas of the last year, identify strengths, challenges, and need for technical assistance. The self-assessment has been designed with user/grantee input with the intention of minimizing burden and maximizing usefulness of the process and product to the grantee. The strategic plan identifies projects and activities and intended results for the coming year. The strategic plan was also developed with grantee input. A full application will be due once every five years. The full application will require a five year strategic plan, letters of commitment from the highest court of appeal and state title IV–E/IV–B agency, a budget narrative, and a list of all statewide task force members.

Taken together, the changes reduce the overall burden hours from years past and those anticipated in the previous Federal Register notice by approximately 50%.

Respondents: Highest State Court.

ANNUAL BURDEN ESTIMATES

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<th>Instrument</th>
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</table>

Estimated Total Annual Burden Hours: 4,476.

Additional Information: Copies of the proposed collection may be obtained by writing to the Administration for Children and Families, Office of Planning, Research and Evaluation, 330 C Street SW., Washington, DC 20201. Attention Reports Clearance Officer. All requests should be identified by the title of the information collection. Email address: infocollection@acf.hhs.gov.

OMB Comment: OMB is required to make a decision concerning the collection of information within 30 days of publication. Written comments and recommendations for the proposed information collection should be sent directly to the following: Office of Management and Budget, Paperwork Reduction Project, Email: OIRA_SUBMISSION@OMB.EOP.GOV, Attn: Desk Officer for the Administration for Children and Families.

Robert Sargsi,
Reports Clearance Officer.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Submission to OMB for Review and Approval; Public Comment Request

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice.

SUMMARY: In compliance with Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the Health Resources and Services Administration...
(HRSA) has submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and approval. Comments submitted during the first public review of this ICR will be provided to OMB. OMB will accept further comments from the public during the review and approval period.

DATES: Comments on this ICR should be received no later than July 13, 2016.

ADDRESSES: Submit your comments, including the Information Collection Request Title, to the desk officer for HRSA, either by email to OIRA_submission@omb.eop.gov or by fax to 202–395–5806.

FOR FURTHER INFORMATION CONTACT: To request a copy of the clearance requests submitted to OMB for review, email the HRSA Information Collection Clearance Officer at paperwork@hrsa.gov or call (301) 443–1984.

SUPPLEMENTARY INFORMATION:

Information Collection Request Title: HIV Quality Measures Module OMB No. 0915–XXXX, New

Abstract: The Ryan White HIV/AIDS Program (RWHAP) provides entities funded by the Program with flexibility to respond effectively to the changing HIV epidemic, with an emphasis on providing life-saving and life-extending services for people living with HIV. All RWHAP recipients must follow certain legislative requirements, such as the establishment of clinical quality management programs, to assess their HIV services according to the most recent Public Health Service guidelines and to develop strategies to improve access to quality HIV services. The HIV Quality Measures Module (HIVQM Module) is a new voluntary data system that recipients funded under all Parts of the RWHAP may use to monitor their performance in providing quality HIV services. Recipients may enter data into the module on their HIV/AIDS Bureau (HAB) performance measures and then generate reports to assess their performance. Recipients may also compare their performance regionally and nationally against other recipients. The HAB performance measures comprise the following categories: (1) Core, (2) all ages, (3) adolescent/adult, (4) HIV-positive children, (5) HIV-exposed children, (6) medical case management, (7) oral health, (8) AIDS Drug Assistance Program (RWHAP’s drug assistance program), and (9) systems-level. HAB created the HIVQM Module as an online tool to facilitate recipients in meeting the clinical quality management program requirement. The use of the module is voluntary for RWHAP recipients, but strongly encouraged.

Need and Proposed Use of the Information: The HIVQM Module will provide recipients an easy-to-use and structured platform to voluntarily continually monitor their performance in serving their clients, particularly in access to care and the provision of quality HIV services. The main purpose for the module is to help recipients set goals and monitor performance measures and their quality improvement projects. HRSA expects the HIVQM Module to better support clinical quality management, performance measurement, service delivery, and client monitoring at both the recipient and client levels. In addition, for recipients and sub-recipients participating in the Centers for Medicare and Medicaid Incentive Programs, such as the Medicare and Medicaid Electronic Health Records Incentive Program and the Physician Quality Reporting System, the module will be consistent to qualify and comply with the requirements to receive incentives from these programs.

The module will be available for data entry three times a year. The module will be accessible via the Ryan White Services Report (RSR), an existing online tool that grant recipients already use for required data collection of their services. Recipients will choose which performance measures they want to monitor and enter data accordingly. Reports or performance measures can be generated and reviewed by the recipients and their sub-recipients and can be compared with other RWHAP recipients by provider type, by region, and at the national level.


Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search existing data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

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Jason E. Bennett, Director, Division of the Executive Secretariat.

[FR Doc. 2016–13846 Filed 6–10–16; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

[Document Identifier: HHS–OS–0990–0275–60D]

Agency Information Collection Activities; Proposed Collection; Public Comment Request

AGENCY: Office of the Secretary, HHS.

ACTION: Notice.

SUMMARY: In compliance with section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, the Office of the Secretary (OS), Department of Health and Human Services, announces plans to submit an Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB). The ICR is for revision of the approved information collection
assigned OMB control number 0990–0275, which expires on 08/31/2016. Prior to submitting the ICR to OMB, OS seeks comments from the public regarding the burden estimate, below, or any other aspect of the ICR.

DATES: Comments on the ICR must be received on or before August 12, 2016.

ADDRESSES: Submit your comments to Information.CollectionClearance@hhs.gov or by calling (202) 690–6162.

FOR FURTHER INFORMATION CONTACT: Information Collection Clearance staff, Information.CollectionClearance@hhs.gov or (202) 690–6162.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the document identifier HHS–OS–0990–0275–60D for reference.

Information Collection Request Title: Performance Data System (PDS) (OMB No. 0990–0275).

Abstract: This request for clearance is to revise data collection activities and extend by three (3) years a currently approved collection using the OMB approved Performance Data System (PDS) (OMB No. 0990–0275), the tool used by the Office of Minority Health (OMH) to collect program management and performance data for all OMH-funded projects. The revised data collection activities pertain only to current questions about grantee use of social media. The modified social media questions in PDS will be more applicable to OMH grantees, more easily understood, and collect more accurate quantitative metrics. Grantee data collection via the UDS (original data collection system) was first approved by OMB on June 7, 2004 (OMB No. 0990–275). OMB approval was also received for modifications to the UDS (August 23, 2007), which upgraded the data collection tool from the UDS to the PDS (August 31, 2010). A 3-year extension without change of the approved PDS collection was approved August 1, 2013. Clearance is due to expire on August 31, 2016.

Need and Proposed Use of the Information: The clearance is needed to continue data collection using the PDS, a system that enables OMH to comply with Federal reporting requirements and monitor and evaluate performance by enabling the efficient collection of performance-oriented data tied to OMH-wide performance reporting needs. The ability to monitor and evaluate performance in this manner, and to work towards continuous program improvement are basic functions that OMH must be able to accomplish in order to carry out its mandate with the most effective and appropriate use of resources. The revision of the social media questions is necessary because social media platforms, such as Facebook, Twitter, and blogs, are becoming increasingly utilized by grantees for their usability, free access, and ability to reach a larger audience. The revised questions will lead to increased data collection completeness and quality.

Likely Respondents: Respondents for this data collection include the project directors for OMH-funded projects and/or the date entry persons for each OMH-funded project. Affected public includes non-profit institutions, State, Local, or Tribal Governments.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions, to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information, to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information, and to transmit or otherwise disclose the information.

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OS specifically requests comments on (1) the necessity and utility of the proposed information collection for the proper performance of the agency’s functions, (2) the accuracy of the estimated burden, (3) ways to enhance the quality, utility, and clarity of the information to be collected, and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Terry S. Clark, Asst Information Collection Clearance Officer.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Cancer Institute; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The contract proposals and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the contract proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Cancer Institute Special Emphasis Panel; Cancer Diagnostics, Prognostics and Detection.

Date: June 15, 2016.

Time: 1:30 p.m. to 5:00 p.m.

Agenda: To review and evaluate contract proposals.

Place: National Cancer Institute Shady Grove, 9609 Medical Center Drive, Room 4W032/034, Rockville, MD 20850, (Telephone Conference Call).

Contact Person: Gerard Lacourciere, Ph.D., Scientific Review Officer, Research Technology and Contract Review Branch, Division of Extramural Activities, National Cancer Institute, 9609 Medical Center Drive, Room 7W248, Rockville, MD 20892–9750, 240–276–5457, gerard.lacourciere@mail.nih.gov.
This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: National Cancer Institute Special Emphasis Panel, Software for Measuring Environmental Effects on Cancer.

Date: June 30, 2016.

Time: 1:30 p.m. to 5:00 p.m.

Agenda: To review and evaluate contract proposals.

Place: National Cancer Institute Shady Grove, 9600 Medical Center Drive, Room 4W030 Rockville, MD 20850, (Telephone Conference Call).

Contact Person: Gerard Lacoucierie, Ph.D., Scientific Review Officer, Research Technology and Contract Review Branch, Division of Extramural Activities, National Cancer Institute, 9609 Medical Center Drive, Room 7W248, Rockville, MD 20892–9750, 240–276–5457, gerard.lacoucierie@mail.nih.gov.

Catalogue of Federal Domestic Assistance Program Nos. 93.392, Cancer Construction; 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer Treatment Research; 93.396, Cancer Biology Research; 93.397, Cancer Centers Support; 93.398, Cancer Research Manpower; 93.399, Cancer Control, National Institutes of Health, HHSA.

Dated: June 8, 2016.

Melanie J. Gray,
Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2016–13930 Filed 6–10–16; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Announcement of Requirements and Registration for “$100,000 for Start a SUD Startup” Challenge

SUMMARY: The National Institute on Drug Abuse (NIDA), one of the components of the National Institutes of Health (NIH), announces the “$100,000 for Start a SUD Startup” Challenge. The Challenge goal is to support research ideas that would further an understanding of neurobiology as it relates to Substance Use Disorders (SUD) and that are intended to be the basis for the development of a new and potentially successful start-up. NIDA hopes that participation in the contest will enable scientists to test the hypothesis that their research idea can be fostered into a biotech startup, and that eventually any newly created startups will contribute to the pool of innovative small business companies that can successfully compete for NIDA’s Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) funding. Each Challenge winner will receive $10,000. The Challenge total purse is up to $100,000.


Submission Period: June 13, 2016 to September 16, 2016, 11:59 p.m., ET.


FOR FURTHER INFORMATION CONTACT: Irina Sazonova, Ph.D., M.Sc., Health Scientist Administrator, Office of Translational Initiatives and Program Innovations (OTIPI), NIDA Challenge Administrator, National Institute on Drug Abuse (NIDA), 6001 Executive Blvd. Room 4206, MSC 9555 Bethesda, MD 20892–9555. Phone: (301) 827–9564, Email: irina.sazonova@nih.gov.

SUPPLEMENTARY INFORMATION: The Institute’s Statutory Authority to Conduct the Challenge. NIDA is conducting this Challenge under the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Reauthorization Act of 2010, 15 U.S.C. 3719. The general purpose of NIDA is to conduct and support biomedical and behavioral research, training and health-information dissemination with respect to the prevention of drug abuse and the treatment of drug abusers. This Challenge is consistent with and advances the mission of NIDA as described in 42 U.S.C. 285o in that it supports new and potential biotech start-ups in the development of research ideas that would further an understanding of neurobiology as it relates to SUD.

Subject of Challenge. NIDA is excited to announce the first competition for biomedical scientists with the goal to support research ideas that would further an understanding of neurobiology as it relates to SUD and that are intended to be the basis for the development of a new and potentially successful start-up. NIDA hopes that participation in the contest will enable scientists to test whether their research ideas can be fostered into a biotech startup. In 2016, NIDA will award up to $100,000 in prizes to up to 10 winners of the contest, $10,000 each.

Are you a biomedical scientist who believes that he/she has a research idea for a biotech start-up? This Challenge is unique because NIDA intends to fund the “would be” startup Founders much earlier than most investors, incubators, or traditional modes of research funding (e.g., small business grants).

What does it take to participate in the Challenge? The team or an individual must have a research idea that could further the understanding of SUD and is intended to be the basis of the development of a new and potentially successful startup. The research “idea” is the product that your future startup will offer. Here, the term startup “product” is used in its broadest definition. Product is any source of value for the people who become customers. Services, subscriptions, software as a service (SaaS), physical/tangible products, aggregations, etc. could all provide value and thus be considered startup products. The startup product could be the result of novel scientific discoveries, repurposing an existing technology for a new use, extending a research observation into a different area, devising a new business model or distribution/delivery channel that unlocks value currently concealed, or simply bringing a product or service to a previously underserved set of customers. The Founder (the teams or an individual) must demonstrate through the Submission the passion, drive, discipline, ability to work collaboratively and willingness to push forward under conditions of extreme business uncertainty.

The winners of this Challenge are encouraged to use the prize funds to develop a minimum viable product (MVP) as quickly as possible and to obtain customer feedback to discover if MVP meets the customer needs. If the product prototype is successfully validated, winners are encouraged to create or further advance their biotech startup no later than 6 months after the prize is awarded. Post Challenge, as with all other NIH grant applicants, NIDA staff will provide dedicated assistance and guidance about the NIH grant submission process, including submissions for the SBIR/STTR grants.

The research idea must be broad enough to address multiple conditions, diseases, or indications consistent with SUD or be specific for prevention and treatments of SUD. For example, if your idea can only work for cancer or diabetes, entering this Challenge is not appropriate. However, if the plan is to test an idea for a research tool that would further an understanding of neurobiology or epigenetics relevant to SUD to progress faster and with greater fidelity, entering this Challenge is appropriate.

Rules for Participating in the Challenge. The Challenge is open to any Founder 18 years of age or older. No prior startup experience is necessary. A
Founder may be (i) an entity or (ii) an individual or group of individuals (i.e., a team assembled with the purpose of participating in this Challenge).

(1) To be eligible to win a prize under this Challenge, an individual or entity:
   a. Shall have registered to participate in the Challenge under the rules promulgated by NIDA as published in this Notice;
   b. Shall have complied with all the requirements set forth in this Notice;
   c. In the case of a private entity, shall be incorporated in and maintain a primary place of business or research activity in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States. However, non-U.S. citizens and non-permanent residents can participate as a member of a team that otherwise satisfies the eligibility criteria. Non-U.S. citizens and non-permanent residents are not eligible to win a monetary prize (in whole or in part). Their participation as part of a winning team, if applicable, may be otherwise recognized when the results are announced.
   d. May not be a Federal entity;
   e. May not be a Federal employee acting within the scope of the employee’s employment and further, in the case of HHS employees, may not work on their submission(s) during assigned duty hours;
   f. May not be an employee of the NIH, a judge of the challenge, or any other party involved with the design, production, execution, or distribution of the Challenge or the immediate family of such a party (i.e., spouse, parent, step-parent, child, or step-child).
   g. Must be a potential start-up (i.e., not yet formed) or a new start-up (i.e. in the early stage of formation and development).

(2) Federal grantees may not use Federal funds to develop their Challenge submissions.

(3) Federal contractors may not use Federal funds from a contract to develop their Challenge submissions or to fund efforts in support of their Challenge submission.

(4) Submissions must not infringe upon any copyright or any other rights of any third party.

(5) By participating in this Challenge, each Founder (whether participating singly or in a group) and entity agrees to assume any and all risks and waive claims against the Federal government and its related entities (as defined in the COMPETES Act), except in the case of wilful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from participation in this Challenge, whether the injury, death, damage, or loss arises through negligence or otherwise.

(6) Based on the subject matter of the Challenge, the type of work that it will possibly require, as well as an analysis of the likelihood of any claims for death, bodily injury, property damage, or loss potentially resulting from Challenge participation, no Founder (whether competing singly or in a group) or entity participating in the Challenge is required to obtain liability insurance or demonstrate financial responsibility in order to participate in this Challenge.

(7) By participating in this Challenge, each Founder (whether competing singly or in a group) and entity agrees to indemnify the Federal government against third party claims for damages arising from or related to Challenge activities.

(8) A Founder or entity shall not be deemed ineligible because the Founder or entity used Federal facilities or consulted with Federal employees during the Challenge if the facilities and employees are made available to all individuals and entities participating in the Challenge on an equitable basis.

(9) By participating in this Challenge, each Founder (whether participating singly or in a group) or entity retains title and full ownership in and to their submission and each participant expressly reserves all intellectual property rights (e.g., copyright) in their submission.

(10) NIDA reserves the right, in its sole discretion, to (a) cancel, suspend, or modify the Challenge, and/or (b) not award any prizes if no entries are deemed worthy.

(11) Each Founder (whether participating singly or in a group) or entity agrees to follow all applicable Local, State, and Federal laws and regulations.

(12) Each Founder (whether participating singly or in a group) and entity participating in this Challenge must comply with all terms and conditions of these rules, and participation in this Challenge constitutes each such contestant’s full and unconditional agreement to abide by these rules. Winning is contingent upon fulfilling all requirements herein.

(13) Scientists working on the projects that are directly applicable or adaptable to benefit the SUD field, NIDA’s mission area, are especially encouraged to apply. A team can also include engineers, IT, business or other professionals in the biomedical care field.

(14) Winners are encouraged to submit the minimum viable proof (MVP) report 6 months after the prize payment.

Registration Process for Contestants.
To participate in this Challenge visit www.challenge.gov. search for “Start a Startup” Challenge and follow the instructions.

Submission Requirements. Each submission for this Challenge requires a complete “Submission Package.” The Submission Package includes a 4-page written proposal describing an idea and 5-min video introducing the team. Both the idea and the Founders will be evaluated.

(1) In the proposal:
   1. Describe your research idea that would further an understanding of neurobiology as it relates to SUD and that is intended to be the basis for a successful start-up. (1 page)
   2. Convince the Challenge reviewers of your technical competence as a biomedical scientist. Be brief, selective and persuasive. Do not use the NIH Bibliographic Sketch format. (0.5 page)
   3. Describe, in as many details as possible, what the prototype of your product would look like. Then, walk the Challenge reviewers through the typical use of the product, using simple terms and instructions. (1.5 pages)
   4. Explain the methods you will use (how, when, where, whom) to determine whether the product is needed by the target audience and whether that audience would be willing to pay for the product. (1 page)

The proposal must consist of a PDF file with at least 1 inch margins and no more than four (4) pages long. Font size must be no smaller than 11 point Arial. All submissions must be in English. The Contestants must not use HHS’s logo or official seal or the logo of NIH or NIDA in the submissions, and must not claim federal government endorsement.

(2) A brief video (link to YouTube) must be no longer than five (5) minutes. If the Challenge submission is from the team of Founders, the entire team must participate in the submitted video. In the YouTube video:
   1. Tell NIDA something, in one minute or less, that can illustrate the drive or the desire of each founder to develop a product that would further an understanding of neurobiology as it relates to SUD and that is intended to be the basis for a successful start-up.
   2. Tell NIDA something about each founder that shows a high level of scientific and entrepreneurial ability.
   3. Tell NIDA something about each founder that shows a high level of perseverance and grit.

• Tell NIDA about a time when your great idea was rejected. What was your response?
• Tell NIDA how you design scientific experiments in general. Amount of the Prize; Award Approving Official. Up to ten monetary prizes will be awarded. The total prize award pool is up to $100,000. No institutional indirect costs are allowed. The names of the winners and the titles of their submissions will be posted on the NIDA Web site. The award approving official for this Challenge is the Director of the National Institute on Drug Abuse.

Payment of the Prize. Prizes awarded under this Challenge will be paid by electronic funds transfer and may be subject to Federal income taxes. The NIH/NIDA will comply with the Internal Revenue Service withholding and reporting requirements, where applicable.

Basis upon Which the Winner Will Be Selected. The judging panel will make recommendations to the award approving official based upon the following 5 criteria. Each criterion will be scored with the maximum of 10 points.

(1) Significance and Unmet Needs (0–10 points). Are there significant needs for your product or service? Does the project address an important problem or a critical barrier to progress in the field of drug abuse research? If the aims of the project are achieved, how will scientific knowledge, technical capability, service or clinical practice be improved?

(2) Innovation (0–10 points). Does the submission seek to shift current paradigms by utilizing novel theoretical concepts, approaches, methodologies, instrumentation, service or interventions for drug abuse research? Is your product novel in a broad sense? Is a refinement, improvement or new application of theoretical concepts, approaches or methodologies instrumentation or interventions proposed?

(3) Approach (0–10 points). Are the overall strategy, methodology, and analyses well-reasoned and appropriate to test the proposed idea? Has feedback from end users been incorporated into the validity of the idea proposed?

(4) Team expertise (0–10 points). Does the individual or team demonstrate high level of ability, perseverance and grit?

(5) Commercialization (0–10 points). Is there a clear path for the product/service to reach the market? Are the product users and purchasers clearly identified?

Submissions that are responsive and comply with the entry requirements will be reviewed by a panel of judges consisting of federal employees. The responsive and compliant submissions entries will be scored in accordance with the judging criteria outlined above. Final recommendations will be determined by a vote of the judges based on score. Scores from each criterion will be weighted equally, but failure to meet a minimum standard for any one criterion might disqualify a submission. The score for each submission will be the sum of the scores from each of the voting judges.

Authority: 15 U.S.C. 3719
Dated: June 7, 2016.
Nora D. Volkow, Director, National Institute on Drug Abuse, National Institutes of Health.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Diabetes and Digestive and Kidney Diseases; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and confidentiality of the discussions could disclose that property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel; Psychological and Behavioral Mechanisms in Bariatric Surgery (R01).

Date: July 26, 2016.
Time: 1:00 p.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).
Contact Person: Paul A. Rushing, Ph.D., Scientific Review Officer, Review Branch, DEA, NIDDK, National Institutes of Health, Room 7345, 6707 Democracy Boulevard, Bethesda, MD 20892–5452, (301) 594–8895, rushingp@extra.niddk.nih.gov.

Name of Committee: National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel; Ulcerative Colitis.

Date: July 7, 2016.
Time: 2:00 p.m. to 4:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).
Contact Person: Ann A. Jenkins, Ph.D., Scientific Review Officer, Review Branch, DEA, NIDDK, National Institutes of Health, Room 7119, 6707 Democracy Boulevard, Bethesda, MD 20892–5422, (301) 594–2235, jerkinsa@niddk.nih.gov.

Name of Committee: National Institute of Diabetes and Digestive and Kidney Diseases Special Emphasis Panel; Pancreatitis with Pancreas Divisum.

Date: July 7, 2016.
Time: 5:00 p.m. to 7:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Two Democracy Plaza, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).
Contact Person: jerkinsa@niddk.nih.gov.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is
the public in accordance with the
provisions set forth in sections
552b(c)(4) and 552b(c)(6), title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Scientific Review Special Emphasis Panel; CVRS
Member Conflicts and Continuous Submissions.
Date: June 28, 2016.
Time: 12:00 p.m. to 2:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892
(Telephone Conference Call).
Contact Person: Olga A. Tjurmina, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3158, Bethesda, MD 20892, (301) 451–1375, otjurmin@nih.gov.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Member Conflict: Developmental and Motor Disability.
Date: July 6, 2016.
Time: 12:00 p.m. to 3:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892
(Telephone Conference Call).
Contact Person: Serena Chu, Ph.D., Scientific Review Officer, BBBP IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3178, MSC 7848, Bethesda, MD 20892, 301–500–5829, sechu@csr.nih.gov.

Name of Committee: AIDS and Related Research Integrated Review Group; Behavioral and Social Science Approaches to Preventing HIV/AIDS Study Section.
Date: July 7–8, 2016.
Time: 9:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: The Fairmont Washington, DC, 2401 M Street NW., Washington, DC 20037.
Contact Person: Jose H. Guerrier, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5222, MSC 7852, Bethesda, MD 20892, 301–435–1137, guerrierj@csr.nih.gov.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Innovative Strategies to Reduce HIV Incidence—Know Projects.
Date: July 7, 2016.
Health, 6701 Rockledge Drive, Room 6158, MSC 7804, Bethesda, MD 20892, 301–435–0198, shawdeni@csr.nih.gov.


Date: July 13, 2016.

Time: 12:00 p.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Yvonne Bennett, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5199, MSC 7846, Bethesda, MD 20892, 301–379–3793, bennetty@csr.nih.gov.


DATED: June 7, 2016.

Natasha M. Copeland,
Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2016–13827 Filed 6–10–16; 8:45 am]
BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND AND HUMAN SERVICES

National Institutes of Health
National Cancer Institute; Notice of Charter Renewal

In accordance with Title 41 of the U.S. Code of Federal Regulations, Section 102–3.65(a), notice is hereby given that the Charter for the National Cancer Institute Clinical Trials and Translational Research Advisory Committee was renewed for an additional two-year period on April 14, 2016.

It is determined that the National Cancer Institute Clinical Trials and Translational Research Advisory Committee is in the public interest in connection with the performance of duties imposed on the National Cancer Institute and National Institutes of Health by law, and that these duties can best be performed through the advice and counsel of this group.

Inquiries may be directed to Jennifer Spaeth, Director, Office of Federal Advisory Committee Policy, Office of the Director, National Institutes of Health, 6701 Democracy Boulevard, Suite 1000, Bethesda, Maryland 20892 (Mail code 4875), Telephone (301) 496–2123, or spaeth@od.nih.gov.

DATED: June 7, 2016.

Jennifer S. Spaeth,
Director, Office of Federal Advisory Committee Policy.

[FR Doc. 2016–13829 Filed 6–10–16; 8:45 am]
BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USC–2016–0372]

Certificates of Alternative Compliance, First Coast Guard District

AGENCY: Coast Guard, DHS.

ACTION: Notice.

SUMMARY: The Coast Guard announces that the First Coast Guard District’s Prevention Department has issued certificates of alternative compliance with the International Regulations for Preventing Collisions at Sea (72 COLREGS), to vessels of special construction or purpose that cannot fully comply with the light, shape, and sound signal provisions of 72 COLREGS without interfering with their special function.

This notice promotes the Coast Guard’s maritime safety and stewardship missions.

FOR FURTHER INFORMATION CONTACT: For information about this document call or email Mr. Kevin Miller, First Coast Guard District’s Towing Vessel and Barge Safety Specialist at (617) 223–8272 or [Kevin.L.Miller2@uscg.mil].

SUPPLEMENTARY INFORMATION:
Discussion

The United States is signatory to the International Maritime Organization’s International Regulations for Preventing Collisions at Sea, 1972, as amended. The special construction or purpose of some vessels makes them unable to comply with the light, shape, and sound signal provisions of 72 COLREGS.

Under statutory law 1 and Coast Guard regulation, 2 a vessel may instead meet alternative requirements and the vessel’s owner, builder, operator, or agent may apply for a certificate of alternative compliance (COAC). The Chief of the Inspections and Investigations Branch in each Coast Guard District office determines whether the vessel for which the COAC is sought complies as closely as possible with 72 COLREGS, and decides whether to issue the COAC. Once issued, a COAC remains valid until information supplied in the application for the COAC, or the terms of the COAC, become inapplicable to the vessel. Under the governing statute 3 and regulation, 4 the Coast Guard must publish notice of each COAC issued by the District office.

The First Coast Guard District issued COACs to the following vessels from January 2016 to May 2016:

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>JACK T MORAN</td>
<td>This certificate authorized the placement of the vessel’s sidelights in a position 13° 5.25′ from the vessel’s side, mounted to the top of the pilot house. Additionally, this certificate authorized the placement of the vessel’s stern light and towing lights in a position 3° 5.75′ aft of Frame 20, mounted on the top of the pilot house.</td>
</tr>
<tr>
<td>2016</td>
<td>GRACIE M REINAUER</td>
<td>This certificate authorized the placement of the vessel’s sidelights in a position 7° 1.75′ from the vessel’s side, mounted to the deckhouse overhead. This certificate authorized the placement of the vessel’s sidelights in a position 13° 5.25′ from the vessel’s side, mounted to the top of the pilot house. Additionally, this certificate authorized the placement of the vessel’s stern light and towing lights in a position 3° 5.75′ aft of Frame 20, mounted on the top of the pilot house.</td>
</tr>
<tr>
<td>2016</td>
<td>COOPER MORAN</td>
<td>This certificate authorized the placement of the vessel’s sternlight and towing lights in a position 3° 5.75′ aft of Frame 20, mounted on the top of the pilot house.</td>
</tr>
</tbody>
</table>

1 33 U.S.C. 1605.
2 33 CFR 81.3.
3 33 U.S.C. 1605(c).
4 33 CFR 81.18.
This notice is issued under authority of 5 U.S.C. 552(a), 33 U.S.C. 1605(c), and 33 CFR 81.18.


B. L. Black,
Captain, U.S. Coast Guard, Chief of Prevention, First Coast Guard District.

[FR Doc. 2016–13926 Filed 6–10–16; 8:45 am]

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency


Proposed Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: Comments are to be submitted on or before September 12, 2016.

ADDRESSES: The Preliminary FIRM, and where applicable, the FIS report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the tables below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

You may submit comments, identified by Docket No. FEMA–B–1621, to Rick Sachibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–7659, or (email) patrick.sachibit@fema.dhs.gov.

FOR FURTHER INFORMATION CONTACT: Rick Sachibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–7659, or (email) patrick.sachibit@fema.dhs.gov; or visit the FEMA Map Information eXchange (FMIX) online at www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP and also are used to calculate the appropriate flood insurance premium rates for new buildings built after the FIRM and FIS report become effective.

The communities affected by the flood hazard determinations are provided in the tables below. Any request for reconsideration of the revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at http://floodsrp.org/pdfs/srp_fact_sheet.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

(Dates and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at http://floodsrp.org/pdfs/srp_fact_sheet.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, “Flood Insurance.”)


Roy E. Wright,

I. Non-watershed-based studies:
Federal Emergency Management Agency, DHS.

SECURITY

BILLING CODE 9110–12–P

SUMMARY:

ACTION:

AGENCY:

Determinations

Changes in Flood Hazard

[Docket ID FEMA–2016–0002]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final notice.

SUMMARY: New or modified Base (1-percent annual chance) Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, and/or regulatory floodways (hereinafter referred to as flood hazard determinations) as shown on the indicated Letter of Map Revision (LOMR) for each of the communities listed in the table below are finalized. Each LOMR revises the Flood Insurance Rate Maps (FIRMs), and in some cases the Flood Insurance Study (FIS) reports, currently in effect for the listed communities. The flood hazard determinations modified by each LOMR will be used to calculate flood insurance premium rates for new buildings and their contents.

DATES: The effective date for each LOMR is indicated in the table below.

ADDRESSES: Each LOMR is available for inspection at both the respective Community Map Repository address listed in the table below and online through the FEMA Map Service Center at www.msc.fema.gov.

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–7659, or (email) patrick.sacbbit@fema.dhs.gov; or visit the FEMA Map Information eXchange (FMIX) online at www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final flood hazard determinations as shown in the LOMRs for each community listed in the table below. Notice of these modified flood hazard determinations has been published in newspapers of local circulation and 90 days have elapsed.

Yavapai County, Arizona, and Incorporated Areas

Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata

| Project: 16–09–1388S Preliminary Date: April 1, 2016 |
| City of Prescott .......................................................... Public Works Department, 201 South Cortez Street, Prescott, AZ 86303. |
| Unincorporated Areas of Yavapai County ........................ Yavapai County Flood Control District Office, 1120 Commerce Drive, Prescott, AZ 86305. |

Delaware County, Indiana, and Incorporated Areas

Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata

| Project: 14–05–6087S Preliminary Date: July 22, 2015 |
| City of Muncie ............................................................ Delaware County Building, 100 West Main Street, Room 206, Muncie, IN 47305. |
| Town of Yorktown ......................................................... Yorktown Town Hall, 9800 West Smith Street, Yorktown, IN 47396. |
| Unincorporated Areas of Delaware County ..................... Delaware County Building, 100 West Main Street, Room 206, Muncie, IN 47305. |

Tippecanoe County, Indiana, and Incorporated Areas

Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata

| Project: 14–05–6086S Preliminary Date: April 17, 2015 |
| City of Lafayette .......................................................... City Hall, 20 North 6th Street, Lafayette, IN 47901. |
| Town of Shadeland ........................................................ Shadeland Town Hall, 3125 South 175 West, Lafayette, IN 47909. |
| Unincorporated Areas of Tippecanoe County .................... Tippecanoe County Office, 20 North 3rd Street, Lafayette, IN 47901. |

Humboldt County, Iowa, and Incorporated Areas

Maps Available for Inspection Online at: http://www.fema.gov/preliminaryfloodhazarddata

| Project: 15–07–0903S Preliminary Date: July 30, 2015 |
| City of Bradgate .......................................................... City Hall, 202 South Garfield Street, Bradgate, IA 50520. |
| City of Dakota City ....................................................... City Hall, 26 5th Street South, Dakota City, IA 50529. |
| City of Humboldt .......................................................... City Hall, 29 5th Street South, Humboldt, IA 50548. |
| City of Livermore .......................................................... City Hall, 401 4th Avenue, Livermore, IA 50558. |
| City of Lu Verne .......................................................... City Hall, 109 Dewitt Street, Lu Verne, IA 50560. |
| City of Thor ................................................................. City Hall, 223 North Ann Street, Thor, IA 50591. |
| Unincorporated Areas of Humboldt County ..................... Humboldt County Courthouse, 203 Main Street, Dakota City, IA 50529. |
since that publication. The Deputy Associate Administrator for Mitigation has resolved any appeals resulting from this notification.

The modified flood hazard determinations are made pursuant to section 206 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 et seq., and with 44 CFR part 65.

For rating purposes, the currently effective community number is shown and must be used for all new policies and renewals.

The new or modified flood hazard information is the basis for the floodplain management measures that the community is required either to adopt or to show evidence of being already in effect in order to remain qualified for participation in the National Flood Insurance Program (NFIP). This new or modified flood hazard information, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities.

This new or modified flood hazard determinations are used to meet the floodplain management requirements of the NFIP and also are used to calculate the appropriate flood insurance premium rates for new buildings, and for the contents in those buildings. The changes in flood hazard determinations are in accordance with 44 CFR 65.4.

Interested lessees and owners of real property are encouraged to review the final flood hazard information available at the address cited below for each community or online through the FEMA Map Service Center at www.msc.fema.gov. (Catalog of Federal Domestic Assistance No. 97.022, "Flood Insurance."

Dated: May 19, 2016.

Roy E. Wright,

<table>
<thead>
<tr>
<th>State and county</th>
<th>Location and case No.</th>
<th>Chief executive officer of community</th>
<th>Community map repository</th>
<th>Effective date of modification</th>
<th>Community No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arkansas:</strong></td>
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<td></td>
</tr>
<tr>
<td>Benton, (FEMA Docket No.: B-1600).</td>
<td>City of Rogers (15–06–1201P).</td>
<td>The Honorable Greg Hines, Mayor, City of Rogers, 301 West Chestnut Street, Rogers, AR 72756.</td>
<td>City Hall, 301 West Chestnut Street, Rogers, AR 72756.</td>
<td>Apr. 5, 2016</td>
<td>050013</td>
</tr>
<tr>
<td>Pulaski, (FEMA Docket No.: B-1600).</td>
<td>City of Sherwood (14–06–4719P).</td>
<td>The Honorable Virginia Hillman Young, Mayor, City of Sherwood, P.O. Box 6256, Sherwood, AR 72124.</td>
<td>City Hall, 2199 East Kiehl Avenue, Sherwood, AR 72125.</td>
<td>Apr. 8, 2016</td>
<td>050235</td>
</tr>
<tr>
<td><strong>Colorado:</strong></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Weld, (FEMA Docket No.: B–1605).</td>
<td>Town of Milliken (15–08–00943P).</td>
<td>The Honorable Mitt Tokunaga, Mayor, Town of Milliken, 1101 Broad Street, Milliken, CO 80543.</td>
<td>Town Hall, 1101 Broad Street, Milliken, CO 80543.</td>
<td>May 4, 2016</td>
<td>080187</td>
</tr>
<tr>
<td>Weld, (FEMA Docket No.: B–1605).</td>
<td>Unincorporated areas of Weld County (15–08–0943P).</td>
<td>The Honorable Barbara Kirkmeyer, Chair, Weld County Board of Commissioners, P.O. Box 758, Greeley, CO 80632.</td>
<td>Weld County Planning and Zoning Department, 1555 North 17th Avenue, Greeley, CO 80631.</td>
<td>May 4, 2016</td>
<td>080266</td>
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<td><strong>Florida:</strong></td>
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<td>Bay, (FEMA Docket No.: B–1600).</td>
<td>City of Lynn Haven (15–04–6857P).</td>
<td>The Honorable Margo Anderson, Mayor, City of Lynn Haven, 825 Ohio Avenue, Lynn Haven, FL 32444.</td>
<td>Building Department, 907 Pennsylvania Avenue, Lynn Haven, FL 32444.</td>
<td>Apr. 4, 2016</td>
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<td>Bay, (FEMA Docket No.: B–1600).</td>
<td>Unincorporated areas of Bay County (15–04–6857P).</td>
<td>The Honorable Guy M. Tunnell, Chairman, Bay County Board of Commissioners, 840 West 11th Street, Panama City, FL 32401.</td>
<td>Bay County Planning and Zoning Department, 840 West 11th Street, Panama City, FL 32401.</td>
<td>Apr. 4, 2016</td>
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<td>Brevard, (FEMA Docket No.: B–1605).</td>
<td>City of Indian Harbour Beach (15–04–1302P).</td>
<td>The Honorable David Panicala, Mayor, City of Indian Harbour Beach, 2055 South Patrick Drive, Indian Harbour Beach, FL 32937.</td>
<td>City Hall, 2055 South Patrick Drive, Indian Harbour Beach, FL 32937.</td>
<td>Apr. 28, 2016</td>
<td>125116</td>
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<td>Broward, (FEMA Docket No.: B–1600).</td>
<td>City of Pompano Beach (15–04–4261P).</td>
<td>The Honorable Lamar Fisher, Mayor, City of Pompano Beach, 100 West Atlantic Boulevard, Pompano Beach, FL 33060.</td>
<td>Building Division, 100 West Atlantic Boulevard, Pompano Beach, FL 33060.</td>
<td>Apr. 6, 2016</td>
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<td>Broward, (FEMA Docket No.: B–1605).</td>
<td>City of Pompano Beach (15–04–7209P).</td>
<td>The Honorable Lamar Fisher, Mayor, City of Pompano Beach, 100 West Atlantic Boulevard, Pompano Beach, FL 33060.</td>
<td>Building Division, 100 West Atlantic Boulevard, Pompano Beach, FL 33060.</td>
<td>May 5, 2016</td>
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<td>Broward, (FEMA Docket No.: B–1600).</td>
<td>Unincorporated areas of Broward County (15–04–4261P).</td>
<td>The Honorable Tim Ryan, Mayor, Broward County Commission, 115 South Andrews Avenue, Room 413, Fort Lauderdale, FL 33301.</td>
<td>Broward County Building Permitting Division, 1 North University Drive, Suite 201A, Plantation, FL 33324.</td>
<td>Apr. 6, 2016</td>
<td>125093</td>
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<td>Charlotte, (FEMA Docket No.: B–1600).</td>
<td>Unincorporated areas of Charlotte County (15–04–9981P).</td>
<td>The Honorable Bill Truax, Chairman, Charlotte County Board of Commissioners, 18500 Murdock Circle, Suite 536, Port Charlotte, FL 33948.</td>
<td>Charlotte County Community Development Department, 18500 Murdock Circle, Port Charlotte, FL 33948.</td>
<td>Apr. 4, 2016</td>
<td>120061</td>
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<td>Hillsborough, (FEMA Docket No.: B–1600).</td>
<td>City of Plant City (15–04–0825P).</td>
<td>The Honorable Rick A. Lott, Mayor, City of Plant City, 302 West Reynolds Street, Plant City, FL 33563.</td>
<td>Engineering Division, 302 West Reynolds Street, Plant City, FL 33563.</td>
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<tr>
<td>Lee, (FEMA Docket No.: B–1600).</td>
<td>Town of Fort Myers Beach (15–04–6044P).</td>
<td>The Honorable Anita Cereceda, Mayor, Town of Fort Myers Beach, 2525 Estero Boulevard, Fort Myers Beach, FL 33931.</td>
<td>Public Works Department, 2525 Estero Boulevard, Fort Myers Beach, FL 33931.</td>
<td>Apr. 4, 2016</td>
<td>120673</td>
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<td>Lee, (FEMA Docket No.: B–1605).</td>
<td>Unincorporated areas of Lee County (15–04–7181P).</td>
<td>The Honorable Frank Mann, Chairman, Lee County Board of Commissioners, District 5, P.O. Box 398, Fort Myers, FL 33902.</td>
<td>Lee County Community Development Department, 1500 Monroe Street, Fort Myers, FL 33901.</td>
<td>May 4, 2016</td>
<td>125124</td>
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<td>Manatee, (FEMA Docket No.: B–1600).</td>
<td>Unincorporated areas of Manatee County (15–04–3585P).</td>
<td>The Honorable Betsy Benac, Chair, Manatee County Board of Commissioners, 1112 Manatee Avenue West, 9th Floor, Bradenton, FL 34205.</td>
<td>Manatee County Public Works Department, 1022 26th Avenue East, Bradenton, FL 34208.</td>
<td>Apr. 5, 2016</td>
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<td>Miami-Dade, (FEMA Docket No.: B–1605).</td>
<td>City of Miami (15–04–A406P).</td>
<td>The Honorable Tomás P. Regalado, Mayor, City of Miami, 3500 Pan American Drive, Miami, FL 33133.</td>
<td>Building Department, 444 Southwest 2nd Avenue, Miami, FL 33130.</td>
<td>Apr. 4, 2016</td>
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<td>Miami-Dade, (FEMA Docket No.: B–1605).</td>
<td>City of Sunny Isles Beach (15–04–8034P).</td>
<td>The Honorable George &quot;Bud&quot; Scholl, Mayor, City of Sunny Isles Beach, 18070 Collins Avenue, Sunny Isles Beach, FL 33160.</td>
<td>Building Department, 18070 Collins Avenue, Sunny Isles Beach, FL 33160.</td>
<td>Apr. 26, 2016</td>
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<td>Nassau, (FEMA Docket No.: B–1600).</td>
<td>Unincorporated areas of Nassau County (15–04–7268P).</td>
<td>The Honorable Pat Edwards, Chairman, Nassau County Board of Commissioners, 9619 Nassau Place, Suite 1, Yulee, FL 32097.</td>
<td>Nassau County Building Department, 96161 Nassau Place, Yulee, FL 32097.</td>
<td>Apr. 7, 2016</td>
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<td>Georgia:</td>
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<td>Columbia, (FEMA Docket No.: B–1600).</td>
<td>Unincorporated areas of Columbia County (15–04–3832P).</td>
<td>The Honorable Ron C. Cross, Chairman, Columbia County Board of Commissioners, P.O. Box 498, Evans, GA 30809.</td>
<td>Columbia County Engineering Services Department, 630 Ronald Reagan Drive, Building A, East Wing, Evans, GA 30809.</td>
<td>Apr. 7, 2016</td>
<td>130059</td>
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<td>Lee, (FEMA Docket No.: B–1605).</td>
<td>City of Leesburg (15–04–3743P).</td>
<td>The Honorable Jim Quinn, Mayor, City of Leesburg, P.O. Box 890, Leesburg, GA 31763.</td>
<td>City Hall, 107 Walnut Avenue South, Leesburg, GA 31763.</td>
<td>Apr. 21, 2016</td>
<td>130348</td>
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<td>Lee, (FEMA Docket No.: B–1605).</td>
<td>Unincorporated areas of Lee County (15–04–3743P).</td>
<td>The Honorable Rick Muggridge, Chairman, Lee County Board of Commissioners, 110 Starksville Avenue North, Leesburg, GA 31763.</td>
<td>Lee County Administration Building, 110 Starksville Avenue North, Leesburg, GA 31763.</td>
<td>Apr. 21, 2016</td>
<td>130122</td>
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<td>Mississippi: Rankin, (FEMA Docket No.: B–1600).</td>
<td>City of Richland (15–04–6709P).</td>
<td>The Honorable Mark Scarborough, Mayor, City of Richland, P.O. Box 180609, Richland, MS 39218.</td>
<td>City Hall, 380 Scarborough Street, Richland, MS 39218.</td>
<td>Apr. 21, 2016</td>
<td>280299</td>
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<td>North Carolina: Watauga, (FEMA Docket No.: B–1600).</td>
<td>Township of Blowing Rock (15–04–2144P).</td>
<td>The Honorable J.B. Lawrence, Mayor, Town of Blowing Rock, P.O. Box 47, Blowing Rock, NC 28605.</td>
<td>Planning and Inspections Department, 1038 Main Street, Blowing Rock, NC 28605.</td>
<td>Apr. 21, 2016</td>
<td>370252</td>
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<tr>
<td>Ohio: Franklin, (FEMA Docket No.: B–1605).</td>
<td>City of Columbus (15–05–3155P).</td>
<td>The Honorable Michael B. Coleman, Mayor, City of Columbus, 90 West Broad Street, 2nd Floor, Columbus, OH 43215.</td>
<td>City Hall, 1250 Fairwood Avenue, Columbus, OH 43206.</td>
<td>Apr. 20, 2016</td>
<td>390170</td>
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<td></td>
<td>City of Grandview Heights (15–05–3155P).</td>
<td>The Honorable Ray DeGraw, Mayor, City of Grandview Heights, 1016 Grandview Avenue, Grandview Heights, OH 43212.</td>
<td>City Hall, 1016 Grandview Avenue, Grandview Heights, OH 43212.</td>
<td>Apr. 20, 2016</td>
<td>390172</td>
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<tr>
<td>Oklahoma: Cleveland, (FEMA Docket No.: B–1600).</td>
<td>City of Moore (15–06–1047P).</td>
<td>The Honorable Stephen O. Eddy, Manager, City of Moore, 301 North Broadway Street, Moore, OK 73160.</td>
<td>City Hall, 301 North Broadway Street, Moore, OK 73160.</td>
<td>Apr. 27, 2016</td>
<td>400044</td>
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<td>City of Oklahoma City (15–06–1047P).</td>
<td>The Honorable Mick Cornett, Mayor, City of Oklahoma City, 200 North Walker Avenue, 3rd Floor, Oklahoma City, OK 73102.</td>
<td>Department of Public Works, 420 West Main Street, Suite 700, Oklahoma City, OK 73102.</td>
<td>Apr. 27, 2016</td>
<td>405378</td>
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<td></td>
<td>City of Edmond (15–06–3272P).</td>
<td>The Honorable Charles Lamb, Mayor, City of Edmond, P.O. Box 2970, Edmond, OK 73035.</td>
<td>Planning and Public Works Department, 10 South Littler, Edmond, OK 73084.</td>
<td>Apr. 7, 2016</td>
<td>400252</td>
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<tr>
<td></td>
<td>City of Oklahoma City (15–06–0551P).</td>
<td>The Honorable Mick Cornett, Mayor, City of Oklahoma City, 200 North Walker Avenue, 3rd Floor, Oklahoma City, OK 73102.</td>
<td>Planning Department, 420 West Main, 9th Floor, Oklahoma City, OK 73102.</td>
<td>May 4, 2016</td>
<td>405378</td>
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<tr>
<td>Ohio: Oklahoma City (15–06–3010P).</td>
<td>The Honorable J.B. Lawrence, Mayor, 1016 Grandview Heights, 1016 Grandview Avenue, Grandview Heights, OH 43212.</td>
<td>Department of Public Works, 420 West Main Street, Suite 700, Oklahoma City, OK 73102.</td>
<td>Department of Public Works, 420 West Main Street, Suite 700, Oklahoma City, OK 73102.</td>
<td>Apr. 26, 2016</td>
<td>405378</td>
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<tr>
<td>Tennessee: Knox, (FEMA Docket No.: B–1600).</td>
<td>City of Knoxville (15–04–6041P).</td>
<td>The Honorable Madeline Rogero, Mayor, City of Knoxville, P.O. Box 1631, Knoxville, TN 37901.</td>
<td>Stormwater Engineering Division, 400 Main Street, Suite 480, Knoxville, TN 37902.</td>
<td>Apr. 8, 2016</td>
<td>475434</td>
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DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
[Docket ID FEMA–2016–0002; Internal Agency Docket No. FEMA–B–1617]

Proposed Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: Comments are requested on proposed flood hazard determinations, which may include additions or modifications of any Base Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the preliminary FIRM, and where applicable, the FIS report that the Federal Emergency Management Agency (FEMA) has provided to the affected communities. The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). In addition, the FIRM and FIS report, once effective, will be used by insurance agents and others to calculate appropriate flood insurance premium rates for new buildings and the contents of those buildings.

DATES: Comments are to be submitted on or before September 12, 2016.

ADDRESSES: The Preliminary FIRM, and where applicable, the FIS report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the tables below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Information eXchange (FMIX) online at www.floodmaps.fema.gov or visit the FEMA Map Information eXchange (FMIX) online at www.floodmaps.fema.gov/fhm/fmix_main.html.

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact

<table>
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<tr>
<th>State and county</th>
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<th>Community No.</th>
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<tr>
<td>Bell, (FEMA Docket No.: B–1605).</td>
<td>City of Belton (15–06–2089P).</td>
<td>The Honorable Marion Grayson, Mayor, City of Belton, P.O. Box 120, Belton, TX 76513.</td>
<td>City Hall, 333 Water Street, Belton, TX 76513.</td>
<td>Apr. 29, 2016</td>
<td>480028</td>
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<tr>
<td>Dallas, (FEMA Docket No.: B–1605).</td>
<td>City of Carrollton (15–08–4000P).</td>
<td>The Honorable Matthew Marchant, Mayor, City of Carrollton, 1945 East Jackson Road, Carrollton, TX 75006.</td>
<td>Engineering Department, 1945 East Jackson Road, Carrollton, TX 75006.</td>
<td>Apr. 18, 2016</td>
<td>480167</td>
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<tr>
<td>Harris and, Waller, (FEMA Docket No.: B–1600).</td>
<td>City of Katy (15–06–1824P).</td>
<td>The Honorable Fabol R. Hughes, Mayor, City of Katy, P.O. Box 617, Katy, TX 77493.</td>
<td>City Hall, 910 Avenue C, Katy, TX 77493.</td>
<td>Apr. 22, 2016</td>
<td>480301</td>
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<td>Johnson, (FEMA Docket No.: B–1600).</td>
<td>City of Burleson (15–06–3404P).</td>
<td>The Honorable Ken Shetter, Mayor, City of Burleson, 141 West Renfro Street, Burleson, TX 76028.</td>
<td>Development Services Department, 141 West Renfro Street, Burleson, TX 76028.</td>
<td>Apr. 18, 2016</td>
<td>480359</td>
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<td>McLennan, (FEMA Docket No.: B–1600).</td>
<td>City of Waco (15–06–2410P).</td>
<td>The Honorable Malcolm Duncan Jr., Mayor, City of Waco, 300 Austin Avenue, Waco, TX 76702.</td>
<td>Engineering Services Department, 401 Franklin Avenue, Waco, TX 76701.</td>
<td>Apr. 4, 2016</td>
<td>480461</td>
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<tr>
<td>Virginia:</td>
<td>Unincorporated areas of Fauquier County (15–03–1168P).</td>
<td>The Honorable Chester W. Stirling, Chairman, Fauquier County Board of Supervisors, 10 Hotel Street, Suite 208, Warrenton, VA 20186.</td>
<td>Fauquier County Department of Community Development, 29 Ashby Street, Suite 310, Warrenton, VA 20186.</td>
<td>Apr. 28, 2016</td>
<td>510055</td>
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[FR Doc. 2016–13813 Filed 6–10–16; 8:45 am]

BILLING CODE 9110–12–P
stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP and also are used to calculate the appropriate flood insurance premium rates for new buildings built after the FIRM and FIS report become effective.

The communities affected by the flood hazard determinations are provided in the tables below. Any request for reconsideration of the revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at http://floodsrp.org/pdfs/srp_fact_sheet.pdf.

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

Dated: May 19, 2016.

Roy E. Wright,

I. Watershed-based studies:

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<th>Community</th>
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<td><strong>Lower Trinity Watershed</strong></td>
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<td>Maps Available for Inspection Online at: <a href="http://www.fema.gov/preliminaryfloodhazarddata">http://www.fema.gov/preliminaryfloodhazarddata</a></td>
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<tr>
<td>City of Mont Belvieu</td>
<td>City Hall, 11607 Eagle Drive, Mont Belvieu, TX 77523.</td>
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<td>City of Old River-Winfree</td>
<td>City Hall, 4818 North Farm to Market 565 Road, Old River-Winfree, TX 77523.</td>
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<td>Unincorporated Areas of Chambers County</td>
<td>Chambers County Road and Bridge Department, 201 Airport Road, Anahuac, TX 77514.</td>
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<td><strong>Liberty County, Texas, and Incorporated Areas</strong></td>
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<tr>
<td>City of Daisetta</td>
<td>Municipal Building, 410 B Main Street, Daisetta, TX 77533.</td>
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<tr>
<td>City of Dayton</td>
<td>City Hall, 117 Cook Street, Dayton, TX 77535.</td>
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<td>City of Dayton Lakes</td>
<td>Liberty County Engineering Department, 2103 Cos Street, Liberty, TX 77575.</td>
</tr>
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<td>City of Devers</td>
<td>Liberty County Engineering Department, 2103 Cos Street, Liberty, TX 77575.</td>
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<tr>
<td>City of Hardin</td>
<td>Hardin City Hall, 142 County Road 2010, Liberty, TX 77575.</td>
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<td>City of Liberty</td>
<td>City Hall, Inspection Department, 1829 Sam Houston Street, Liberty, TX 77575.</td>
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<tr>
<td>City of Mont Belvieu</td>
<td>City Hall, 11607 Eagle Drive, Mont Belvieu, TX 77523.</td>
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<tr>
<td>Town of Kenefick</td>
<td>Kenefick Town Hall, 3564 Farm to Market Road 1008, Dayton, TX 77535.</td>
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<td>Unincorporated Areas of Liberty County</td>
<td>County Engineering Department, 2103 Cos Street, Liberty, TX 77575.</td>
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<td>Unincorporated Areas of San Jacinto County</td>
<td>San Jacinto County Courthouse, Permit Department, 1 State Highway 150, Room 3, Coldspring, TX 77331.</td>
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II. Non-watershed-based studies:

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<th>Project: 11–04–1944S</th>
<th>Preliminary Date: January 15, 2016</th>
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<tr>
<td>City of Fernandina Beach</td>
<td>City Hall, 204 Ash Street, Fernandina Beach, FL 32034.</td>
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<tr>
<td>Unincorporated Areas of Nassau County</td>
<td>Nassau County Building Department, 96161 Nassau Place, Yulee, FL 32097.</td>
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**Volusia County, Florida, and Incorporated Areas**

Maps Available for Inspection Online at: [http://www.fema.gov/preliminaryfloodhazarddata](http://www.fema.gov/preliminaryfloodhazarddata)

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<td>City of Daytona Beach</td>
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<td>City of Port Orange</td>
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<td>City of South Daytona</td>
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<td>Town of Ponce Inlet</td>
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<td>Unincorporated Areas of Volusia County</td>
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**Colleton County, South Carolina, and Incorporated Areas**

Maps Available for Inspection Online at: [http://www.fema.gov/preliminaryfloodhazarddata](http://www.fema.gov/preliminaryfloodhazarddata)

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<td>City of Walterboro</td>
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<td>Town of Cottageville</td>
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<td>Town of Smoaks</td>
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<td>Town of Williams</td>
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<td>Unincorporated Areas of Colleton County</td>
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**Lexington County, South Carolina, and Incorporated Areas**

Maps Available for Inspection Online at: [http://www.fema.gov/preliminaryfloodhazarddata](http://www.fema.gov/preliminaryfloodhazarddata)

<table>
<thead>
<tr>
<th>Project: 10–04–4870S Preliminary Date: October 30, 2015</th>
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<td>City of Cayce</td>
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<td>City of Columbia</td>
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<td>Town of Springdale</td>
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<td>Town of Swansea</td>
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<td>Unincorporated Areas of Lexington County</td>
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DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice lists communities where the addition or modification of Base Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, or the regulatory floodway (hereinafter referred to as flood hazard determinations), as shown on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports, prepared by the Federal Emergency Management Agency (FEMA) for each community, is appropriate because of new scientific or technical data. The FIRMs, and where applicable, portions of the FIS report, have been revised to reflect these flood hazard determinations through issuance of a Letter of Map Revision (LOMR), in accordance with title 44, part 65 of the Code of Federal Regulations (44 CFR part 65). The LOMR will be used by insurance agents and others to calculate appropriate flood insurance premium rates for new buildings and the contents of those buildings. For rating purposes, the currently effective community number is shown in the table below and must be used for all new policies and renewals.

DATES: These flood hazard determinations will become effective on the dates listed in the table below and revise the FIRMs panels and FIS report in effect prior to this determination for the listed communities.

From the date of the second publication of notification of these changes in a newspaper of local circulation, any person has 90 days in which to request through the community that the Deputy Associate Administrator for Mitigation reconsider the changes. The flood hazard determination information may be changed during the 90-day period.

ADDRESS: The affected communities are listed in the table below. Revised flood hazard information for each community is available for inspection at both the online location and the respective community map repository address listed in the table below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

Submit comments and/or appeals to the Chief Executive Officer of the community as listed in the table below.

FOR FURTHER INFORMATION CONTACT: Rick Sachibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–7659, or (email) patrick.sachibit@fema.dhs.gov; or visit the FEMA Map Information eXchange (FMIX) online at www.floodmaps.fema.gov/fhm/fmx_main.html.

SUPPLEMENTARY INFORMATION: The specific flood hazard determinations are not described for each community in this notice. However, the online location and local community map repository address where the flood hazard determination information is available for inspection is provided. Any request for reconsideration of flood hazard determinations must be submitted to the Chief Executive Officer of the community as listed in the table below.

The modifications are made pursuant to section 201 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 et seq., and with 44 CFR part 65.

The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP).

These flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. The flood hazard determinations are in accordance with 44 CFR 65.4.

The affected communities are listed in the following table. Flood hazard determination information for each community is available for inspection at both the online location and the respective community map repository address listed in the table below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at www.msc.fema.gov for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, “Flood Insurance.”)

Dated: May 19, 2016.

Roy E. Wright,

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<tr>
<th>State and county</th>
<th>Location and case No.</th>
<th>Chief executive officer of community</th>
<th>Community map repository</th>
<th>Online location of letter of map revision</th>
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<tr>
<td>Mohave ..........</td>
<td>Unincorporated areas of Mohave County (15–09–3028P),</td>
<td>The Honorable Leona Bishop, Chair, Board of Supervisors, Mohave County, 700 West Beale Street, Kingman, AZ 86402.</td>
<td>County Administration Building, 700 West Beale Street, Kingman, AZ 86402.</td>
<td><a href="http://www.msc.fema.gov/lomc">http://www.msc.fema.gov/lomc</a></td>
<td>Jun. 20, 2016 .....</td>
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<tr>
<td>Pima</td>
<td>City of Tucson (15–09–2996P).</td>
<td>The Honorable Jonathan Rothschild, Mayor, City of Tucson, City Hall, 255 West Alameda Street, 10th Floor, Tucson, AZ 85701.</td>
<td>Regional Flood Control District, 210 North Stone Avenue, 9th Floor, Tucson, AZ 85701</td>
<td><a href="http://www.msc.fema.gov/lomc">http://www.msc.fema.gov/lomc</a></td>
<td>Jul. 26, 2016 ......</td>
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<tr>
<td>Pima</td>
<td>City of Tucson (16–09–0139P).</td>
<td>The Honorable Jonathan Rothschild, Mayor, City of Tucson, City Hall, 255 West Alameda Street, 10th Floor, Tucson, AZ 85701.</td>
<td>Planning and Development Services, 201 North Stone Avenue, 1st Floor, Tucson, AZ 85701</td>
<td><a href="http://www.msc.fema.gov/lomc">http://www.msc.fema.gov/lomc</a></td>
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<td>Pima</td>
<td>Unincorporated areas of Pima County (15–09–2996P).</td>
<td>The Honorable Sharon Bronson, Chair, Board of Supervisors, Pima County, 130 West Congress Street, 11th Floor, Tucson, AZ 85701.</td>
<td>Regional Flood Control District, 210 North Stone Avenue, 9th Floor, Tucson, AZ 85701</td>
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<td>Pima</td>
<td>Unincorporated areas of Pima County (15–09–3190P).</td>
<td>The Honorable Sharon Bronson, Chair, Board of Supervisors, Pima County, 130 West Congress Street, 11th Floor, Tucson, AZ 85701.</td>
<td>Regional Flood Control District, 210 North Stone Avenue, 9th Floor, Tucson, AZ 85701</td>
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<tr>
<td>California</td>
<td>Alameda ...........</td>
<td>The Honorable Bill Harrison, Mayor, City of Fremont, 3300 Capitol Avenue, Fremont, CA 94538.</td>
<td>City Hall, 3300 Capitol Avenue, Fremont, CA 94538.</td>
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<tr>
<td>Ventura</td>
<td>City of Simi Valley (15–09–3074P).</td>
<td>The Honorable Bob Huber, Mayor, City of Simi Valley, 2929 Tapo Canyon Road, Simi Valley, CA 93063.</td>
<td>City Hall, 2929 Tapo Canyon Road, Simi Valley, CA 93063.</td>
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**SUMMARY:** This notice announces that HUD’s Office of Policy Development and Research (PD&R) has the authority to accept unsolicited research proposals that address current research priorities. In accordance with statutory requirements, the research projects must be funded at least 50 percent by philanthropic entities or Federal, state, or local government agencies. This notice announces that HUD is accepting research proposals and provides a general description of information that should be included in any research proposal.

**DATES:** There are no set deadlines. Proposals may be submitted at any time and will be evaluated as they are received; however, available funds will be awarded as proposals are received, evaluated, and approved, until funds are exhausted.

**FOR FURTHER INFORMATION CONTACT:** Questions should be directed by email to ResearchPartnerships@hud.gov, by telephone to Madlyn Wohlman-Rodriguez at 202–402–5939 or Kinnard Wright at 202–402–7495, or by mail to

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**

[Docket No. FR–5952–N–01]

**Authority To Accept Unsolicited Proposals for Research Partnerships**

**AGENCY:** Office of the Assistant Secretary for Policy Development and Research, HUD.

**ACTION:** Notice.
the Department of Housing and Urban Development, Office of University Partnerships, 451 7th Street SW., Room 8226, Washington, DC 20410. These are not toll-free numbers. Persons with speech or hearing impairments may access these number through TTY by calling the Federal Relay Service, toll-free, at 800–877–8339.

I. Funding Opportunity Description

A. Program Description, Requirements and Purpose

HUD developed the Research Partnerships vehicle to allow greater flexibility in addressing important policy questions and to better utilize external expertise in evaluating the local innovations and effectiveness of programs impacting residents of urban, suburban, rural and tribal areas.

Through this notice, HUD is able to accept unsolicited research proposals that address current research priorities and allow PD&R to participate in innovative research projects that inform HUD’s policies and programs. These projects are meant to align with PD&R’s research priorities and help the HUD answer key policy and programmatic questions in ways that can inform new policy and program development efforts.

B. Authority

The Consolidated Appropriations Act, 2016, (Pub. L. 114–53, approved December 11, 2015) (FY 2016 appropriation) authorizes PD&R to enter into non-competitive cooperative agreements for research projects that are aligned with PD&R’s research priorities and that will help inform HUD’s policies and programs.

C. Program Description

1. Research Priorities. The two primary documents that provide a framework for HUD’s research priorities are the FY2010–2015 Strategic Plan (available at, http://portal.hud.gov/hudportal/HUD?src=/program_offices/cfo/stratplan), which describes the Department’s mission and strategic goals for program activities, and the HUD Research Roadmap (available at, https://www.huduser.gov/portal/about/pdr_roadmap.html), which takes the strategic plan as a starting point and integrates extensive input from diverse stakeholders groups to define a five-year research agenda. PD&R developed and published this research agenda to focus research resources on timely, policy-relevant research questions that lie within the Department’s area of comparative advantage. This focus on comparative advantage has a corollary, which is the accompanying need for PD&R to collaborate with other research organizations to support their comparative advantage in areas that are mutually important.

The authority that Congress provided HUD to enter into noncompetitive cooperative agreements for research is a central tool for fulfilling the Roadmap’s vision for research collaboration. Research proposals should be developed that inform important policy and program objectives of HUD that are not otherwise being addressed and that focus on one of HUD’s research priorities, including:

(1) Strengthening Housing Markets: Homeownership and Housing Finance

HUD is interested in research in many areas of homeownership and housing finance, which include, but are not limited to:

(a) Improving outcomes for struggling homeowners and communities in the areas of foreclosures, mortgage modification protocols, and real-estate owned properties;

(b) Finding ways that are safer for both borrowers and lenders to extend mortgage credit to first-time homebuyers and homeowners with less-than-stellar credit; and

(c) Updating federal support structures for single-family and multifamily housing finance in a reformed housing finance system.

(2) Affordable Quality Rental Housing

HUD is interested in research that improves the efficiency and effectiveness of HUD’s housing programs (e.g., public housing, Housing Choice Vouchers, assisted multifamily programs, and FHA insurance) which include, but are not limited to:

(a) Improving program operations and responses to changing market conditions;

(b) Identifying rent subsidy approaches that could more efficiently and beneficially meet the full range of housing needs; and

(c) Better understanding how HUD’s programs are affected by tenant and landlord behavior.

(3) Housing as a platform for improving quality of life

HUD is interested in how HUD-provided housing assistance can be best used to improve quality of life, including, but not limited to:

(a) Improving educational outcomes and early learning and development;

(b) Improving health outcomes;

(c) Increasing economic security and self-sufficiency; and

(d) Improving housing stability for vulnerable populations, including the elderly, people with disabilities, homeless families and individuals, and those individuals and families at risk of becoming homeless.

2. HUD Assets. HUD has made, and continues to make, significant investments in “Research Assets,” as described below, including program demonstrations and in the production of datasets, that PD&R is interested in seeing leveraged in ways that may, or may not, be specifically referenced in the Research Roadmap or HUD’s Strategic Plan. Such studies demonstrate a broader usefulness of HUD’s Research Assets that further increases the return on these investments for the taxpayer.

2. HUD’s Research Assets. In considering potential research partnerships, PD&R urges organizations to consider ways to take advantage of key research assets that the Research Roadmap identifies as part of HUD’s comparative advantage.

(1) HUD demonstrations. HUD values demonstrations as a method for evaluating new policy and program initiatives and significantly advancing evidence-based policy, especially when rigorous random-assignment methods are feasible. HUD also is interested in research opportunities that take advantage of completed and ongoing demonstrations. For example, the Moving to Opportunity demonstration was completed in 2011, but researchers
continue to answer relevant policy questions using the existing data. Examples of demonstrations that are underway include Choice Neighborhoods, Family Options, the Rental Assistance Demonstration, Pre-Purchase Counseling Outcome Study, and Rent Reform. Electronic versions of published HUD research can be found at: https://www.huduser.gov/portal/publications/pdrpubli.html.

(2) HUD data infrastructure. HUD makes significant investments to improve and support the nation’s housing data, so submitting institutions are encouraged to consider opportunities to use HUD-sponsored survey data and administrative data. The American Housing Survey (AHS) is one of HUD’s largest research investments. The AHS provides a wealth of data on size and composition of the nation’s housing inventory that researchers could use more effectively to address questions about housing market dynamics. The AHS, the 2012 Rental Housing Finance Survey, and other datasets sponsored by PD&R, along with HUD administrative data made available by PD&R, represent HUD research assets that PD&R encourages the use, and further analysis of, through Research Partnerships. Data assets are described at: https://www.huduser.gov/portal/pdrdatas_landing.html.

D. Other Requirements

1. Protection of Human Research Subjects. HUD will require successful applicants to comply with requirements of the federal Common Rule (45 CFR part 46) for protecting human research subjects when applicable. Compliance may require grantees to seek review and approval of research plans by an Institutional Review Board (IRB). For research requiring an IRB review, work plans shall identify the IRB that the awardee will use and factor in the necessary cost and time involved in that review. HUD will require awardees to provide appropriate assurances and certifications of compliance before human subjects research begins.

2. Privacy. Submission of any information to databases (whether Web site, computer, paper, or other format) of personal identifiable information is subject to the protections of the Privacy Act of 1974. You should also check to ensure you meet state and local privacy regulations.

3. Cost Sharing. The Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, set forth in 2 CFR part 200, apply to this Federal award. Cost sharing or matching means the portion of project costs not paid by Federal funds (unless otherwise authorized by Federal statute.) Applicants should refer to 2 CFR 200.306 for specific requirements.

4. Data Only Requests. For those who are interested in requesting only HUD data (no funds), a HUD data license agreement will be required. To obtain a copy of the data license application go to the following Web site: https://www.huduser.gov/portal/research/pdr_data-license.html. Please be advised that a data license will only be considered for research that is in alignment with one of the research priorities listed in this notice. Applications may be submitted to HUD at DataLicense@hud.gov. Upon receipt, the application will be forwarded to the appropriate PD&R office for review and approval.

II. Description of Awards

A. Available Funds

HUD is making approximately $1 million available for Research Partnerships. Additional funds may become available for award as a result of HUD’s efforts to recapture unused funds or use carryover funds. Use of these funds will be subject to statutory constraints.

B. Number of Awards

The number of awards will be based on the number of proposals HUD reviews, approves, and funds.

C. Period of Performance

The period of performance will be determined by the applicant’s proposal and subject to negotiation by HUD.

D. Type of Funding Instrument

Funding Instrument Type: Cooperative Agreement.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants under this Notice include academic institutions, philanthropic entities, state and units of local government, not-for-profit and for-profit institutions located in the United States. For-profit firms are not allowed to earn a fee (i.e., make a profit from the project).

B. Cost Sharing

Cost sharing is required for research projects to be eligible for funding through HUD’s non-competitive cooperative agreement authority. Research projects must include at least a 50 percent cost share from philanthropic organizations, Federal, state, local government agencies, or a combination of these entities. For the purposes of the cost-sharing requirement, HUD defines a philanthropic entity as the subset of 501(c)(3) organizations that directly fund research activities. These include private foundations, educational institutions that may have a separate foundation, public charities, and operating foundations. Philanthropic entities may include foreign entities. HUD will not count waiver of overhead or similar costs as cost-sharing contributions.

IV. Proposal and Submission Information

A. Proposal Submission

All proposals should be submitted electronically to ResearchPartnerships@hud.gov, or by mail to: U.S. Department of Housing and Urban Development, Office of University Partnerships, 451 7th Street SW., Room 8226, Washington, DC 20410, ATTENTION: Research Partnerships

B. Content and Form of Proposal Submission

Proposals should contain sufficient information for PD&R to identify whether the research would meet statutory requirements for cost sharing and alignment with the research priorities identified in Section I.C.1 of this Notice. At a minimum, proposals must include:

1. Proposal Abstract. Applicants should provide a Proposal Abstract with the project title, the names and affiliations of all investigators, a summary of the objectives, study design and expected results, and the total funds requested.

2. Points of Contact. Applicants should clearly identify the name of the entity(s) submitting the proposal and detailed contact information for the point of contact.

3. Key Personnel. Applicants should provide information on key personnel that will be engaged with the project. HUD will assess the qualifications of key personnel to carry out the proposed study as evidenced by academic and professional background, publications, and recent (within the past 5 years) research experience. The proposed Principal Investigator must directly represent and be compensated directly by the applicant for his or her role in the proposed study. Publications and/or research experience are considered relevant if they required the acquisition and use of knowledge and skills that can be applied in the planning and execution of the technical study that is proposed.

4. Research Proposal Description. Applicants should provide a clear
description of the research project, including the methodology being used, and its alignment with the PD&R research priorities identified. Specific components should include:

1. Clearly and thoroughly describe your proposed study and its design, and identify the major objectives;
2. The study should be presented as a logical sequence of steps or phases with individual tasks described for each phase;
3. Your narrative should reflect the performance and successfully achieve clearly feasible to complete the study deliverables and associated timeframes; and
4. Describe the statistical basis for your study design and demonstrate that you would have adequate statistical power to test your stated hypotheses and achieve your study objectives;
5. Discuss your plans for data management, analysis, and archiving; and
6. You should identify any important “decision points” in your study plan;
7. You should describe/list deliverables and associated timeframes; and
8. You should demonstrate that it is clearly feasible to complete the study within the proposed period of performance and successfully achieve your objectives.

Budget. Applicants should provide a detailed budget with line items including the amount of the HUD share and the contributions of any partners (cost sharing component) and/or the submitting institution. HUD strongly encourages using form HUD–424CBW to detail your budget request. The form is available at: https://www.hudexchange.info/resource/304/hud-form-424cbw/. Proposals for research partnerships that have already been submitted to HUD as part of a grant competition are ineligible as the subject of a non-competitive cooperative agreement.

C. Review and Selection Process

1. Proposals that meet all of the threshold requirements will be eligible for review and rating.
2. Proposals will be reviewed by individuals who are knowledgeable in the field covered by the research proposal.
3. As required by the statutory authority within the appropriations bill, HUD will report each award provided through a cooperative agreement in the Federal Funding Accountability and Transparency Act Sub-award Reporting System created under the Federal Funding Accountability and Transparency Act of 2006.

DATED: June 7, 2016.

Matthew E. Ammon
General Deputy Assistant Secretary for Policy Development and Research.

[FR Doc. 2016–13945 Filed 6–10–16; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–5921–N–07]

Implementation of the Privacy Act of 1974, as Amended New System of Records, Choice Neighborhoods Evaluation

AGENCY: Office of Policy Development and Research, HUD.

ACTION: New system of records notice.

SUMMARY: Pursuant to the Privacy Act of 1974 (5 U.S.C. 552a(e)(4)), as amended, notice is hereby given that the Department of Housing and Urban Development (HUD), Office of Policy Development and Research provides public notice regarding its Choice Neighborhoods Evaluation System of Records. This evaluation will study HUD’s Choice Neighborhoods program, which is intended to help people living in HUD-assisted housing developments and surrounding distressed neighborhoods improve their quality of life. This study will allow the Department to evaluate the benefits and impacts of the Choice Neighborhoods program, to determine whether it accomplishes its goals, and to inform policymaking decisions. The data sources covered in this notice are gathered from Federal, local, and private databases, and directly from individuals that the program intends to help. A more detailed description of the proposed requirements is contained in the purpose section of this notice.

DATES: Effective Date: The notice will be effective July 13, 2016, unless comments are received that would result in a contrary determination. [Comments due date]: July 13, 2016.

ADDRESSES: Interested persons are invited to submit comments regarding this notice to the Rules Docket Clerk, Office of General Counsel, Department of Housing and Urban Development, 451 Seventh Street SW., Room 10276, Washington, DC 20410. Communications should refer to the above docket number and title. Fixed comments are not accepted. A copy of each communication submitted will be available for public inspection and copying between 8 a.m. and 5 p.m. weekdays at the above address.

FOR FURTHER INFORMATION CONTACT: Frieda B. Edwards, Acting Chief Privacy Officer, 451 Seventh Street SW., Room 10139, Washington, DC 20410, telephone number 202–402–6828 (this is not a toll-free number). Individuals who are hearing- and speech-impaired may access this number via TTY by calling the Federal Relay Service at 800–877–8339 (this is a toll-free number).

SUPPLEMENTARY INFORMATION: The new SORN will encompass data collected by the Department’s Office of Policy Development and Research in order to evaluate the Choice Neighborhoods program. The Choice Neighborhoods program supports the implementation of plans that transform distressed HUD housing and address challenges impacting people living in surrounding distressed areas: Boston, Chicago, New Orleans, San Francisco, and Seattle. The new notice states the name and location of the record system, the authority for and manner of its operations, the categories of individuals that it covers, the type of records that it contains, the sources of the information for the records, the routine uses made of the records, and the types of exemptions in place for the records. The notice also includes the business address of the HUD officials who will inform interested persons of how they may gain access to and/or request amendments to records pertaining to themselves.

Publication of this notice allows the Department to provide new information about its system of records notices in a clear and cohesive format. The Privacy Act places on Federal agencies principal responsibility for compliance with its provisions, by requiring Federal agencies to safeguard an individual’s records against an invasion of personal privacy; protect the records contained in an agency system of records from unauthorized disclosure; ensure that the records collected are relevant, necessary, current, and collected only for their intended use; and adequately safeguard the records to prevent misuse of such information. In addition, this notice demonstrates the Department’s focus on industry best practices and laws that protect interest such as personal privacy and privacy protect records from inappropriate release.

Pursuant to the Privacy Act and the Office of Management and Budget (OMB) guidelines, a report of the amended system of records was submitted to OMB, the Senate Committee on Homeland and Security and Governmental Affairs, and the House Committee on Oversight and


Patricia A. Hoban-Moore,
Senior Agency Official for Privacy.

SYSTEM OF RECORDS NO.:
PD&R/RRE.07

SYSTEM NAME:
Choice Neighborhoods Evaluation.

SYSTEM LOCATION:
Department of Housing and Urban Development, 451 Seventh Street SW., Washington, DC 20410; HUD Data Center, Charleston, West Virginia; Urban Institute, 2100 M Street NW., Washington, DC 20037, and at the location of the service providers under contract with HUD.

CATEGORIES OF INDIVIDUALS COVERED BY THIS SYSTEM:
HUD program participants, and other residents (not assisted by HUD) living in Choice Neighborhoods program cities: Boston, Chicago, New Orleans, San Francisco, and Seattle.

CATEGORIES OF RECORDS IN THE SYSTEM:

The data sets will contain the following categories of records:

- Responses to baseline survey: Include participants name, date of birth, address, phone number, and email address, demographic data, economic characteristics, educational characteristics, health, subjective wellbeing, and information about the household member living environment, contact information of a family member or friend who could help locate the survey respondent in the future if they move, and unique study identifier assigned to the program participant.
- Responses to follow-up survey: Include participants name, date of birth, address, phone number, and email addresses, demographic data, economic characteristics, educational characteristics, health, subjective wellbeing, and information about the household member living environment, contact information of a family member or friend who could help locate the survey respondent in the future if they move. The follow-up survey will collect information very similar to the baseline survey, in order to show how the experience of Choice Neighborhoods residents has changed over time, and

unique study identifier assigned to the program participant.
- Administrative data: Include data on households available through HUD administrative data, collections will be brought into the dataset directly from HUD's Inventory Management System, including information pertaining to the participating family structure, household size, household income, race and demographics, address, and participation in other HUD programs.
- Locational data: Include data such as the address and location of participating household. These data sets will be drawn from a variety of sources, including the National Change of Address database, proprietary databases such as Accurint, and directly from participating households.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:
Section 502(g) of the Housing and Urban Development Act of 1970 (Pub. L. 91–609) (12 U.S.C. 1701z–1; 1701z–2(d) and (g)).

PURPOSE(S):
The purpose of the Choice Neighborhoods Evaluation is to track the effects of the Choice Neighborhoods program in the five cities: Boston, Chicago, New Orleans, San Francisco, and Seattle that received implementation grants in 2011. Choice Neighborhoods is meant to transform distressed neighborhoods, with a focus on HUD assisted developments (public housing or project-based section 8). This transformation is intended to help the people living in the targeted developments and surrounding distressed neighborhoods improve their quality of life. The evaluation will track the experiences of a statistical sample of individuals living in five Choice Neighborhoods sites, to determine whether the program improves their quality of life in a variety of dimensions, including employment, education, health, and subjective wellbeing. This analysis will inform HUD leadership, policymakers, and HUD partners that implement community development programs. The data collected for the Choice Neighborhood Evaluation will be used and stored solely for research purposes, and will not be used to identify individuals or make decisions that affect the rights, benefits, or privileges of specific individuals. The data in this system will include location data, which will be used to analyze the neighborhoods in which people affected by the initiative live. The data in the system will also include information about household composition, income, education, and many quality of life measures, which will be used to analyze the extent to which people's lives are being improved by the Choice Neighborhoods Program. The data in this system will be analyzed using statistical methods and only reported in the aggregate. Resulting reports will not disclose or identify any individuals or sensitive personal information. The Choice Neighborhoods Evaluation is in direct service of the mission of HUD's Office of Policy Development and Research, which is to "inform policy development and implementation to improve life in American communities through conducting, supporting, and sharing research, surveys, demonstrations, program evaluations, and best practices."

ROUTINE USE OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, HUD may disclose information contained in this system of records:

1. To a recipient who has provided the agency with advance, adequate written assurance that the record provided from this system of records will be used solely for statistical research or reporting purposes. Records under this condition will be disclosed or transferred in a form that does not identify an individual.

2. To contractors, grantees, experts, consultants, Federal agencies, and non-Federal entities, including, but not limited to, State and local governments, and other research institutions or their parties, and entities and their agents with whom HUD has a contract, service agreement, grant, or cooperative agreement, when necessary to accomplish an agency function, related to this system of records for the purposes of statistical analysis and research in support of program operations, management, performance monitoring, evaluation, risk management, and policy development, or to otherwise support the Department's mission. Records under this routine use may not be used in whole or in part to make decisions that affect the rights, benefits or privileges of specific individuals. The results of the matched information may not be disclosed in identifiable form.

3. To appropriate agencies, entities, and persons when:
   a) HUD suspects or has confirmed that the security or confidentiality of information in a system of records has been compromised;
   b) HUD has determined that as a result of the suspected or confirmed compromise, there is a risk of harm to
system of records, your request must conform to the Privacy Act regulations is open to the Public.

The Department’s rules for contesting contents of records and appealing initial denials appear in 24 CFR part 16.3,

“Procedures for inquiries.” Additional assistance may be obtained by contacting Frieda B. Edwards, Acting Chief Privacy Officer, 451 Seventh Street SW., Room 10139, Washington, DC 20410, telephone number 202–402–6828. When seeking records about yourself from this system of records or any other HUD system of records, your request must

**CONTESTING RECORD PROCEDURES:**

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settled in 24 CFR part 16. You must first verify your identity by providing your full name, current address, and date and place of birth. You must sign your request, and your signature must either be notarized or submitted under 28 U.S.C. 1746, a law that permits statements to be made under penalty of perjury as a substitute for notarization. In addition, your request should:

a. Explain why you believe HUD would have information on you.
b. Identify which office of HUD you believe has the records about you.
c. Specify when you believe the records would have been created.
d. Provide any other information that will help the Freedom of Information Act (FOIA) staff determine which HUD office may have responsive records.

If your request is seeking records pertaining to another living individual, you must obtain a statement from that individual certifying their agreement for you to access their records. Without the above information, the HUD FOIA office may not be able to conduct an effective search, and your request may be denied due to lack of specificity or lack of compliance with applicable regulations.

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DEPARTMENT OF THE INTERIOR
United States Geological Survey

Nomination Period for Northeastern State Government Members of the Advisory Committee on Climate Change and Natural Resource Science


SUMMARY: The Advisory Committee on Climate Change and Natural Resource Science (Committee) has a vacancy for a representative from state government in the region covered by the Northeast Association of Fish and Wildlife Agencies.

DATES: Written nominations must be received by July 13, 2016.

ADDRESSES: Send nominations to: Robin O’Malley, Policy and Partnership Coordinator, National Climate Change and Wildlife Science Center, U.S. Geological Survey, 12201 Sunrise Valley Drive, Mail Stop 516, Reston, VA 20192, ronmalley@usgs.gov.

FOR FURTHER INFORMATION CONTACT: Robin O’Malley, Policy and Partnership Coordinator, National Climate Change and Wildlife Science Center, U.S. Geological Survey, 12201 Sunrise Valley Drive, Mail Stop 516, Reston, VA 20192, ronmalley@usgs.gov.

SUPPLEMENTARY INFORMATION: The Committee provides advice on matters and actions relating to the establishment and operations of the U.S. Geological Survey National Climate Change and Wildlife Science Center and the DOI Climate Science Centers. See: https://ncwcs.usgs.gov/acccnrs for more information. See http://www.neafwa.org/members.html for the area covered by the Northeast Association of Fish and Wildlife Agencies. The committee charter calls for representatives from state government (see below for membership categories), and the historically had four such representatives, one from each of the four regional associations of state fish and wildlife management agencies. At present, there is no representative from the Northeastern U.S. and the Department seeks to fill this vacancy.

Nominations should include a resume that describes the nominee’s qualifications in enough detail to enable us to make an informed decision regarding meeting the membership requirements of the Committee and to contact a potential member.

The Committee is composed of approximately 25 members from the Federal Government, and the following interests: (1) State and local governments, including state membership entities; (2) Non-governmental organizations, including those whose primary mission is professional and scientific and those whose primary mission is conservation and related scientific and advocacy activities; (3) American Indian tribes and other Native American entities; (4) Academia; (5) Landowners, businesses, and organizations representing landowners or businesses.

In addition, the Committee may include scientific experts, and will include rotating representation from one or more of the institutions that host the DOI Climate Science Centers.

The Committee will meet approximately 2–4 times annually, and at such times as designated by the DFO. The Secretary of the Interior will appoint members to the Committee. Members appointed as special Government employees are required to file on an annual basis a confidential financial disclosure report.

No individual who is currently registered as a Federal lobbyist is eligible to serve as a member of the Committee.

Robin O’Malley,
Designated Federal Officer, ACCCNRS.

Dated: June 8, 2016.
John C. Brock,
Program Coordinator, NCGMP, Designated Federal Officer.

Final Environmental Impact Statement for the Restoration of Native Species in High Elevation Aquatic Ecosystems Plan, Sequoia and Kings Canyon National Parks, Fresno and Tulare Counties, California

AGENCY: National Park Service, Interior.

SUMMARY: The National Park Service (NPS) has prepared a Plan and Final Environmental Impact Statement for the restoration of native species in high elevation aquatic ecosystems within Sequoia and Kings Canyon National Parks (SEKI)—(Restoration Plan/Final EIS). The Restoration Plan/Final EIS will guide management actions by the NPS to restore and conserve the native species diversity and ecological function of selected high elevation aquatic ecosystems that have been adversely impacted by human activities and to increase the resistance and resilience of these species and ecosystems to human induced environmental modifications, such as nonnative fish, disease, and climate change. The Restoration Plan/Final EIS would be implemented over a period of 20 to 35 years, depending on the alternative selected, with an internal evaluation of management effectiveness scheduled every 5 to 10 years.

DATES: The NPS will execute a Record of Decision not sooner than 30 days from the date of publication of the U.S. Environmental Protection Agency’s notice of availability for the Restoration Plan/Final EIS in the Federal Register.


Electronic versions of the complete document are available online at http://parkplanning.nps.gov/aquatics. Request printed documents or CDs through email (seki_planning@nps.gov) (type “Restoration Plan/Final EIS” in the subject line) or telephone (559)565–3102.

SUPPLEMENTARY INFORMATION: The National Park Service has prepared the Final Environmental Impact Statement for the Restoration of Native Species in High Elevation Aquatic Ecosystems Plan. This process was conducted pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and the implementing regulations promulgated by the Council on Environmental Quality (40 CFR part 1502.9).

The overall goal of this Restoration Plan/Final EIS is to restore clusters of waterbodies to their naturally fishless state in strategic locations across SEKI to create high elevation ecosystems having more favorable habitat conditions for the persistence of native species and ecosystem processes. Preserving and restoring native wildlife and the communities and ecosystems in which they occur is one of the guiding principles for managing biological resources in national parks and is among the desired conditions.
established in SEKI’s General Management Plan/Final Environmental Impact Statement, approved in 2007. From 1870 to 1988, nonnative fish were introduced into many heretofore fishless waterbodies throughout SEKI. Surveys conducted from 1997 to 2002 determined that self-sustaining nonnative trout populations had become established in approximately 575 lakes, ponds, and marshes, plus connecting streams, and nearly all streams that drain these sites from high to low elevations. Impacts of nonnative trout on high-elevation aquatic and adjacent terrestrial ecosystems are well documented and occur at all levels of the food web. Nonnative trout impact native species directly through predation and indirectly through competition for food resources. Nonnative trout can disrupt the type and distribution of species, and thus the natural function of aquatic ecosystems.

Two species of mountain yellow-legged frogs (MYLFs) are integral components of high elevation aquatic ecosystems. Formerly abundant MYLFs are today among the world’s endangered amphibians: Over 92% of their populations in the Sierra Nevada have disappeared, and most of the remaining populations are much smaller and more isolated than they were historically. Extensive research has identified two primary factors for this decline. The first factor is the introduction of nonnative trout. Nonnative trout have several direct effects on MYLFs, including predation, competition for food, restriction of breeding to marginal habitat, and fragmentation of remaining populations. The second factor is the recent spread of chytridiomycosis, a disease caused by amphibian chytrid fungus, which has infected and imperiled most remaining MYLF populations. A third emerging factor is global climate change, which has begun to dry up smaller, shallower ponds in SEKI. Ponds have become important habitat for MYLFs because, in basins where nonnative trout occur, fish occupy most of the larger lakes, which are more resistant to climate change. This has restricted many MYLF populations to smaller waterbodies that are more vulnerable to drought and warming.

The Restoration Plan/Final EIS therefore proposes to recover smaller relatively-simple habitats using physical tools and larger more-complex habitats (including whole basins) using alternative tools. Because eradication of nonnative fish from larger, more-complex habitats has been determined infeasible using gill nets and electrofishers, the NPS is considering alternatives using piscicides (rotenone) in order to restore these ecologically significant habitats. **Alternative A:** No-action/Status Quo would continue the ongoing ecosystem restoration effort for 25 waterbodies, but no new fish eradication activities would be initiated. Physical treatment methods (gill netting, electrofishing, disturbing redds, and/or temporarily covering spawning habitat with boulders) would continue to be utilized until 2017. Native species and ecological processes in high elevation aquatic ecosystems would be monitored. Research on native species, ecological processes, and their stressors would continue in accordance with NPS policy. After all treatments are completed, self-sustaining nonnative trout populations would continue to exist in 550 waterbodies (252 lakes, 235 ponds, 63 marshes) and hundreds of miles of stream.

**Alternative B (NPS preferred alternative)** would include physical and piscicide treatments preceding restoration. Under this alternative, a prescription (detailed plan of action) for restoration would be developed for each proposed restoration area based on the criteria for basin selection, pre-treatment surveys, habitat size, basin topography, wilderness values, visitor use, and field crew safety. Prescriptions would consider the actual distribution of fish, results of amphibian surveys, and whether any unique habitats were detected (such as springs). Physical treatment as described under alternative A, plus trapping, would be utilized. Piscicide treatment methods would be considered for waterbodies determined infeasible for physical treatment. Based on current knowledge of the proposed fish eradication sites, physical treatment would be applied in 52 waterbodies (27 lakes, 24 ponds, 1 marsh; total of 492 ac/199 ha) and 15 mi (25 km) of streams in 17 basins, and piscicide treatment would be applied in 33 waterbodies (4 lakes, 25 ponds, and 4 marshes; total of 142 ac/57 ha) and 16 mi (25 km) of streams in 9 basins. In addition, any unsurveyed habitat adjacent to treated lakes, ponds, marshes, and streams found to contain nonnative fish would also require treatment in order to eradicate fish from the geographic area. After all treatments are completed, self-sustaining nonnative trout populations would continue to exist in 456 waterbodies (221 lakes, 186 ponds, 58 marshes) and hundreds of miles of stream.

**Alternative C** would use physical treatment methods only to eradicate nonnative fish, and blasting rock to create vertical fish barriers (if needed). In comparison to alternative B, excluded from the list of proposed restoration waterbodies are long reaches of stream, several large lakes, and interconnected lake complexes that are too large for effective physical treatment. Physical treatment methods would be applied in 52 waterbodies (27 lakes, 24 ponds, and 1 marsh; total of 492 ac/199 ha) and 15 mi (25 km) of streams contained in 17 basins. In addition, any unsurveyed habitat adjacent to treated lakes, ponds, marshes, and streams found to contain nonnative fish would be treated to eradicate fish from the entire scope of the restoration area. After all treatments are completed, self-sustaining nonnative trout populations would continue to exist in 408 waterbodies (225 lakes, 211 ponds, 62 marshes) and hundreds of miles of stream.

**Alternative D** emphasizes speed in recovering habitat because MYLF populations are declining rapidly. To achieve this, only piscicide treatment would be used for nonnative fish eradication, which can be conducted faster than using physical methods. Piscicide treatment would be used for 85 waterbodies (31 lakes, 49 ponds, and 5 marshes; total of 634 ac/257 ha), approximately 31 mi (50 km) of streams, and connected fish-containing habitat as necessary. After all treatments are completed, self-sustaining nonnative trout populations would continue to exist in 465 waterbodies (221 lakes, 186 ponds, 58 marshes) and hundreds of miles of stream.

Dated: March 25, 2016.

Patricia L. Neubacher,
Acting Regional Director, Pacific West Region.
[FR Doc. 2016–13840 Filed 6–10–16; 8:45 am]
BILLING CODE 4312–FF–P

DEPARTMENT OF THE INTERIOR
National Park Service
(NPS–IMR–SAGU–20976; PPMILMAE6 PS.SIMLA0044.00.1)

Minor Boundary Revision at Saguaro National Park

AGENCY: National Park Service, Interior.

ACTION: Notification of boundary revision.

SUMMARY: The boundary of Saguaro National Park is modified to include 273.08 acres of land located in Pima County, Arizona, immediately adjacent to the boundary of the park. Subsequent to the proposed boundary revision, the United States will acquire the land by donation from The Trust for Public Land, a nonprofit conservation organization.
DEPARTMENT OF THE INTERIOR

Bureau of Safety and Environmental Enforcement

[Docket ID BSEE–2016–0009; OMB Control Number 1014–0004; [164E1700D2 EEEE500000 ET1SF0000.DAQ000]

Information Collection Activities: Oil and Gas Well-Completion Operations; Proposed Collection; Comment Request

ACTION: 60-Day notice.

SUMMARY: To comply with the Paperwork Reduction Act of 1995 (PRA), the Bureau of Safety and Environmental Enforcement (BSEE) is inviting comments on a collection of information that we will submit to the Office of Management and Budget (OMB) for review and approval. The information collection request (ICR) concerns renewal to the paperwork requirements in the regulations under Subpart E, Oil and Gas Well-Completion Operations.

DATE: You must submit comments by August 12, 2016.

ADDRESSES: You may submit comments by either of the following methods listed below.

• Electronically: go to http://www.regulations.gov and search for BSEE–2016–0009. Follow the instructions to submit public comments and view all related materials. We will post all comments.

• Email request@bsee.gov or hand-carry comments to the Department of the Interior; BSEE; Regulations and Standards Branch; Attention: Kelly Odom; 45600 Woodland Road; Sterling, Virginia 20166. Please reference ICR 1014–0004 in your comment and include your name and return address.

FOR FURTHER INFORMATION CONTACT: Kelly Odom, Regulations and Standards Branch at (703) 787–1775 to request additional information about this ICR.

Dated: May 2, 2016.

Colin Campbell, Acting Regional Director, Intermountain Region.

[FR Doc. 2016–13842 Filed 6–10–16; 8:45 am]

BILLING CODE 4312–CB–P

DEPARTMENT OF THE INTERIOR

Bureau of Safety and Environmental Enforcement

DATE: The effective date of this boundary revision is June 13, 2016.

ADDRESSES: The map depicting this boundary revision is available for inspection at the following locations: National Park Service, Land Resources Program Center, Intermountain Region, 12795 West Alameda Parkway, Denver, Colorado 80228 and National Park Service, Department of the Interior, 1849 C Street NW., Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT: Chief Realty Officer Steve Muykses, National Park Service, Land Resources Program Center, Intermountain Region, 12795 West Alameda Parkway, Denver, Colorado 80228, telephone (303) 969–2610.

SUPPLEMENTARY INFORMATION: Notice is hereby given that, pursuant to 54 U.S.C. 100506(c)(1)(B), the boundary of Saguaro National Park is modified to include 273.08 acres of adjacent land identified as Tract 01–177. The boundary revision is depicted on Map No. 151/117.410A, dated April 7, 2015.

54 U.S.C. 100506(c)(1)(B) provides that, after notifying the House Committee on Natural Resources and the Senate Committee on Energy and Natural Resources, the Secretary of the Interior is authorized to make this boundary revision upon publication of notice in the Federal Register. The Committees have been notified of this boundary revision. This boundary revision and subsequent acquisition will ensure preservation and protection of a significant riparian corridor and habitat at the park.

Dated: May 2, 2016.

Colin Campbell, Acting Regional Director, Intermountain Region.

[FR Doc. 2016–13842 Filed 6–10–16; 8:45 am]
and (e) sustained casing pressures are
within acceptable limits.

The BSEE will protect proprietary
information according to the Freedom
of Information Act (5 U.S.C. 552) and its
implementing regulations (43 CFR 2); 30
CFR 250.197, Data and information to
be made available to the public or for
limited inspection; and 30 CFR part 252,
OCS Oil and Gas Information Program.
No items of a sensitive nature are
collected. Responses are mandatory.

Frequency: Responses are generally
weekly, monthly, annually, and vary by
section.

Description of Respondents: Potential
respondents comprise Federal OCS oil,
gas, and sulphur lessees and holders of
pipeline rights-of-way.

Estimated Reporting and
Recordkeeping Hour Burden: The
currently approved annual reporting
burden for this collection is 40,183
hours. This submission requests 13,223
burden hours. The adjustment decrease
of 26,960 hours is due to the publication
of the final blowout preventer
regulations which moved many of the
requirements of Subpart F into the new
Subpart G regulations. Well Operations
and Equipment. The following chart
details the individual components and
respective hour burden estimates of this
ICR. In calculating the burdens, we
assumed that respondents perform
certain requirements in the normal
course of their activities. We consider
these to be usual and customary and
took that into account in estimating the
burden.

| Citation 30 CFR 250 sub-
| Reporting and recordkeeping | Hour burden | Average number of annual | Annual burden hours |
| part E | requirements | | responses | (rounded) |
| 500–531 ......................... | General departure and alternative compliance requests not specifically covered elsewhere in Subpart E regulations. | Burden covered under Subpart A—1014–0022 | 0 |
| 513 ......................... | These sections contain references to information, approvals, requests, payments, etc., which are submitted with an APD, the burdens for which are covered under its own information collection. | APD burden covered under 1014–0025 | 0 |
| 513(a); 518(f); 526(a); 527 | These sections contain references to information, approvals, requests, payments, etc., which are submitted with an APM, the burdens for which are covered under its own information collection. | APM burden covered under 1014–0026 | 0 |
| 511 ......................... | Record weekly results of traveling-block safety device in operations log. | 1.5 × 360 completions × 2 recordings = 720. | 1,080 |
| 512 ......................... | Request establishment, amendment, or cancellation of well-completion field rules. | 11 × 28 field rules | 308 |
| 513(c), (d) ......................... | Submit EOR (BSEE–0125) to District Manager 30-day after completion; including additional supporting information and public information copies. | Burden covered under Subpart D—1014–0018 | 0 |
| 514(c) ......................... | Post the number of stands of drill pipe/collars that may be pulled and equivalent well-control fluid volume. | 1.5 × 741 postings | 1,112 |
| 524 ......................... | Retain records of casing pressure and diagnostic tests for 2 years or until the well is abandoned. | 1.75 × 3,017 records | 5,280 |
| 526(b); 528 ......................... | Submit a casing pressure request; any additional information as needed. | 9 × 484 requests | 4,356 |
| 530(a) ......................... | Notify BSEE after completion of corrected action within 30 days. | 14 × 68 plans | 952 |
| 530(b) ......................... | Submit the casing pressure diagnostic test data within 14 days. | 2.5 × 54 submittals | 135 |
| Total Hour Burden .......... | | | 5,112 Responses | 13,223 |

Estimated Reporting and
Recordkeeping Non-Hour Cost Burden:
We have identified no non-hour cost
burdens associated with this collection
of information.

Public Disclosure Statement: The PRA
(44 U.S.C. 3501, et seq.) provides that an
agency may not conduct or sponsor a
collection of information unless it
displays a currently valid OMB control
number. Until OMB approves a
collection of information, you are not
obligated to respond.

Comments: Before submitting an ICR
to OMB, PRA section 3506(c)(2)(A)
requires each agency “. . . to provide
notice . . . and otherwise consult with
members of the public and affected
agencies concerning each proposed
collection of information. . . “. Agencies
must specifically solicit comments to:
(a) Evaluate whether the collection is
necessary or useful; (b) evaluate the
accuracy of the burden of the proposed
collection of information; (c) enhance
the quality, usefulness, and clarity of
the information to be collected; and (d)
minimize the burden on the
respondents, including the use of
technology.

Agencies must also estimate the non-
hour paperwork cost burdens to
respondents or recordkeepers resulting
from the collection of information.
Therefore, if you have other than hour
burden costs to generate, maintain, and
disclose this information, you should
comment and provide your total capital
and startup cost components or annual
operation, maintenance, and purchase
of service components. For further
information on this burden, refer to 5
CFR 1320.3(b)(1) and (2), or contact the
Bureau representative listed previously
in this notice.
We will summarize written responses to this notice and address them in our submission for OMB approval. As a result of your comments, we will make any necessary adjustments to the burden in our submission to OMB.

Public Comment Procedures: Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

BSEE Information Collection Clearance Officer: Nicole Mason (703) 787–1607.

Dated: June 3, 2016.
Robert W. Middleton, Deputy Chief, Office of Offshore Regulatory Programs.

[FR Doc. 2016–13862 Filed 6–10–16; 8:45 am]
BILLING CODE 4310–VH–P

INTERNATIONAL TRADE COMMISSION
[USITC SE–16–019]

Sunshine Act Meeting


TIME AND DATE: June 16, 2016 at 11:00 a.m.


STATUS: Open to the public.

MATTERS TO BE CONSIDERED: 1. Agendas for future meetings: None. 2. Minutes.

3. Ratification List.

4. Vote in Inv. Nos. 701–TA–541 and 731–TA–1284 and 1286 (Final) (Cold-Rolled Steel Flat Products from China and Japan). The Commission is currently scheduled to complete and file its determinations and views of the Commission on July 5, 2016.

5. Outstanding action jackets: None. In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

By order of the Commission.
Issued: June 8, 2016.

William R. Bishop, Supervisory Hearings and Information Officer.

[FR Doc. 2016–14044 Filed 6–9–16; 4:15 pm]
BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION
[USITC SE–16–020]

Sunshine Act Meeting


TIME AND DATE: June 22, 2016 at 11:00 a.m.


STATUS: Open to the public.

MATTERS TO BE CONSIDERED: 1. Agendas for future meetings: None. 2. Minutes.

3. Ratification List.

4. Vote in Inv. Nos. 701–TA–541 and 731–TA–1284 and 1286 (Final) (Cold-Rolled Steel Flat Products from China and Japan). The Commission is currently scheduled to complete and file its determinations and views of the Commission on July 5, 2016.

5. Outstanding action jackets: None. In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

By order of the Commission.
Issued: June 8, 2016.

William R. Bishop, Supervisory Hearings and Information Officer.

[FR Doc. 2016–14045 Filed 6–9–16; 4:15 pm]
BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Bulk Manufacturer of Controlled Substances Application: Sigma Aldrich Research Biochemicals, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.33(a) on or before August 12, 2016.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION: The Attorney General has delegated her authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (“Deputy Assistant Administrator”) pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.33(a), this is notice that on February 1, 2016, Sigma Aldrich Research Biochemicals, Inc., 1–3 Stratham Road, Natick, Massachusetts 01760–2447 applied to be registered as a bulk manufacturer of the following basic classes of controlled substances:

<table>
<thead>
<tr>
<th>Controlled substance</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathinone (1235)</td>
<td>1</td>
</tr>
<tr>
<td>Methcathinone (1237)</td>
<td>1</td>
</tr>
<tr>
<td>Mephedrone (4-Methyl-N-methylcathinone) (1248)</td>
<td>1</td>
</tr>
<tr>
<td>Aminorex (1585)</td>
<td>1</td>
</tr>
<tr>
<td>Alpha-ethytryptamine (7248)</td>
<td>1</td>
</tr>
<tr>
<td>Lysergic acid diethylamide (7315)</td>
<td>1</td>
</tr>
<tr>
<td>Tetrahydrocannabinols (7370)</td>
<td>1</td>
</tr>
<tr>
<td>4-Bromo-2,5-dimethoxyamphetamine (7391)</td>
<td>1</td>
</tr>
<tr>
<td>4-Bromo-2,5-dimethoxyphenethyamine (7392)</td>
<td>1</td>
</tr>
<tr>
<td>4-Methyl-2,5-dimethoxyamphetamine (7395)</td>
<td>1</td>
</tr>
<tr>
<td>2,5-Dimethoxyamphetamine (7396)</td>
<td>1</td>
</tr>
<tr>
<td>3,4-Methylenedioxyamphetamine (7400)</td>
<td>1</td>
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<tr>
<td>Controlled substance</td>
<td>Schedule</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>N-Hydroxy-3,4-methylenedioxyamphetamine (7402)</td>
<td>I</td>
</tr>
<tr>
<td>3,4-Methylenedioxy-N-ethylamphetamine (7404)</td>
<td>I</td>
</tr>
<tr>
<td>3,4-Methylenedioxyamphetamine (7405)</td>
<td>I</td>
</tr>
<tr>
<td>Dimethyltryptamine (7435)</td>
<td>I</td>
</tr>
<tr>
<td>Psilocybin (7437)</td>
<td>I</td>
</tr>
<tr>
<td>5-Methoxy-N,N-diisopropyltryptamine (7439)</td>
<td>I</td>
</tr>
<tr>
<td>1-(3-Thienyl)cyclohexylpiperidine (7470)</td>
<td>I</td>
</tr>
<tr>
<td>N-Benzylpiperazine (7493)</td>
<td>I</td>
</tr>
<tr>
<td>MDPV (3,4-Methylenedioxypropylone) (7535)</td>
<td>II</td>
</tr>
<tr>
<td>Methylenedioxypyrovalerone fentanyl (9801)</td>
<td>II</td>
</tr>
<tr>
<td>Carfentanil (9740)</td>
<td>II</td>
</tr>
<tr>
<td>Sufentanil (9740)</td>
<td>II</td>
</tr>
<tr>
<td>Metazocine (9240)</td>
<td>II</td>
</tr>
<tr>
<td>Ecgonine (9180)</td>
<td>II</td>
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<tr>
<td>Normorphine (9313)</td>
<td>II</td>
</tr>
<tr>
<td>Norlevorphanol (9634)</td>
<td>II</td>
</tr>
<tr>
<td>Amphetamine (1100)</td>
<td>II</td>
</tr>
<tr>
<td>Methamphetamine (1105)</td>
<td>II</td>
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<tr>
<td>Nabilone (7379)</td>
<td>II</td>
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<tr>
<td>1-Phencyclohexylamine (7460)</td>
<td>II</td>
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<tr>
<td>Phencyclidine (7471)</td>
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</tr>
<tr>
<td>Codeine (9050)</td>
<td>II</td>
</tr>
<tr>
<td>Egonine (9180)</td>
<td>II</td>
</tr>
<tr>
<td>Levomethorphan (9210)</td>
<td>II</td>
</tr>
<tr>
<td>Levorphanol (9220)</td>
<td>II</td>
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<td>Metazocine (9240)</td>
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<td>Methadone (9250)</td>
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<td>Morphin (9300)</td>
<td>II</td>
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<tr>
<td>Thebaine (9333)</td>
<td>II</td>
</tr>
<tr>
<td>Levoalphacetylmethadol (9648)</td>
<td>II</td>
</tr>
<tr>
<td>Remifentanil (9739)</td>
<td>II</td>
</tr>
<tr>
<td>Sufentanil (9740)</td>
<td>II</td>
</tr>
<tr>
<td>Norlevorphanol (9634)</td>
<td>II</td>
</tr>
<tr>
<td>Fentanyl (9801)</td>
<td>II</td>
</tr>
</tbody>
</table>

The company plans to manufacture reference standards.

Dated: June 7, 2016.

Louis J. Milione,
Deputy Assistant Administrator.

[FR Doc. 2016–19194 Filed 6–10–16; 8:45 am]
BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE
Drug Enforcement Administration

[OMB Number 1117–0023]

Agency Information Collection Activities; Proposed eCollection, eComments Requested; Extension Without Change of a Previously Approved Collection—Import/Export Declaration for List I and List II Chemicals, DEA Forms 486, 486A

AGENCY: Drug Enforcement Administration, Department of Justice

ACTION: 60-Day notice.

SUMMARY: The Department of Justice (DOJ), Drug Enforcement Administration (DEA), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until August 12, 2016.

FOR FURTHER INFORMATION CONTACT: If you have comments on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Clifton A. Coward, Jr., Office of Diversion Control, Drug Enforcement Administration; Mailing Address: 8701 Morrissette Drive, Springfield, Virginia 22152; Telephone: (202) 598–6812.

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

—Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

—Evaluate whether and if so how the quality, utility, and clarity of the information proposed to be collected can be enhanced; and

—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

1. Type of Information Collection: Extension of a currently approved collection.

2. Title of the Form/Collection: Import/Export Declaration for List I and List II Chemicals.

3. The agency form number, if any, and the applicable component of the Department sponsoring the collection: DEA Forms: 486, 486A. The applicable component within the Department of Justice is the Drug Enforcement Administration, Office of Diversion Control.

4. Affected public who will be asked or required to respond, as well as a brief abstract:

Affected public (Primary): Business or other for-profit.
Affected public (Other): Not-for-profit institutions; Federal, State, local, and tribal governments.

Abstract: Section 1018 of the Controlled Substances Import and Export Act (CSIEA) (21 U.S.C. 971) and Title 21 Code of Federal Regulations (21 CFR) Part 1313 require any persons who import, export, or conduct international transactions involving list I and list II chemicals are required to establish a system of recordkeeping and report certain information regarding those transactions to the DEA. The chemicals subject to control are used in the clandestine manufacture of controlled substances.

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Title of the Form/Collection</th>
<th>Number of annual respondents</th>
<th>Number of annual responses</th>
<th>Average time per response (minutes)</th>
<th>Total annual hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA–486—Import (paper)</td>
<td>DEA Form 236</td>
<td>342</td>
<td>1,359</td>
<td>17</td>
<td>385</td>
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<tr>
<td>DEA–486—Import (online)</td>
<td></td>
<td></td>
<td>855</td>
<td>17</td>
<td>242</td>
</tr>
<tr>
<td>DEA–486—Export (paper)</td>
<td></td>
<td></td>
<td>2,533</td>
<td>20</td>
<td>844</td>
</tr>
<tr>
<td>DEA–486—Export (online)</td>
<td></td>
<td></td>
<td>7,743</td>
<td>20</td>
<td>2,581</td>
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<tr>
<td>DEA–486—International (paper)</td>
<td></td>
<td></td>
<td>422</td>
<td>17</td>
<td>120</td>
</tr>
<tr>
<td>DEA–486A—Import (paper)</td>
<td></td>
<td></td>
<td>333</td>
<td>20</td>
<td>111</td>
</tr>
<tr>
<td>DEA–486A—Import (online)</td>
<td></td>
<td></td>
<td>416</td>
<td>20</td>
<td>139</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>342</strong></td>
<td><strong>13,661</strong></td>
<td></td>
<td><strong>4,422</strong></td>
</tr>
</tbody>
</table>

6. An estimate of the total public burden (in hours) associated with the proposed collection: The DEA estimates that this collection takes 4,442 annual burden hours.

If additional information is required please contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., Suite 3E.405B, Washington, DC 20530.

Dated: June 8, 2016.

Jerri Murray,
Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2016–13908 Filed 6–10–16; 8:45 am]
BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[OMB Number 1117–0009]

Agency Information Collection Activities; Proposed eCollection, eComments Requested; Extension Without Change of a Previously Approved Collection Controlled Substances Import/Export Declaration DEA Form 236

AGENCY: Drug Enforcement Administration, Department of Justice

ACTION: 60-Day notice.

SUMMARY: The Department of Justice (DOJ), Drug Enforcement Administration (DEA), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until August 12, 2016.

FOR FURTHER INFORMATION CONTACT: If you have comments on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Clifton A. Coward, Jr., Office of Diversion Control, Drug Enforcement Administration; Mailing Address: 8701 Morrissette Drive, Springfield, Virginia 22152; Telephone: (202) 598–6812.

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

1. Evaluate whether the agency’s proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
2. Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Evaluate whether and if so how the quality, utility, and clarity of the information proposed to be collected can be enhanced; and
4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

1. Type of Information Collection: Extension of a currently approved collection.

2. Title of the Form/Collection: Controlled Substances Import/Export Declaration (DEA Form 236).

3. The agency form number, if any, and the applicable component of the Department sponsoring the collection: Form Number: DEA Form 236. The Department of Justice component is the Drug Enforcement Administration, Office of Diversion Control.

4. Affected public who will be asked or required to respond, as well as a brief abstract:

   Affected public (Primary): Business or other for-profit.

   Affected public (Other): None.

Abstract: DEA Form 236 enables the DEA to monitor and control the importation and exportation of controlled substances. Analysis of these documents provides the DEA with important intelligence regarding the international commerce in controlled substances and assists in the identification of suspected points of diversion.

An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond: The DEA estimates that there are 157 total respondents for this information collection. In total, 157 respondents submit 6,321 responses, with each response taking 17 minutes to complete.
DEPARTMENT OF JUSTICE
Drug Enforcement Administration
[OMB Number 1117–0004]

Agency Information Collection Activities; Proposed eCollection, eComments Requested; Extension Without Change of a Previously Approved Collection Application for Permit To Export Controlled Substances, Application for Permit To Export Controlled Substances for Subsequent Re-export, DEA Forms 161, 161R

AGENCY: Drug Enforcement Administration, Department of Justice.

ACTION: 60-Day notice.

SUMMARY: The Department of Justice (DOJ), Drug Enforcement Administration (DEA), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until August 12, 2016.

FOR FURTHER INFORMATION CONTACT: If you have comments on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Clifton A. Coward, Jr., Office of Diversion Control, Drug Enforcement Administration; Mailing Address: 8701 Morrissette Drive, Springfield, Virginia 22152; Telephone: (202) 598–6812.

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
—Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
—Evaluate whether and if so how the quality, utility, and clarity of the information proposed to be collected can be enhanced; and
—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

1. Type of Information Collection: Extension of a currently approved collection.

2. Title of the Form/Collection: Application for Permit to Export Controlled Substances; Application for Permit to Export Controlled Substances for Subsequent Reexport, DEA Forms 161, 161R.

3. The agency form number, if any, and the applicable component of the Department sponsoring the collection: DEA Forms: 161, 161R.

4. Affected public who will be asked or required to respond, as well as a brief abstract:

   Affected public (Primary): Business or other for-profit.

   Affected public (Other): Not-for-profit institutions; Federal, State, local, and tribal governments.

   Abstract: Title 21, Code of Federal Regulations (21 CFR), Sections 1312.21 and 1312.22 require that any person who desires to export or reexport controlled substances listed in schedules I or II, any narcotic substance listed in schedules III or IV, or any non-narcotic substance in schedule III which the Administrator has specifically designated by regulation in § 1312.30, or any non-narcotic substance in schedule IV or V which is also listed in schedule I or II of the Convention on Psychotropic Substances, must have an export permit.

5. An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond: The DEA estimates that 334 respondents, with 6,116 responses annually to this collection. The DEA estimates that it takes .5 hour to complete the form.

6. An estimate of the total public burden (in hours) associated with the proposed collection: The DEA estimates that this collection takes 3,301 annual burden hours.

If additional information is required please contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., Suite 3E.405B, Washington, DC 20530.

Dated: June 8, 2016.

Jerri Murray,
Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2016–13907 Filed 6–10–16; 8:45 am]
BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE
Executive Office for United States Trusts
[OMB Number 1105–0084]

Agency Information Collection Activities; Proposed eCollection, eComments Requested; Extension With Change, of a Previously Approved Collection. Application for Approval as a Nonprofit Budget and Credit Counseling Agency (Application).

AGENCY: Executive Office for United States Trustees, Department of Justice.

ACTION: 60-Day notice.

SUMMARY: The Department of Justice, Executive Office for United States Trustees (EOUST) will be submitting an extension of information collection, through its Application for Approval as a Nonprofit Budget and Credit Counseling Agency, to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until August 12, 2016.

FOR FURTHER INFORMATION CONTACT: If you have additional comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection with instructions, of if you need additional
information, please contact Carrie Weinfeld, Department of Justice, EOUST, at 441 G Street NW., Suite 6150, Washington, DC 205330 (phone: (202) 307–1399).

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Bureau of Justice Statistics, including whether the information will have practical utility;
2. Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Evaluate whether and if so how the quality, utility, and clarity of the information to be collected can be enhanced; and
4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

1. Type of Information Collection: Extension of a currently approved collection.

2. Title of the Form/Collection: Application for Approval as a Nonprofit Budget and Credit Counseling Agency (Application).

3. Agency form number, if any, and the applicable component of the Department sponsoring the collection: There is no form number. The applicable component within the Department of Justice is the Executive Office for United States Trustees.

4. Affected public who will be asked or required to respond, as well as a brief abstract: Agencies that wish to offer credit counseling services pursuant to the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (“BAPCPA”), Public Law 109–8, 119 Stat. 23, 37, 38 (April 20, 2005), and codified at 11 U.S.C. 109(h) and 111, and Application Procedures and Criteria for Approval of Nonprofit Budget and Credit Counseling Agencies by United States Trustees, 78 FR 16,138 (March 14, 2013) (88), are encouraged. The BAPCPA requires any individual who wishes to file for bankruptcy to obtain credit counseling, within 180 days before filing for bankruptcy relief, from a nonprofit budget and credit counseling agency that has been approved by the United States Trustee. The Application collects information from such agencies in order to ensure compliance with the law and the Rule.

5. Estimate of the total number of respondents and the amount of time estimated for an average respondent to respond: It is estimated that 122 respondents will complete the application; initial applicants will complete the application in approximately ten (10) hours, while renewal applicants will complete the application in approximately four (4) hours.

6. An estimate of the total public burden (in hours) associated with the collection: The estimated public burden associated with this collection is 560 hours.

If additional information is required contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., 3E.405B, Washington, DC 20530.

Dated: June 8, 2016.

Jerri Murray,
Department Clearance Officer for PRA, U.S. Department of Justice.

BILLING CODE 4610–40–P

DEPARTMENT OF JUSTICE

[OMB Number 1105–0085]

Executive Office for United States Trustees; Agency Information Collection Activities; Proposed Collection, Comments Requested; Extension With Change, of a Previously Approved Collection Application for Approval as a Provider of a Personal Financial Management Instructional Course

AGENCY: Executive Office for United States Trustees, Department of Justice.

ACTION: 60-Day notice.

SUMMARY: The Department of Justice, Executive Office for United States Trustees (EOUST) will be submitting an extension of information collection, through its Application for Approval as a Provider of a Personal Financial Management Instructional Course, to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until August 12, 2016.

FOR FURTHER INFORMATION CONTACT: If you have additional comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection with instructions, or if you need additional information, please contact Carrie Weinfeld, Department of Justice, EOUST, at 441 G Street NW., Suite 6150, Washington DC 205330 (phone: (202) 307–1399).

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Bureau of Justice Statistics, including whether the information will have practical utility;
—Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
—Evaluate whether and if so how the quality, utility, and clarity of the information to be collected can be enhanced; and
—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

1. Type of Information Collection: Extension of a currently approved collection.

2. Title of the Form/Collection: Application for Approval as a Personal Financial Management Instructional Course

3. Agency form number, if any, and the applicable component of the Department sponsoring the collection: There is no form number. The applicable component within the Department of Justice is the Executive Office for United States Trustees.

4. Affected public who will be asked or required to respond, as well as a brief abstract: Individuals and entities that wish to offer instructional courses to debtors concerning personal financial
The Department of Labor (DOL) is submitting the Employment and Training Administration (ETA) sponsored information collection request (ICR) proposal titled, “Young Parents Demonstration Project Evaluation,” to the Office of Management and Budget (OMB) for review and approval for use in accordance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501 et seq.). Public comments on the ICR are invited.

**DATES:** The OMB will consider all written comments that agency receives on or before July 13, 2016.

**ADDRESSES:** A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the RegInfo.gov Web site at http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201507-1205-009 (this link will only become active on the day following publication of this notice) or by contacting Michele Smyth by telephone at 202-693-4129 (this is not a toll-free number) or by email at DOL_PRA_PUBLIC@dol.gov.

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–ETA, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202–395–5806 (this is not a toll-free number); or by email: OIRA_submission@omb.eop.gov. Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor–OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: DOL_PRA_PUBLIC@dol.gov.

**FOR FURTHER INFORMATION CONTACT:** Contact Michele Smyth by telephone at 202–693–4129 (this is not a toll-free number) or by email at DOL_PRA_PUBLIC@dol.gov.

**DEPARTMENT OF LABOR**

**Office of the Secretary**

**Agency Information Collection Activities; Submission for OMB Review; Comment Request; Young Parents Demonstration Project Evaluation**

**ACTION:** Notice.

**SUMMARY:** The Department of Labor (DOL) is submitting the Employment and Training Administration (ETA) sponsored information collection request (ICR) proposal titled, “Young Parents Demonstration Project Evaluation,” to the Office of Management and Budget (OMB) for review and approval for use in accordance with the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501 et seq.). Public comments on the ICR are invited.

**DATES:** The OMB will consider all written comments that agency receives on or before July 13, 2016.

**ADDRESSES:** A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the RegInfo.gov Web site at http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201507-1205-009 (this link will only become active on the day following publication of this notice) or by contacting Michele Smyth by telephone at 202–693–4129 (this is not a toll-free number) or by email at DOL_PRA_PUBLIC@dol.gov.

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–ETA, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202–395–5806 (this is not a toll-free number); or by email: OIRA_submission@omb.eop.gov. Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor–OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: DOL_PRA_PUBLIC@dol.gov.

**FOR FURTHER INFORMATION CONTACT:** Contact Michele Smyth by telephone at 202–693–4129 (this is not a toll-free number) or by email at DOL_PRA_PUBLIC@dol.gov.
notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information if the collection of information does not display a valid Control Number. See 5 CFR 1320.5(a) and 1320.6. For additional information, see the related notice published in the Federal Register on July 8, 2015 (80 FR 39161).

Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the ADDRESSES section within thirty (30) days of publication of this notice in the Federal Register. In order to help ensure appropriate consideration, comments should mention OMB Control Number 1205–0494. The OMB is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Agency: DOL–ETA.

Title of Collection: Young Parents Demonstration Project Evaluation.

OMB Control Number: 1205–0494.

Affected Public: Individuals or Households, Private Sector—not-for-profit institutions.

Total Estimated Number of Respondents: 2,971.

Total Estimated Number of Responses: 11,168.

Total Estimated Annual Time Burden: 2,116 hours.

Total Estimated Annual Other Costs Burden: $0.

Dated: June 7, 2016.

Michel Smyth.

Departmental Clearance Officer.

DEPARTMENT OF LABOR

Office of the Secretary

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Regulations Containing Procedures for Handling of Retaliation Complaints

ACTION: Notice.

SUMMARY: The Department of Labor (DOL) is submitting the Occupational Safety and Health Administration (OSHA) sponsored information collection request (ICR) revision titled, “Regulations Containing Procedures for Handling of Retaliation Complaints,” to the Office of Management and Budget (OMB) for review and approval for use in accordance with the Paperwork Reduction Act (PRRA) of 1995 (44 U.S.C. 3501 et seq.). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before July 13, 2016.

ADDRESSES: A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the RegInfo.gov Web site at http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201604-1218-001 (this link will only become active on the day following publication of this notice) or by contacting Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to DOL_PRA_PUBLIC@dol.gov.

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–OSHA, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; or by fax: 202–395–5806 (this is not a toll-free number); or by email: OIRA_submission@omb.eop.gov. Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor-OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: DOL_PRA_PUBLIC@dol.gov.

FOR FURTHER INFORMATION CONTACT: Contact Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to DOL_PRA_PUBLIC@dol.gov.


SUPPLEMENTARY INFORMATION: This ICR seeks approval under the PRA for revisions to the Regulations Containing Procedures for Handling of Retaliation Complaints information collection. The OSHA administers and enforces a number of provisions in various Federal laws and regulations prohibiting retaliatory action by an employer against an employee who is believed to have reported a possible violation of those laws or regulations, or who otherwise engages in an activity protected specified by an anti-retaliation provision. Any person may file a complaint alleging the employer violated these protection provisions with the OSHA for investigation. This ICR has been classified as a revision, because it seeks OMB approval to implement a revised whistleblower complaint form, titled “Notice of Whistleblower Complaint,” Form OSHA 8–60.1. The Web-based form enables submitting whistleblower complaints directly to the OSHA 24-hours a day. Additionally, the revised form includes interactive features that make it easier to understand and complete. The revised form also provides information about worker protections enforced by other agencies, in order better to direct complainants to the proper investigative agencies.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by the OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number. See 5 CFR 1320.5(a) and 1320.6. The DOL obtains OMB approval for this information collection under Control Number 1218–0236. The current approval is scheduled to expire on July 31, 2016; however, the DOL notes that existing information collection requirements submitted to the OMB receive a month-to-month extension while they undergo review. New requirements would only take effect upon OMB approval. For additional substantive information about this ICR, see the related notice published in the Federal Register on February 17, 2016 (81 FR 8103).
Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the ADDRESSES section within thirty (30) days of publication of this notice in the Federal Register. In order to help ensure appropriate consideration, comments should mention OMB Control Number 1218–0236.

The OMB is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Agency: DOL–OSHA.
Title of Collection: Regulations Containing Procedures for Handling of Retaliation Complaints.
OMB Control Number: 1218–0236.
Affected Public: Individuals or Households.
Total Estimated Number of Respondents: 7,516.
Total Estimated Number of Responses: 7,516.
Total Estimated Annual Time Burden: 7,516 hours.
Total Estimated Annual Other Costs Burden: $0.
Dated: June 7, 2016.
Michel Smyth,
Departmental Clearance Officer.
FOR FURTHER INFORMATION CONTACT:
Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or by email at DOL_PRA_PUBLIC@dol.gov.

SUMMARY: The Department of Labor (DOL) is submitting the Bureau of Labor Statistics (BLS) sponsored information collection request (ICR) titled, “Veterans Supplement to the Current Population Survey,” to the Office of Management and Budget (OMB) for review and approval for continued use, without change, in accordance with the Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. 3501 et seq. Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before July 13, 2016.

ADDRESSES: A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the RegInfo.gov Web site at http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201511–1220–002 (this link will only become active on the day following publication of this notice) or by contacting Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or by email at DOL_PRA_PUBLIC@dol.gov.

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–BLS, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202–395–5806 (this is not a toll-free number); or by email: OIRA_submission@omb.eop.gov. Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor–OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: DOL_PRA_PUBLIC@dol.gov.

Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the ADDRESSES section within thirty (30) days of publication of this notice in the Federal Register. In order to help ensure appropriate consideration, comments should mention OMB Control Number 1220–0102. The OMB is particularly interested in comments that:

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DEPARTMENT OF LABOR
Office of the Secretary
Agency Information Collection Activities; Submission for OMB Review; Comment Request; Veterans Supplement to the Current Population Survey
ACTION: Notice.
• Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
• Evaluate the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
• Enhance the quality, utility, and clarity of the information to be collected; and
• Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Agency: DOL–BLS.
Title of Collection: Veterans Supplement to the Current Population Survey.
OMB Control Number: 1220–0102.
Affected Public: Individuals or Households.
Total Estimated Number of Respondents: 9,000.
Total Estimated Number of Responses: 9,000.
Total Estimated Annual Time Burden: 300 hours.
Total Estimated Annual Other Costs Burden: $0.

Dated: June 6, 2016.
Michel Smyth,
Departmental Clearance Officer.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Centennial Challenges Vascular Tissue Challenge

AGENCY: National Aeronautics and Space Administration (NASA).

ACTION: Notice.

SUMMARY: This notice is issued in accordance with 51 U.S.C. 20144(c). The Vascular Tissue Challenge is open and teams that wish to compete may now register. Centennial Challenges is a program of prize competitions to stimulate innovation in technologies of interest and value to NASA and the nation. The Vascular Tissue Challenge is a prize competition with a $500,000 prize purse for teams that can successfully create thick, human vascularized organ tissue in an in vitro environment while maintaining metabolic functionality similar to their in vivo functionality throughout a 30-day survival period. NASA is providing the prize purse. The Methuselah Foundation’s New Organ Alliance is the Allied Organization managing the competition.

DATES: This is a “first to demonstrate” competition. Teams may submit their intent to compete beginning June 13, 2016 and the competition will remain open until the requirements of the rules are met and a winner is announced or until the Challenge Deadline of September 30th, 2019.

ADDRESSES: The Vascular Tissue Challenge will be conducted and judged at the laboratory facilities of the participants.

FOR FURTHER INFORMATION CONTACT: To register for or get additional information regarding the Vascular Tissue Challenge, please visit: https://www.neworgan.org/vtc-prize.php.

For general information on the NASA Centennial Challenges Program please visit: http://www.nasa.gov/challenges. General questions and comments regarding the program should be addressed to Monsi Roman, Centennial Challenges Program, NASA Marshall Space Flight Center Huntsville, AL 35812. Email address: hq-stmd-centennialchallenges@mail.nasa.gov.

SUPPLEMENTAL INFORMATION:

Summary

Competitors will be asked to produce an in-vitro vascularized tissue that is ≥ 1 centimeter in thickness in all dimensions at the launch of the trial and maintains ≥85% survival of the required parenchymal cells throughout a 30-day period. Tissues must provide adequate blood perfusion without uncontrolled leakage into the bulk tissue to maintain metabolic functionality similar to their in-vivo native cells. Histological measurement of the quality and amount of functional performance will be required to determine survival of parenchymal tissue. Teams must demonstrate 3 successful trials with at least a 75% trial success rate to win an award. In addition to the in-vitro trials, teams must also submit a Spaceflight Experiment Concept that details how they would further advance some aspect of their tissue vascularization research through a microgravity experiment that could be conducted in the U.S. National Laboratory (ISS–NL) onboard the International Space Station.

I. Prize Amounts

The total Vascular Tissue Challenge prize purse is $500,000 (five hundred thousand U.S. dollars). First place will receive $300,000 (three hundred thousand U.S. dollars). Two runners-up may be awarded $100,000 (one hundred thousand U.S. dollars) each. Entries must meet specific requirements detailed in the Rules to be eligible for prize awards.

II. Eligibility

To be eligible to win a prize, competitors must:
(1) Register and comply with all requirements in the rules and Team Agreement;
(2) In the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States; and
(3) Not be a Federal entity or Federal employee acting within the scope of their employment.

III. Rules

The complete rules for the Vascular Tissue Challenge can be found at: https://www.neworgan.org/vtc-prize.php.

Cheryl Parker,
NASA Federal Register Liaison Officer.

BILLING CODE 7510–13–P

NATIONAL CREDIT UNION ADMINISTRATION

Sunshine Act Meeting

TIME AND DATE: 10:00 a.m., Thursday, June 16, 2016.
PLACE: Board Room, 7th Floor, Room 7047, 1775 Duke Street (All visitors must use Diagonal Road Entrance), Alexandria, VA 22314–3428.
STATUS: Open.

MATTERS TO BE CONSIDERED:
1. NCUA’s Rules and Regulations, Technical Amendments to Community Development Revolving Loan Fund.
2. NCUA’s Rules and Regulations, Statutory Inflation Adjustment of Civil Money Penalties.
3. Board Briefing, Interest Rate Risk Supervision and Adding ‘S’ to CAMEL.
RECESS: 11:00 a.m.
TIME AND DATE: 11:15 a.m., Thursday, June 16, 2016.
PLACE: Board Room, 7th Floor, Room 7047, 1775 Duke Street, Alexandria, VA 22314–3428.
NATIONAL SCIENCE FOUNDATION

Notice of Permits Issued under the Antarctic Conservation Act of 1978

AGENCY: National Science Foundation.


SUMMARY: The National Science Foundation (NSF) is required to publish notice of permits issued under the Antarctic Conservation Act of 1978. This is the required notice.

FOR FURTHER INFORMATION CONTACT: Nature McGinn, ACA Permit Officer, Division of Polar Programs, Rm. 755, Wilson Boulevard, Arlington, VA 22230. Or by email: ACApermits@nsf.gov.

SUPPLEMENTARY INFORMATION: On April 21 & April 29, 2016 the National Science Foundation published a notice in the Federal Register of a permit applications received. The permits were issued on June 5, 2016 to:

1. Kristin O’Brien—Permit No. 2017–001
2. Deneb Karentz—Permit No. 2017–002

Nadene G. Kennedy,
Polar Coordination Specialist, Division of Polar Programs.

FOR FURTHER INFORMATION CONTACT: Gerard Poliquin, Secretary of the Board, Telephone: 703–518–6304.

GERARD POLIQUIN, Secretary of the Board.

[FR Doc. 2016–14022 Filed 6–9–16; 4:15 pm]
BILLING CODE 7535–01–P

NUCLEAR REGULATORY COMMISSION

[DOCKET NO. 50–423; NRC–2016–0109]

Dominion Nuclear Connecticut, Inc., et al.; Millstone Power Station, Unit No. 3

AGENCY: Nuclear Regulatory Commission.

ACTION: License amendment application; opportunity to comment, request a hearing, and petition for leave to intervene.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an amendment to Facility Operating License No. NPF–49, issued to Dominion Nuclear Connecticut, Inc., et al. (the licensee), for operation of the Millstone Power Station, Unit No. 3 (MPS3). The proposed amendment would revise the Technical Specifications (TSs) to enable the use of Dominion nuclear safety and reload core design methods for MPS3, address the issues identified in three Westinghouse communication documents, and update approved reference methodologies in the TSs. The amendment would also relocate certain equations, supporting descriptions, and surveillance requirements from the TSs to licensee-controlled documents.

DATES: Submit comments by July 13, 2016. A request for a hearing or petition for leave to intervene must be filed by August 12, 2016.

ADDRESSES: You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

• Federal Rulemaking Web site: Go to http://www.regulations.gov and search for Docket ID NRC–2016–0109. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: Carol.Galagher@nrc.gov. For technical questions, contact the

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Supervisory Matter. Closed pursuant to Exemptions (8), (9)(i)(B), and (9)(ii).

FOR FURTHER INFORMATION CONTACT: Gerard Poliquin, Secretary of the Board, Telephone: 703–518–6304.

Gerard Poliquin,
Secretary of the Board.

[FR Doc. 2016–13993 Filed 6–9–16; 11:15 am]
BILLING CODE 7550–01–P
individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.


For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:**

**SUPPLEMENTARY INFORMATION:**

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2016–0109 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- NRC’s Agencywide Documents Access and Management System (ADAMS): You may obtain publicly-available information online in the ADAMS Public Documents collection at http://www.nrc.gov/reading-ry/adams.html. To begin the search, select “ADAMS Public Documents” and then select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to pdr.resource@nrc.gov. The application for amendment, dated May 6, 2015, as supplemented by letters dated January 28, February 25, March 23, March 29, and May 2, 2016, are available in ADAMS under Accession Nos. ML15134A244, ML16034A216, ML16057A812, ML16088A140, ML16095A233 and ML16130A563, respectively.
- NRC’s PDR: You may examine and purchase copies of public documents at the NRC’s PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID NRC–2016–0109 in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at http://www.regulations.gov as well as entering the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

II. Introduction

The NRC is considering issuance of an amendment to Facility Operating License No. NPF–49, issued to Dominion Nuclear Connecticut, Inc. for operation of MPS3 located in New London County, Connecticut.

The proposed license amendment, initially submitted by application dated May 8, 2015 (ADAMS Accession No. ML15134A244), would modify the MPS3 TSs to (1) allow the use of Dominion nuclear safety and reload core design methods; (2) allow the use of applicable departure from nucleate boiling ratio design limits for VIPRE–D; (3) update the approved reference methodologies cited in TS 6.9.1.6.b; (4) remove the base load mode of operation that is not a feature of the Dominion Relaxed Power Distribution Control power distribution control methodology; and (5) address the issues identified in Westinghouse Nuclear Safety Advisory Letter (NSAL–09–5), Rev. 1, NSAL–15–1, and Westinghouse Communication 06–IC–03.

Additionally, the proposed changes would involve, in part, the relocation of certain equations, supporting descriptions and surveillance requirements from the TSs to licensee-controlled documents. The NRC staff previously made a proposed determination that the amendment request dated May 8, 2015, involves no significant hazards consideration (80 FR 52804; September 1, 2015). This notice supersedes the previous notice and is intended to include the added clarification that the proposed changes involve the relocation of TS information either to the TS Bases or the Core Operating Limits Report which are both licensee-controlled documents. There are no changes to the staff’s proposed no significant hazards consideration determination as originally noticed.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission’s regulations.

The NRC has made a proposed determination that the amendment request involves no significant hazards consideration. Under the NRC’s regulations in section 50.92 of title 10 of the Code of Federal Regulations (10 CFR), this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue in a no significant hazards consideration, which is presented below:

1. Does the proposed [amendment] involve a significant increase in the probability or consequences of any accident previously evaluated?

Response: No.

The Dominion analysis methods do not make any contribution to the potential accident initiators and thus do not increase the probability of any accident previously evaluated. The use of the approved Dominion analysis methods will not increase the probability of an accident because plant systems, structures, and components (SSC) will not be affected or operated in a different manner, and system interfaces will not change.

Since the applicable safety analysis and nuclear core design acceptance criteria will be satisfied when the Dominion analysis methods are applied to MPS3, the use of the approved Dominion analysis methods does not increase the potential consequences of any accident previously evaluated. The use of the approved Dominion methods will not result in a significant impact on normal operating plant releases, and will not increase the predicted radiological consequences of postulated accidents described in the FSAR [final safety analysis report]. The proposed resolution of Westinghouse notification documents NSAL–09–5, Rev. 1, 06–IC–03 and NSAL–15–1 is intended to address deficiencies identified within the existing MPS3 Technical Specifications to return them to their as designed function and does not result in actions that would increase the probability of any accident previously evaluated.

Therefore, the proposed amendment does not involve a significant increase in the probability or the consequences of any accident previously evaluated.
2. Does the proposed [amendment] create the possibility of a new or different kind of accident from any previously evaluated?
Response: No.

The use of Dominion analysis methods and the Dominion statistical design limit (SDL) for fuel departure from nucleate boiling ratio (DNBR) and fuel critical heat flux (CHF) does not impact any of the applicable core design criteria. All pertinent licensing basis limits and acceptance criteria will continue to be met. Demonstrated adherence to these limits and acceptance criteria precludes new challenges or might introduce a new type of accident. All design and performance criteria will continue to be met and new single failure mechanisms will be created. The use of the Dominion methods does not involve any alteration to plant equipment or procedures that might introduce any new or unique operational modes or accident precursors. The proposed resolution of Westinghouse notification documents NSAL–09–5, Rev. 1, 06–IC–03 and NSAL–15–1 does not involve the alteration of plant equipment or introduce unique operational modes or accident precursors.

Therefore, the proposed amendment does not create [the possibility of] a new or different kind of accident from any accident previously evaluated.

3. Does the proposed [amendment] involve a significant reduction in the margin of safety?
Response: No.

Nuclear core design and safety analysis acceptance criteria will continue to be satisfied with the application of Dominion methods. Meeting the analysis acceptance criteria and limits ensure that the margin of safety is not significantly reduced. Nuclear core design and safety analysis acceptance criteria will continue to be satisfied with the application of Dominion methods. In particular, use of [the model] VIPRE–D with the proposed safety limits provides at least a 95% probability at a 95% confidence level that DNBR will not occur (the 95%/95 DNBR criterion). The required DNBR margin of safety for MPS2, which is the margin between the 95%/95 DNBR criterion and clad failure, is therefore not reduced. The proposed resolution of Westinghouse notification documents NSAL–09–5, Rev. 1, 06–IC–03 and NSAL–15–1 does not propose actions that would result in a significant reduction in margin of safety.

Therefore, the proposed amendment does not involve a significant reduction in [the] margin of safety.

The NRC staff has reviewed the licensee’s analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves a No Significant Hazards Consideration.

The NRC is seeking public comments on this proposed determination that the licensees request involves no significant hazards consideration. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of 60 days after the date of publication of this notice. The Commission may issue the license amendment before expiration of the 60-day notice period provided if the Commission concludes the amendment involves no significant hazards consideration. In addition, the Commission may issue the amendment prior to the expiration of the 30-day comment period should circumstances change during the 30-day comment period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility. Should the Commission take action prior to the expiration of either the comment period or the notice period, it will publish in the Federal Register a notice of issuance. Should the Commission make a final No Significant Hazards Consideration Determination, any hearing will take place after issuance. The Commission expects that the need to take this action will occur very infrequently.

III. Opportunity To Request a Hearing and Petition for Leave To Intervene

Within 60 days after the date of publication of this notice, any person(s) whose interest may be affected by this action may file a request for a hearing and a petition to intervene with respect to issuance of the amendment to the subject facility operating license or combined license. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission’s “Agency Rules of Practice and Procedure” in 10 CFR part 2. Interested person(s) should consult a current copy of 10 CFR 2.309, which is available at the NRC’s PDR, located at One White Flint North, Room 11555 Rockville Pike (first floor), Rockville, Maryland 20852. The NRC’s regulations are accessible electronically from the NRC Library on the NRC’s Web site at http://www.nrc.gov/reading-rm/doc-collections/cfr/. If a request for a hearing or petition for leave to intervene is filed within 60 days, the Commission or a presiding officer designated by the Commission or by the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the Chief Administrative Judge of the Atomic Safety and Licensing Board will issue a notice of a hearing or an appropriate order.

As required by 10 CFR 2.309, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following general requirements: (1) The name, address, and telephone number of the requestor or petitioner; (2) the nature of the requestor’s/petitioner’s right under the Act to be made a party to the proceeding; (3) the nature and extent of the requestor’s/petitioner’s property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order which may be entered in the proceeding on the requestor’s/petitioner’s interest. The petition must also set forth the specific contentions which the requestor/petitioner seeks to have litigated at the proceeding.

Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the requestor/petitioner shall provide a brief explanation of the bases for the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the requestor/petitioner intends to rely in proving the contention at the hearing. The requestor/petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the requestor/petitioner intends to rely to establish those facts or expert opinion. The petition must include sufficient information to show that a genuine dispute exists with the applicability on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the requestor/petitioner to relief. A requestor/petitioner who fails to satisfy these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing with respect to resolution of that person’s admitted contentions, including the opportunity to present evidence and to submit a cross-examination plan for cross-examination of witnesses, consistent with NRC regulations, policies and procedures.

Petitions for leave to intervene must be filed no later than 60 days from the
Requests for hearing, petitions for leave to intervene, and motions for leave to file new or amended contentions that are filed after the 60-day deadline will not be entertained absent a determination by the presiding officer that the filing demonstrates good cause by satisfying the three factors in 10 CFR 2.309(c)(1)(i)–(iii).

If a hearing is requested, and the Commission has not made a final determination on the issue of no significant hazards consideration, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held. If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment. If the final determination is that the amendment request involves a significant hazards consideration, then any hearing held would take place before the issuance of any amendment unless the Commission finds an imminent danger to the health or safety of the public, in which case it will issue an appropriate order or rule under 10 CFR part 2.

A State, local governmental body, Federally-recognized Indian Tribe, or agency thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(b)(1). The petition should state the nature and extent of the petitioner’s interest in the proceeding. The petition should be submitted to the Commission by August 12, 2016. The petition must be filed in accordance with the filing instructions in the “Electronic Submissions (E-Filing)” section of this document, and should meet the requirements for petitions for leave to intervene set forth in this section, except that under § 2.309(b)(2) a State, local governmental body, or Federally-recognized Indian Tribe, or agency thereof does not need to address the standing requirements in 10 CFR 2.309(d) if the facility is located within its boundaries. A State, local governmental body, Federally-recognized Indian Tribe, or agency thereof may also have the opportunity to participate under 10 CFR 2.315(c).

If a hearing is granted, any person who does not wish, or is not qualified, to become a party to the proceeding may, in the discretion of the presiding officer, make a limited appearance pursuant to the provisions of 10 CFR 2.315(a). A person making a limited appearance may make an oral or written statement of position on the issues, but may not otherwise participate in the proceeding. A limited appearance may be made at any session of the hearing or at any prehearing conference, subject to the limits and conditions as may be imposed by the presiding officer. Persons desiring to make a limited appearance are requested to inform the Secretary of the Commission by August 12, 2016.

IV. Electronic Submissions (E-Filing)

All documents filed in NRC adjudicatory proceedings, including a request for hearing, a petition for leave to intervene, any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities participating under 10 CFR 2.315(c), must be filed in accordance with the NRC’s E-Filing rule (72 FR 49139; August 28, 2007). The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by email at hearing.docket@nrc.gov, or by telephone at 301–415–1677, to request (1) a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a request or petition for hearing (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC’s public Web site at http://www.nrc.gov/site-help/e-submittals.html. System requirements for accessing the E-Submittal server are detailed in the NRC’s “E-Filing System Requirements.” Participants must have a digital ID certificate before a hearing request/petition for leave to intervene is filed so that they can obtain access to the document via the E-Filing system. Participants may apply for and receive a digital ID certificate before a hearing request/petition for leave to intervene is filed so that they can obtain access to the document via the E-Filing system.

A person filing electronically using the NRC’s adjudicatory E-Filing system may seek assistance by contacting the NRC Meta System Help Desk through the “Contact Us” link located on the NRC’s public Web site at http://www.nrc.gov/site-help/e-submittals.html.
I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend certain rules governing trading of index options.

The text of the proposed rule change is available on the Exchange’s Web site at http://nasdaqomxphlx.cchwallstreet.com/, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange is amending various rules regarding index options. The amendments delete certain outdated language relating primarily to index options which the Exchange no longer lists. The amendments also conform certain language in the Phlx rules to that of Chapter XIV, Index Rules, of the NASDAQ Options Market LLC (“NOM”), and make a number of grammatical and technical corrections. Deletions of Obsolete Rule Text

The Exchange is deleting references to the following in Rule 1001A, Position Limits. Rule 1009A, Designation of the Index, Sections (g) and (h), and Rule 1101A, Terms of Options Contracts, Section (a) and Commentary .01, as applicable, relating to indexes on which the Exchange no longer lists options: SIG Energy MLP Index, NASDAQ China Index, MSCI EM Index, MSCI EAFE Index, PHLX Computer Box Maker Index, PHLX Defense Index, PHLX Drug Index, PHLX Europe Index, PHLX World Energy Index, SIG Investment Managers Index, SIG Cable, Media & Entertainment Index, SIG Semiconductor Equipment Index, SIG Semiconductor Device Index, SIG Specialty Retail Index, SIG Steel...
which replaced it. For the same reason, in Section (D)(2)(i) of that Commentary, an incorrect reference to “Commentary .06 to Exchange Rule 1001” is replaced with a reference to Exchange Rule 1001(k), Rule 1000A(b)(14) which defines “expiration date” is amended by the deletion of a reference to the Exchange “on which such option is listed,” since the rule applies only to options listed on Phlx.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act 6 in general, and furthers the objectives of Section 6(b)(5) of the Act 7 in particular, in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest, by updating and clarifying outdated rules relating to index options trading. The proposed rule change is also consistent with Section 6(b)(1) of the Act 8 in that it enables the Exchange to be so organized as to have the capacity to be able to carry out the purposes of the Act and to comply, and to enforce compliance by its exchange members and persons associated with its exchange members, with the provisions of the Act, the rules and regulations thereunder, and the rules of the Exchange. The amendments should enable Phlx members to better understand the Exchange’s index options rules and the Exchange to better enforce compliance with those rules.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act because the rule merely updates and clarifies outdated rules relating to index options and conforms certain Phlx rules to NOM rules.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(iii) of the Act 9 and subparagraph (f)(6) of Rule 19b-4 thereunder.10

At any time within 60 days of the filing of the proposed rule change, the Commission may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in the furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

• Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml); or

• Send an email to rule-comments@sec.gov. Please include File Number SR–Phlx–2016–61 on the subject line.

Paper Comments

• Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–Phlx–2016–61. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (http://www.sec.gov/}

10 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.
rules/sro.shtml]. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission’s Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–Phx–2016–61 and should be submitted on or before July 5, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.11

Robert W. Errett, Deputy Secretary.

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BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION


Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing of Proposed Rule Change Relating to Amendments to NYSE MKT Rules 1600 et seq. and to Changes to the Names and Operation of the Nuveen Diversified Commodity Fund and the Nuveen Long/Short Commodity Total Return Fund

June 7, 2016.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)2 and Rule 19b–4 thereunder,3 notice is hereby given that, on May 24, 2016, NYSE MKT LLC (“Exchange” or “NYSE MKT”)4 filed with the Securities and Exchange Commission (“Commission”)5 the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend NYSE MKT Rules 1600 et seq. (Trading of Trust Units), pursuant to which the Exchange currently lists and trades shares of the Nuveen Diversified Commodity Fund (the “Diversified Fund”) and the Nuveen Long/Short Commodity Total Return Fund (the “Long/Short Fund,” with the Diversified Fund and the Long/Short Fund each being referred to herein as a “Fund,” and collectively, as the “Funds”), and to reflect changes to the names and operation of the Funds, as described herein. The proposed rule change is available on the Exchange’s Web site at www.nyse.com, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend NYSE MKT Rules 1600 et seq. (Trading of Trust Units), pursuant to which the Exchange currently lists and trades shares (“Shares”) of the Funds.6 In addition, the Exchange proposes to (1) reflect changes to the operation of the Funds, as described herein, and (2) permit the continued listing and trading of Shares of the Funds on the Exchange pursuant to NYSE MKT Rules 1600 et seq., as proposed to be amended, following changes to the operation of the Funds, as described below.7

The Funds are currently structured as actively managed closed-end commodity pools. On December 19, 2014, Nuveen Investment Company, LLC (the “Manager”), announced the (“Conversion Plan Announcement”) that the Manager had approved a plan to convert the Funds into exchange-traded products (“ETPs”) that utilize a creation/redemption mechanism, subject to approval by shareholders of each Fund (such plan, with respect to each Fund, is referred to herein as the “Conversion,” and collectively, the “Conversions”). Subsequently, at meetings of shareholders in 2015, shareholders of each Fund likewise approved the Conversions. The purpose of the Conversions, which would implement a process for continual creation and redemption of Shares at net asset value (“NAV”) after receipt of an order in proper form on any business day (as described below), is to promote the trading of the Funds’ Shares at prices equal to or near their NAV. Indeed, since the Conversion Plan Announcement, each Fund has traded at a substantially reduced discount to NAV,8 which suggests that the

11 See, for the Diversified Fund, Pre-Effective Amendment No. 1 to the registration statement on Form S–3 (File No. 333–82963), filed on November 30, 2015; see also, for the Long/Short Fund, Pre-Effective Amendment No. 1 to the registration statement on Form S–3 (File No. 333–205587), filed on November 30, 2015 (collectively referred to herein as the “Registration Statement”).

8 From December 18, 2014, to March 9, 2016, the discount to NAV has been reduced for the Diversified Fund from 18.02% to 5.11% and for the Long/Short Fund from 19.80% to 3.75%.
Conversion will achieve its intended purpose, to the benefit of shareholders.

Accordingly, the Exchange proposes to amend NYSE MKT Rules 1600 et seq. to accommodate the implementation of continual creation and redemption of shares of Trust Units listed or traded pursuant to Rules 1600 et seq. in the manner set forth above. The proposed amendments to Rules 1600 et seq. will provide that Trust Units, which include Shares of the Funds, will be issued and redeemed on a continuous basis in specified aggregate amounts at NAV next determined.

Amendments to NYSE MKT Rules 1600 et seq.

To achieve the foregoing changes, the Exchange proposes to amend NYSE MKT Rules 1600 et seq. as described below. NYSE MKT Rule 1600 defines a Trust Unit as a security that is issued by a trust (“Trust”) or other similar entity that is constituted as a commodity pool that holds investments comprising or otherwise based on any combination of futures contracts, options on futures contracts, forward contracts, swap contracts, and/or commodities. The Exchange proposes to amend Rule 1600 in several respects.

First, the Exchange proposes amending Rule 1600(b)(i) to delete reference to Section 1(a)(4) of the Commodity Exchange Act (“CEA”) and to state that the term “commodity” is defined in Section 1(a)(9) of the CEA. Section 1(a)(4) of the CEA was renumbered as Section 1(a)(9) under amendments adopted under the Dodd-Frank Wall Street Reform and Consumer Protection Act.7 Next, the Exchange proposes amending Rule 1600(b)(ii) to: (1) Add the phrase “and/or securities” to the enumerated financial instruments in which Trust Units may invest (proposed Rule 1600(b)(ii));8 and (2) provide that Trust Units are issued and redeemed continuously in specified aggregate amounts at NAV next determined (proposed Rule 1600(b)(ii)).

The Exchange also proposes adding new rules. Proposed NYSE MKT Rule 1600(b)(iii) would define “Disclosed Portfolio” as the identities and quantities of the assets held by a Trust that will form the basis for that Trust’s calculation of the NAV at the end of the business day. Proposed Rule 1600(b)(iv) would define “Intraday Indicative Value” as the estimated indicative value of a Trust Unit based on current

information regarding the value of the assets in the Disclosed Portfolio.

Proposed Rule 1600(b)(v) would define “Reporting Authority” as, in respect of a particular series of Trust Units, the Exchange, an institution, or a reporting or information service designated by the Trust or the Exchange or by the exchange that lists a particular series of Trust Units (if the Exchange is trading such series pursuant to unlisted trading privileges) as the official source for calculating and reporting information relating to such series, including, but not limited to, (i) the Intraday Indicative Value, (ii) the Disclosed Portfolio, (iii) the amount of any cash distribution to holders of Trust Units, (iv) NAV, and (v) other information relating to the issuance, redemption, or trading of Trust Units. A series of Trust Units may have more than one Reporting Authority, each having different functions.9

Proposed Commentary .04 to Rule 1600 would provide that, if a Trust’s advisor is affiliated with a broker-dealer, the broker-dealer shall erect a “fire wall” around the personnel who have access to information concerning changes and adjustments to the Disclosed Portfolio. Personnel who make decisions on the Trust’s portfolio composition must be subject to procedures designed to prevent the use and dissemination of material non-public information regarding the applicable portfolio.

The Exchange proposes to amend Rule 1602(a)(ii) to provide that the Exchange will obtain a representation from the issuer of each series of Trust Units that the NAV of the Disclosed Portfolio will be made available to all market participants at the same time. Additionally, the Exchange proposes amendments to Rule 1602(b)(iii) to replace the term “portfolio holdings” with “Disclosed Portfolio” and to provide that, if the Exchange becomes aware that the Disclosed Portfolio or NAV per share with respect to a series of Trust Units is not disseminated to all market participants at the same time, it will halt trading in such series until such time as the Disclosed Portfolio or NAV per share is available to all market participants. Proposed Rule 1602(b)(iii) would provide that each series of Trust Units will be listed and/or traded subject to application of the following criteria: (1) The Intraday Indicative Value for shares will be widely disseminated by one or more major market data vendors at least every 15 seconds during the time when the Trust Units trade on the Exchange; (2) the Disclosed Portfolio will be disseminated at least once daily and will be made available to all market participants at the same time; and (3) the Reporting Authority that provides the Disclosed Portfolio must implement and maintain, or be subject to, procedures designed to prevent the use and dissemination of material, non-public information regarding the actual components of the portfolio.10

The Exchange also proposes to delete the text of current NYSE MKT Rule 1603, which is obsolete,11 and to amend NYSE MKT Rule 1605 to provide that none of the Exchange, the Reporting Authority or any agent of the Exchange shall have any liability for damages, claims, losses or expenses caused by any errors, omissions, or delays in calculating or disseminating the Disclosed Portfolio; any value of underlying futures contracts, options on futures contracts, forward contracts, swap contracts, commodities and/or securities; the current value of positions or interests if required to be deposited to the Trust in connection with issuance of Trust Units; NAV; or other information relating to the purchase, redemption or trading of Trust Units, resulting from any negligent act or omission by the Exchange, the Reporting Authority, or any agent of the Exchange, or any act, condition or cause beyond the reasonable control of the Exchange or any agent of the Exchange, or the Reporting Authority, including, but not limited to, an act of God; fire; flood; extraordinary weather conditions; war; insurrection; riot; strike; accident; action of government; communications

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7 12 U.S.C. 5301 et seq.
8 This proposed provision is identical to the definition of Trust Units in NYSE Arca Equities Rule 8.500(b)(2).
9 Proposed Rules 1600(b)(iii)–(v) are substantively similar to the current NYSE Arca Equities Rules 8.600(c)(2)–(4).
10 These proposed amendments and rule additions are substantively similar to the current NYSE Arca Equities Rule 8.600(d).
11 NYSE MKT Rule 1603 would be reserved. Current Rule 1603 provides that if a Designated Market Maker (“DMM”) is operating under Rule 98 (Former)—Equities, Rule 105(b) (Former)—Equities and section (m) of the Guidelines thereunder shall be deemed to prohibit a DMM, his or her member organization, other member, or approved person of such member organization or employee or officer thereof from acting as a market maker or functioning in any capacity involving market-marking responsibilities in an underlying asset or commodity, related futures or options on futures, or any related derivative. The Exchange has deleted NYSE MKT Rule 98 (former), See Securities Exchange Act Release No. 72535 (July 3, 2014), 79 FR 39024 (July 9, 2014) (SR–NYSEMKT–2014–22), in which the Exchange stated that “[a]ll DMMs are now approved to operate under Rule 98 and are no longer subject to ‘Rule 98 (former).’” The Exchange deleted NYSE MKT Rule 105 in SR–NYSEMKT–2012–68, See Securities Exchange Act Release No. 68306 (November 29, 2012), 77 FR 71846 (December 4, 2012) (notice of filing and immediate effectiveness of proposed rule change amending Exchange rules to delete obsolete and outdated rules).
or power failure; equipment or software malfunction; or any error, omission or delay in the reports of transactions in the Trust Units, futures contracts, options on futures contracts, forward contracts, swap contracts, commodities and/or securities.\(^{12}\)

**Description of the Funds**

As set forth in each Fund’s respective Prior Release, each Fund is a commodity pool managed by the Manager. The Manager is a Delaware limited liability company that is registered as a commodity pool operator (the “CPO”) with the Commodity Futures Trading Commission (“CFTC”). The Manager is a wholly-owned subsidiary of Nuveen Investments, Inc. (“Nuveen Investments”), which is an indirect wholly-owned subsidiary of TIAA, a national financial services organization. The Manager is responsible for determining the Funds’ overall investment strategies and overseeing their implementation. The Manager also manages the Funds’ business affairs and provides certain legal, accounting and other administrative services to the Funds. Also as described in the Prior Releases, Gresham Investment Management LLC (the “Commodity Subadviser”), an affiliate of the Manager, manages each Fund’s commodity futures investment strategy (which is described more fully below). The Commodity Subadviser is a Delaware limited liability company and is registered with the CFTC as a commodity trading advisor and as a CPO, and is a member of the National Futures Association (“NFA”). The Commodity Subadviser also is registered with the Commission as an investment adviser under the Investment Advisers Act of 1940, as amended (the “Advisers Act”). As set forth in the Prior Releases, Nuveen Asset Management, LLC (the “Collateral Subadviser”) and, together with the Commodity Subadviser, the “Subadvisers”), an affiliate of the Manager, manages each Fund’s investments in U.S. government securities, other short-term, high grade fixed income securities and cash equivalents (“collateral”). The Collateral Subadviser is registered with the Commission as an investment adviser under the Advisers Act.

As the Commodity Subadviser and the Collateral Subadviser are each registered as investment advisers under the Advisers Act, the Subadvisers and their respective related personnel are (and any future subadviser to the Funds will be) subject to the provisions of Rule 204A–1 under the Advisers Act relating to codes of ethics. This Rule requires investment advisers to adopt a code of ethics that reflects the fiduciary nature of their relationship to clients, as well as their compliance with other applicable securities laws. Accordingly, procedures designed to prevent the communication and misuse of non-public information by an investment adviser must be consistent with Rule 204A–1 under the Advisers Act. In addition, Rule 206(4)–7 under the Advisers Act makes it unlawful for an investment adviser to provide investment advice to clients unless such investment adviser has: (i) Adopted and implemented written policies and procedures reasonably designed to detect and prevent violation, by the investment adviser and its supervised persons, of the Advisers Act and the Commission rules adopted thereunder; (ii) implemented, at a minimum, an annual review of the adequacy of the policies and procedures described in clause (i) above and the effectiveness of their implementation; and (iii) designated an individual (who is a supervised person) responsible for administering such policies and procedures.

State Street Bank and Trust Company (“State Street” or the “Transfer Agent”) serves as transfer agent, registrar for the Shares, and custodian and administrator of the assets of each Fund, pursuant to which it performs NAV calculations, accounting and other fund administrative services, and, after the Conversions, it also will receive and process orders from Authorized Participants to create and redeem an aggregate of Shares of each Fund (“Baskets”).

**Current Operation of the Funds Prior to Conversion**

**Diversified Fund.** As described in the Prior Diversified Release, the Fund’s current investment objective is to generate attractive risk-adjusted total returns as compared to investments in commodity indexes.

Currently, the Fund pursues its investment objective by utilizing: (a) An actively managed rules-based commodity investment strategy, whereby the Fund invests in a diversified basket of commodity futures and forward contracts with an aggregate notional value substantially equal to the net assets of the Fund; and (b) An options strategy designed to moderate the overall risk and return characteristics of the Fund’s commodity investments, pursuant to which the Fund writes (sells) “out-of-the-money” commodity call options to obtain option premium cash flow, on individual futures and forward contracts, on baskets of commodities or on broad based commodity indices.

Current Operations, as described in the Prior Diversified Release, the Fund typically: (i) Invests in commodity futures and forward contracts that are traded either on U.S. or non-U.S. commodity futures exchanges; and (ii) Sells call options on commodity futures and forward contracts that are traded either on U.S. or non-U.S. exchanges. The Fund may also purchase put options on commodity futures and forward contracts that are traded either on U.S. or non-U.S. exchanges or may purchase OTC commodity put options through dealers pursuant to negotiated, bi-lateral arrangements. The Fund invests in commodity futures and forward contracts, options on commodity futures and forward contracts and over-the-counter commodity options in the following commodity groups: Energy, industrial metals, precious metals, livestock, agricultural, and tropical foods and fibers. The Fund also may invest in other commodity contracts that are presently, or may hereafter become, the subject of commodity futures trading. Except for certain limitations described below, there are no restrictions or limitations on the specific commodity investments in which the Fund may invest.

As stated in the Prior Diversified Release, to support its commodity investments, the Fund maintains collateral that is invested in short-term debt instruments with maturities of up to two years that, at the time of investment, are investment grade quality, including obligations issued or guaranteed by the U.S. government or its agencies and instrumentalities, as well as corporate obligations and asset-backed securities.

Currently, to achieve the Fund’s investment objective, the Fund invests on a notional basis substantially all of its assets in commodity futures and forward contracts pursuant to the Commodity Subadviser’s Tangible Asset Program (“TAP”), an actively managed, rules-based commodity investment

\(^{13}\) While forward contracts generally are traded over the counter (“OTC”), “forward contracts” in this context refer to contracts that are traded on the London Metal Exchange and operate substantially as futures contracts. As such, all of the contracts in which the Diversified Fund invests are exchange-traded.

\(^{14}\) Pursuant to TAP® the Fund invests in commodity futures and forward contracts, for commodities in each of the following groups:
generate attractive total returns. The Fund’s portfolio investments and the term total returns generated by the Fund, including, most importantly, the long-term component, are not be solely dependent on the amount of income earned or capital gains realized by the Fund. The Fund’s ability to make regular monthly distributions to its shareholders (stated in terms of a fixed cents per share distribution rate) based on past and projected performance of the Fund. The Fund seeks to establish a distribution rate that roughly corresponds to the Manager’s projections of the total return that could reasonably be expected to be generated by the Fund over an extended period of time, although the distribution rate will not be solely dependent on the amount of income earned or capital gains realized by the Fund. The Fund’s ability to make regular monthly distributions depends on a number of factors, including, most importantly, the long-term total returns generated by the Fund’s portfolio investments and the risk management program.

**Long/Short Fund.** As described in the Prior Long/Short Release, the Fund’s current investment objective is to generate attractive total returns. The Fund is actively managed and seeks to outperform its benchmark, the Morningstar Long/Short Commodity Index.

The Fund’s investment strategy utilizes the Commodity Subadviser’s long/short commodity investment program, which has three principal elements:

- an actively managed long/short portfolio of exchange-traded commodity futures contracts;
- a portfolio of exchange-traded commodity option contracts; and
- a collateral portfolio of cash equivalents and short-term, high-grade debt securities.

In pursuing its investment objective, the Fund currently invests directly in a diverse portfolio of exchange-traded commodity futures contracts that represent the main commodity sectors and are among the most actively traded futures contracts in the global commodity markets. Generally, individual commodity futures positions may be either long or short (or flat in the case of energy futures contracts) depending upon market conditions. According to the Prior Long/Short Release, this long/short commodity investment program is an actively managed, fully collateralized, rules-based commodity investment strategy that seeks to capitalize on opportunities in both up and down commodity markets. The Fund invests in a diverse portfolio of exchange-traded commodity futures contracts with an aggregate notional value substantially equal to the net assets of the Fund. The Fund makes investments in the most actively traded commodity futures contracts in the four main commodity sectors in the global commodities markets: Energy; agriculture; metals; and livestock.

During temporary defensive periods or during adverse market circumstances, the Fund may deviate from its investment objective and policies. The Subadvisers may invest 100% of the total assets of the Fund in short-term, high-quality debt securities and money market instruments to respond to adverse market circumstances. The Fund may invest in such instruments for extended periods, depending on the Commodity Subadviser’s assessment of market conditions. These debt securities and money market instruments may include shares of mutual funds, commercial paper, certificates of deposit, bankers’ acceptances, U.S. Government securities, repurchase agreements, and bonds that are rated AAA. Generally, the risk-adjusted total return over time. Pursuant to the options strategy, the Fund may sell commodity call or put options, which are all exchange-traded, on a continual basis on up to approximately 25% of the notional value of each of its corresponding commodity futures contracts that, in the Commodity Subadviser’s discretion, have sufficient option trading volume and liquidity. According to the Prior Long/Short Release, if the Commodity Subadviser sells the commodity futures contract, it will sell a call option on the same underlying commodity futures contract. If the Commodity Subadviser shorts the commodity futures contract, it will sell a put option on the same underlying commodity futures contract (except in the case of energy futures contracts).

When initiating new trades, the Fund expects to sell covered in-the-money options. Because the Fund holds options until expiration, the Fund may have uncovered out-of-the-money options in its portfolio depending on price movements of the underlying futures contracts.

Generally, the Fund expects to sell short-term commodity options with terms of one to three months. Subject to the foregoing limitations, the implementation of the options strategy is within the Commodity Subadviser’s discretion. Over extended periods of time, the “moneyness” of the commodity options may vary significantly. Upon sale, the commodity options may be “in-the-money,” “at-the-money,” or “out-of-the-money.”

The Commodity Subadviser will employ a proprietary methodology in assessing commodity market movements and in determining the Fund’s long/short commodity futures positions. Generally, the Commodity Subadviser will employ momentum-based modeling (quantitative formulas that evaluate trends and relationships between the changes in prices of futures contracts and trading volumes for a
specific commodity) to estimate forward-looking prices and to evaluate the return impact of futures contract rolls. To determine the direction of the commodity futures position, either long or short (or flat in the case of energy futures contracts), the Commodity Subadviser will calculate a roll-adjusted price that accounts for the current spot price and the impact of roll yield. The Commodity Subadviser may exercise discretion in its long/short decisions and the timing and implementation of the Fund’s commodity investments to seek to benefit from trading on commodity price momentum.

According to the Prior Long/Short Release, the Fund’s commodity investments will, at all times, be fully collateralized (i.e., the “notional value”—the value of the underlying commodity at the contract’s spot price—of the Fund’s commodity exposure will not exceed the market value of the Fund’s net assets). The Fund’s commodity investments generally do not require significant outlays of principal. Approximately 25% of the Fund’s net assets are used to secure the futures contracts.16 These assets are placed in one or more commodity futures accounts and will be held in cash or invested in U.S. Treasury bills and other direct or guaranteed debt obligations of the U.S. government maturing within less than a year at the time of investment.

The remaining collateral (approximately 75% of the Fund’s net assets) are held in a separate collateral investment account managed by the Collateral Subadviser. Such assets are invested in cash equivalents or short-term debt securities with final terms not exceeding one year at the time of investment. These collateral investments shall be rated at all times at the applicable highest short-term or long-term debt or deposit rating or money market fund rating as determined by at least one nationally recognized statistical rating organization. These collateral investments consist primarily of direct and guaranteed obligations of the U.S. government and senior obligations of U.S. government agencies and may also include, among others, money market funds and bank money market accounts invested in U.S. government securities, as well as repurchase agreements collateralized with U.S. government securities.

According to the Prior Long/Short Release, the potential Fund investments in futures contracts and options on such futures contracts are traded on U.S. and non-U.S. exchanges, including the Chicago Board of Trade (“CBOT”), the Chicago Mercantile Exchange (“CME”), the ICE Futures Europe, the ICE Futures U.S., the New York Mercantile Exchange (“NYMEX”) and the New York Commodity Exchange (“COMEX”), and the Kansas City Board of Trade (“KCBOT”).

Also according to the Prior Long/Short Release, the Fund (like the Diversified Fund) intends to make monthly distributions to its shareholders (stated in terms of a fixed cents per share distribution rate) based on past and projected performance of the Fund. The Fund seeks to establish a distribution rate that roughly corresponds to the Manager’s projections of the total return that could reasonably be expected to be generated by the Fund over an extended period of time, although the distribution rate will not be solely dependent on the amount of income earned or capital gains realized by the Fund. The Fund’s ability to make regular monthly distributions depends on a number of factors, including, most importantly, the long-term total returns generated by the Fund’s portfolio investments and the risk management program.

Operation of the Funds Following Conversion

Generally

Following the Conversions, each Fund, through use of a rules-based investment methodology, will seek to obtain returns that, over time, generally match (before fees and expenses) the returns of a commodity-linked index. The Diversified Fund will take long positions in the components of the Gresham Adaptive Commodity Index (the “Adaptive Index”), while the Long/Short Fund will take positions either long or short in the components of the Gresham Long/Short Commodity Index (the “Long/Short Index”). Each of the Adaptive Index and the Long/Short Index also is referred to herein as an “Index” and, collectively, as the “Index(es).”

In contrast to certain representations made in the Prior Releases and described above, after the Conversions each Fund: (i) Will no longer invest in forwards (and instead will invest solely in futures contracts), (ii) will no longer hold options or utilize options strategies, and (iii) will no longer make monthly distributions to its shareholders.

Names: Investment Objectives

After the Conversion, the name of the Diversified Fund will change to the “NuShares Gresham Adaptive Commodity ETF” and the name of the Long/Short Fund will change to the “NuShares Gresham Long/Short Commodity ETF.” Each Fund’s investment objective will be to generate attractive total returns by generally tracking its respective Index. Each Fund will continue to seek to achieve its investment objective by investing in a diverse portfolio of exchange-traded commodity futures contracts that provide exposure to the global commodity market primarily by the futures contracts are referred to herein as “Commodity Futures”). Generally, each Fund will invest in Commodity Futures that are included in a Fund’s respective Index; however, each Fund also may invest in other commodity futures contracts that are not included in the Indexes (at times when the Commodity Subadviser believes such investments will improve a Fund’s profitability and/or reduce the potential for losses, as described more fully below).

The Funds’ Investments

After the Conversions, each Fund’s principal investments are not expected to change. Under normal market conditions,17 each Fund will continue to invest in (i) Commodity Futures traded on U.S. and non-U.S. futures exchanges18 having various expiration dates, and (ii) collateral consisting of U.S. government securities and cash equivalents, some of which are maintained on deposit with a Fund’s commodity broker as margin, to collateralize a Fund’s positions in the Commodity Futures. As stated above,
the Funds will not invest in forwards or options following the Conversions. Futures contracts on commodities reflect the expected future value of an underlying commodity on which the contract is based. Pursuant to such futures contracts, one party agrees to buy, and the other to sell, a set amount of the reference asset (or a cash equivalent) at a pre-determined price (the “spot price”) on a pre-determined future date (the “expiration date”). As the expiration date for any given Commodity Futures contract draws closer, the Commodity Subadviser will roll that Commodity Futures contract, prior to its expiration, on an ongoing basis, so as to ensure that each Fund maintains a position in such Commodity Futures contract.

For each Fund, the Commodity Subadviser employs a proprietary methodology in assessing commodity market movements. Generally, the Commodity Subadviser employs momentum-based modeling to estimate forward-looking prices and to evaluate the return impact of futures contract rolls. The Commodity Subadviser will calculate a roll-adjusted price that accounts for the current spot price and the impact of roll yield. The Commodity Subadviser may exercise discretion in its decisions and the timing and implementation of the Fund’s commodity investments to seek to benefit from trading on commodity price momentum. Specifically, following the Conversion, the Diversified Fund weightings will be determined monthly, if the price of a commodity contract is higher than its six-month simple moving average, the commodity contract will be held at its target weight; conversely, if the price is below the six-month simple moving average, the commodity weight will be reduced by half. Following the Conversion, for the Long/Short Fund, the momentum-based model will employ shorter-term moving averages (such as 6-months) to determine whether a commodity futures position in the Fund is long or short (or flat, for petroleum-related commodities).

Each Fund’s Commodity Futures investments will, at all times, be fully collateralized (i.e., the “notional value”—the value of the underlying commodity at the contract’s spot price—of the Fund’s commodity exposure will not exceed the market value of the Fund’s net assets). However, whereas the Prior Releases represented that 25% of that Fund’s Collateral will be committed as “initial” and “variation” margin, the Funds now represent that, following the Conversions, approximately 10–25% of each Fund’s Collateral will be committed as initial and variation margin and be segregated pursuant to the Commodity Exchange Act, and the regulations thereunder, to secure the futures contract positions. Those assets will be held in a commodity futures account maintained by SG Americas Securities, LLC (“SG”), the Funds’ clearing broker, which serves as a futures commission merchant and broker-dealer registered with the CFTC and the Commission.

The remaining 75–90% of a Fund’s Collateral (as opposed to a set 75%, as noted in the Prior Releases) will continue be held in a separate collateral investment account managed by the Collateral Subadviser. However, the eligible Collateral investments will change following the Conversion. The Funds will no longer invest in money market funds or repurchase agreements; instead, they will invest in short-term U.S. government securities and cash equivalents.

The Funds’ Investment Strategies

Following the Conversions, each Fund will employ a rules-based commodity investment strategy in seeking to achieve its investment objective: The Diversified Fund will use a long-biased strategy, and the Long/Short Fund will use a long/short strategy. In doing so, each Fund, as they currently do prior to the Conversion, will invest in a diverse portfolio of exchange-traded Commodity Futures that have an aggregate notional value less than or substantially equal to the net assets of such Fund. Generally, those Commodity Futures will be components of each Fund’s respective Index; however, each Fund also may invest in other commodity futures contracts that are not included in the Indexes in seeking to improve profitability and/or reduce the potential for loss.

Each Fund will make investments in Commodity Futures in the six principal groups within the global commodities markets: Agriculture; energy; foods and fibers; industrial metals; livestock; and precious metals. To provide diversification, each Fund will take positions in Commodity Futures related to approximately 30 commodities; its rules-based strategy will limit the weight of any individual Commodity Futures and also will limit the allocation to the largest two commodity groups to allow for higher allocations to the smaller commodity groups. Each Fund will continue to allocate its investments to Commodity Futures pursuant to the Commodity Subadviser’s proprietary strategy.

Typically, each Fund expects to follow certain rules pertaining to eligible commodities, weights, diversification, rebalancing, and annual reconstitution that are the same as those for its respective Index, so as to minimize the divergence between the price behavior of a Fund’s Commodity Futures portfolio and the price behavior of its Index (such divergence is referred to as “tracking error”). As such, each Fund’s investment results, before the deduction of fees and other expenses, are expected generally to correspond to the changes, positive or negative, in the levels of its respective Index over time.

Although each Fund generally will seek to track the performance of its Index (before fees and expenses), the Funds will remain actively managed and therefore will not be obligated to always invest in the components of the Indexes. From time to time, a Fund may invest in commodity futures contracts not included in its Index and/or that have differing expiration dates and terms. Such variations from an Index are market-driven and opportunistic, and are designed to improve a Fund’s profitability and reduce the potential for losses. Additionally, each Fund will continue to deviate temporarily from its investment objective and policies during adverse market circumstances.

Description of the Indexes

According to the Registration Statement, each Index is a proprietary index developed by the Commodity Subadviser’s senior management team. The methodology for commodity selection and target weight calculation for each Index is based on the Commodity Subadviser’s TAP strategy. Annual rebalancing for the TAP strategy follows a systematic, disciplined approach for establishing new target weights for commodities in the portfolio and encompasses a diverse mix of tangible Commodity Futures. TAP typically allocates to Commodity Futures relating to approximately 30 different commodities. TAP scales its position according to rankings of individual commodities based on three factors: (i) Historical global production; (ii) historical global trade; and (iii) historical contract liquidity. The TAP strategy employs portfolio construction constraints that seek liquidity, a robust and fair regulatory framework, avoidance of foreign exchange risk, and transparency, as it trades only in markets where exchange settlements are publicly disseminated. In order to ensure a high level of actively managed diversification at each annual rebalance, the TAP strategy maintains certain
limits on amounts allocated to commodity groups. Each Index is rebalanced annually. Between rebalance dates, Index weights vary based on the performance of the commodity contract positions in each Index. On a monthly basis, each Index utilizes historical price trends to determine its positions and rolls its contracts to implement the new positions.

Adaptive Index. According to the Registration Statement, by maintaining a long-bias, the Adaptive Index seeks to benefit from rising commodity markets while still affording flexibility to reduce its target investment exposure by half of the target weighting to certain individual commodities when appropriate. On a monthly basis, each commodity’s weight in the Adaptive Index will be maintained or reduced after comparing the price of each commodity with its six-month simple moving average. If the price of a commodity is higher than its six-month simple moving average, the commodity is held at its target weight; conversely, if the price is below the six-month simple moving average, the commodity’s weight is reduced by half.

Long/Short Index. The Long/Short Index seeks to take advantage of the persistent trends in commodities prices, often referred to as “momentum.” The central principle of a persistence or momentum investment process is that if the price of an asset is rising (or falling), it is expected to continue to do so. The Long/Short Index employs a momentum rule to determine if exposure to a particular constituent Commodity Futures contract should be held long or short (or “flat,” in the case of petroleum-related commodities contracts, as described below).

Whether a Long/Short Index position will be long or short (or flat) is currently determined on a monthly basis by comparing the price of each Commodity Futures contract to its six-month simple moving average. If the price of a commodity is higher than its six-month simple moving average, the commodity is assigned a long position; conversely, if the price is below the six-month simple moving average, it is assigned a short position. A long position will increase in market value if the price of the Commodity Futures is rising during the period when the position is open, whereas a short position will increase in market value if the price of the Commodity Futures is falling during the period when the position is open.

The Long/Short Index is currently constructed such that, when the price of a petroleum-related Commodity Futures contract (e.g., WTI Crude, Brent Crude, Heating Oil, RBOB Gasoline or Gas Oil) is below its six-month simple moving average, the weight of that commodity is moved to the collateral portfolio (i.e., the position is “flat”). The price of petroleum-related commodities historically have been extremely sensitive to geopolitical events and less driven by supply and demand imbalances; as such, holding flat positions in petroleum-related commodities could serve to protect the Long/Short Fund from losses arising from such geopolitical risks. A flat position in a petroleum-related Commodity Futures contract will not provide futures market exposure to that contract.

During transitions from long to short positions or vice versa, the Fund may temporarily hold both long and short positions on the same Commodity Futures contract. In accordance with the Long/Short Fund’s “long/short” commodity investment strategy, each Commodity Futures contract will be assigned a target weight and may be held in the portfolio as a long position or a short position (or flat position).

Composition of the Indexes

Eligible Contracts. Listed below are the main categories of Commodity Futures contracts that are eligible to become components of each Index as of February 1, 2016. Each commodity may have several different types of individual Commodity Futures contracts (e.g., hard winter wheat and soft red wheat). The Commodity Subadviser has discretion over Commodity Futures contract selection and may choose from the available contract types. As noted above, each Fund will invest in Commodity Futures that are traded on both U.S. and non-U.S. exchanges. If the Commodity Futures in which a Fund will invest are listed on multiple exchanges, a Fund may invest in those contracts that are listed on the exchange with the greatest dollar volume traded in those contracts.

<table>
<thead>
<tr>
<th>Group</th>
<th>Commodity</th>
<th>Primary exchange</th>
<th>Trading hours (eastern time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>WTI Crude Oil</td>
<td>New York Mercantile Exchange</td>
<td>09:00–14:30</td>
</tr>
<tr>
<td></td>
<td>Brent Crude Oil</td>
<td>ICE Futures Europe</td>
<td>20:00–18:00</td>
</tr>
<tr>
<td></td>
<td>Gas Oil</td>
<td>New York Mercantile Exchange</td>
<td>09:00–14:30</td>
</tr>
<tr>
<td></td>
<td>Heating Oil</td>
<td>New York Mercantile Exchange</td>
<td>09:00–14:30</td>
</tr>
<tr>
<td></td>
<td>Natural Gas</td>
<td>New York Mercantile Exchange</td>
<td>09:00–14:30</td>
</tr>
<tr>
<td>Foods and Fibers</td>
<td>Cotton #2</td>
<td>ICE Futures US</td>
<td>21:00–14:20</td>
</tr>
<tr>
<td></td>
<td>Sugar #11</td>
<td>ICE Futures US</td>
<td>03:30–13:00</td>
</tr>
<tr>
<td></td>
<td>White Sugar</td>
<td>ICE Futures Europe</td>
<td>03:45–12:55</td>
</tr>
<tr>
<td></td>
<td>Coffee</td>
<td>ICE Futures US</td>
<td>04:15–13:30</td>
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<tr>
<td></td>
<td>Cocoa</td>
<td>ICE Futures US</td>
<td>04:45–13:30</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Robusta Coffee</td>
<td>ICE Futures Europe</td>
<td>04:00–12:30</td>
</tr>
<tr>
<td></td>
<td>Corn</td>
<td>Chicago Board of Trade</td>
<td>09:30–14:15</td>
</tr>
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<td></td>
<td>Soybean Meal</td>
<td>Chicago Board of Trade</td>
<td>09:30–14:15</td>
</tr>
<tr>
<td></td>
<td>Soybean Oil</td>
<td>Chicago Board of Trade</td>
<td>09:30–14:15</td>
</tr>
<tr>
<td></td>
<td>Soybeans</td>
<td>Chicago Board of Trade</td>
<td>09:30–14:15</td>
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<td></td>
<td>Kansas City Wheat</td>
<td>Chicago Board of Trade</td>
<td>09:30–14:15</td>
</tr>
<tr>
<td></td>
<td>Minneapolis Wheat</td>
<td>Minneapolis Grain Exchange</td>
<td>20:00–14:30</td>
</tr>
<tr>
<td></td>
<td>Wheat</td>
<td>Chicago Board of Trade</td>
<td>09:30–14:15</td>
</tr>
<tr>
<td>Base Metals</td>
<td>Aluminum</td>
<td>London Metal Exchange</td>
<td>15:00–14:45</td>
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<tr>
<td></td>
<td>Copper (LME)</td>
<td>London Metal Exchange</td>
<td>15:00–14:45</td>
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<td>Copper (COMEX)</td>
<td>Commodity Exchange, Inc.</td>
<td>08:30–14:00</td>
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<td></td>
<td>Nickel</td>
<td>London Metal Exchange</td>
<td>15:00–14:45</td>
</tr>
</tbody>
</table>
### Index Composition

Listed below are the target weights for each commodity as of February 1, 2016. These target weights are the same for each Index.

<table>
<thead>
<tr>
<th>Commodity group</th>
<th>Synthetic Commodity</th>
<th>Primary exchange</th>
<th>Trading hours (eastern time)</th>
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<tbody>
<tr>
<td><strong>Group</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Zinc</td>
<td></td>
<td>London Metal Exchange</td>
<td>15:00–14:45</td>
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<tr>
<td>Lead</td>
<td></td>
<td>London Metal Exchange</td>
<td>15:00–14:45</td>
</tr>
<tr>
<td><strong>Precious Metals</strong></td>
<td>Gold</td>
<td>COMEX</td>
<td>08:20–13:30</td>
</tr>
<tr>
<td></td>
<td>Palladium</td>
<td>New York Mercantile Exchange</td>
<td>08:30–13:00</td>
</tr>
<tr>
<td></td>
<td>Platinum</td>
<td>New York Mercantile Exchange</td>
<td>08:20–13:05</td>
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<tr>
<td>Silver</td>
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<td>COMEX</td>
<td>08:30–13:00</td>
</tr>
<tr>
<td><strong>Livestock</strong></td>
<td>Feeder Cattle</td>
<td>Chicago Mercantile Exchange</td>
<td>09:30–14:00</td>
</tr>
<tr>
<td></td>
<td>Lean Hogs</td>
<td>Chicago Mercantile Exchange</td>
<td>09:30–14:00</td>
</tr>
<tr>
<td></td>
<td>Live Cattle</td>
<td>Chicago Mercantile Exchange</td>
<td>09:30–14:00</td>
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<tr>
<td><strong>Agriculture</strong></td>
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<td>Soybean Meal</td>
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<td>Soybean Oil</td>
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<td>1.1</td>
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<tr>
<td></td>
<td>Soybeans</td>
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<td>5.0</td>
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<tr>
<td><strong>Livestock</strong></td>
<td>Live Cattle</td>
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<td>Feeder Cattle</td>
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<td>Lean Hogs</td>
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<td>Cocoa</td>
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<td>White Sugar</td>
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<td>Robusta Coffee</td>
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<td>Coffee</td>
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<td></td>
<td>Copper (COMEX)</td>
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<td>Aluminum</td>
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<td>Nickel</td>
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<td>Zinc</td>
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<td>Lead</td>
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<td>Platinum</td>
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<td></td>
<td>Palladium</td>
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<td>0.7</td>
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<tr>
<td></td>
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<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
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<td>100.0</td>
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</table>

### Summary of Other Aspects Regarding the Conversion of the Funds

As set forth in its respective Prior Release, each Fund is currently structured as a closed-end commodity pool. As part of the Conversion, each Fund plans to convert to an ETP structure, which requires an amendment to each Fund’s Agreement and Declaration of Trust (with respect to each Fund, the “Amendment,” and collectively, the “Amendments”). Each
The Manager will announce in advance the expected effective date of the Conversions via press releases and Form 8-K filings. Those press releases also will include a summary of changes to the Funds that will occur in

<table>
<thead>
<tr>
<th>Changes to Diversified Fund</th>
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<tbody>
<tr>
<td><strong>Fund name</strong></td>
</tr>
<tr>
<td>Nuveen Diversified Commodity Fund</td>
</tr>
<tr>
<td><strong>Ticker</strong></td>
</tr>
<tr>
<td><strong>Share Repurchases</strong></td>
</tr>
<tr>
<td><strong>Investment Strategy</strong></td>
</tr>
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<td></td>
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<table>
<thead>
<tr>
<th>Changes to Long/Short Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fund name</strong></td>
</tr>
<tr>
<td>Nuveen Long/Short Commodity Total Return Fund</td>
</tr>
<tr>
<td><strong>Ticker</strong></td>
</tr>
<tr>
<td><strong>Distribution Policy</strong></td>
</tr>
<tr>
<td><strong>Share Repurchases</strong></td>
</tr>
<tr>
<td><strong>Investment Strategy</strong></td>
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<tr>
<td></td>
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<td></td>
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</tbody>
</table>
connection with the Conversions. The Exchange will also issue a notice to members approximately 10 days prior to the date of effectiveness of the Conversion, and another notice to members on the business day prior to the date Shares of the Funds will trade under the new CUSIP.

The Manager expects that the Conversions will have the effect of further narrowing the discount in each Fund’s Share price as compared to its NAV.

Creation and Redemption of Shares

Following the Conversion, the Funds will issue and redeem Shares in “Baskets” of 50,000 Shares each on a continuous basis to “Authorized Participants” in exchange for cash equal to the total value of the futures contracts, cash and collateral assets (i.e., cash equivalents) that comprise one Basket (“Basket Amount”). Similarly, an Authorized Participant is entitled to receive the corresponding Basket Amount in exchange for each Basket surrendered for redemption. The Basket represents one Creation Unit of a Fund. Except when aggregated in Baskets, the Shares are not redeemable securities of a Fund. The size of a Basket will be subject to change.

Only Authorized Participants may place orders to create and redeem Baskets. An “Authorized Participant” must (1) be a registered broker-dealer or other securities market participant, such as a bank or other financial institution exempt from registration as a broker-dealer to engage in securities transactions, (2) be a participant in The Depository Trust Company (“DTC”), and (3) have entered into a Participant Agreement. The Participant Agreement sets forth the procedures for the creation and redemption of Baskets and for the delivery of the Basket Amount required for such creations or redemptions. The Manager will have engaged at least two market participants to act as Authorized Participants with respect to the Funds prior to completing the Conversions.

Authorized Participants may sell the individual Shares included in the Baskets and purchased from each Fund to other investors on the Exchange. Otherwise, Shares will not be individually redeemable. To redeem, an investor must accumulate enough Shares to constitute a Creation Unit. Redemption orders must be placed by or through an Authorized Participant.

The Manager expects that purchasers of Creation Units will include institutional investors and arbitrageurs and that secondary market purchasers of Shares will include both institutional investors and retail investors. The Manager also expects that the price at which Shares of each Fund trade will be disciplined by arbitrage opportunities created by the option to continually purchase or redeem Creation Units at their NAV. The Manager believes that a conversion from the current closed-end structure to one that utilizes a creation/redemption process will serve to reduce the Shares’ discount to NAV, to the benefit of current shareholders.

On any business day that NYSE MKT is open for regular trading, an Authorized Participant may place an order with the Transfer Agent to create one or more Baskets. Creation orders must be placed by 10:00 a.m., Eastern time. The creation order date is the day on which the Transfer Agent receives an order in proper form to purchase the Shares in one or more Baskets. The day on which a creation order is settled is the creation order settlement date. The creation order settlement date may occur up to 3 business days after the creation order date.

The total cash payment required to create each Basket is equal to the NAV of 50,000 Shares of a Fund as of the closing time of the NYSE MKT on the creation order date. Because orders to purchase Baskets must be placed by 10:00 a.m., Eastern time, but the total payment required to create a Basket will not be determined until 4:00 p.m., Eastern time, on the date the creation order is received, Authorized Participants will not know the total amount of the payment required to create a Basket at the time they submit the creation order for the Basket.19

The procedures by which an Authorized Participant can redeem one or more Baskets mirror the procedures for the creation of Baskets.

The redemption proceeds from each Fund consist of the cash redemption amount. The cash redemption amount is equal to the NAV of the number of Basket(s) of a Fund requested in the Authorized Participant’s redemption order as of the closing time of the NYSE MKT or the last to close of the exchanges on which its futures contracts are traded, whichever is later, on the redemption order date. The Manager will distribute the cash redemption amount at the redemption order settlement date as of 2:45 p.m., Eastern time, on the redemption order settlement date through DTC to the account of the Authorized Participant as recorded on DTC’s book-entry system.

The redemption proceeds due from each Fund are delivered to the Authorized Participant at 2:45 p.m., Eastern time, on the redemption order settlement date if, by such time, a Fund’s DTC account has been credited with all of the Baskets to be redeemed. If a Fund’s DTC account has not been credited with all of the Baskets to be redeemed by such time, the redemption distribution is delivered to the extent of whole Baskets received.

For either Fund, the Manager may, in its discretion, suspend the right of redemption, or postpone the redemption order settlement date, for (1) any period during which an emergency exists as a result of which the redemption distribution is not reasonably practicable, or (2) such other period as the Manager determines to be necessary for the protection of the shareholders.

Shareholders who are not Authorized Participants will have no right to purchase or redeem their Shares directly from or to the Funds. Instead, such shareholders will continue to have the ability to purchase or sell their Shares on an exchange.

Net Asset Value

According to the Registration Statement, a Fund’s NAV is calculated as of the close of the exchange on which it trades, on each day that such exchange is open. NAV per Share is computed by dividing the value of all assets of a Fund (including any accrued interest and dividends), less all liabilities (including accrued expenses and distributions declared but unpaid), by the total number of Shares outstanding. Each Fund publishes its NAV on its Web site on a daily basis, rounded to the nearest cent.

For purposes of determining the NAV of a Fund, portfolio instruments will be valued using prices provided primarily by independent pricing services approved by the Manager. A Fund’s Commodity Futures generally will be valued at their final settlement price, if available, as determined by the principal exchange on which they are traded. Non-exchange traded instruments pledged as collateral will generally be valued using prices provided by independent pricing services.

19ETPs that invest in commodity contracts traded on the LME commonly adopt an order cut-off time prior to the close of regular trading on the LME (5 p.m., London time, or 12 p.m. Eastern time) in order to permit sufficient time to conduct necessary trading on the LME in response to creation and redemption activity. See, e.g., PowerShares DB Commodity Index Tracking Fund (DBC) (order cut-off time of 10:00 a.m., Eastern time) and United State Commodity Index Fund (USCI) (order cut-off time of the earlier of 10:30 a.m., Eastern time, or the close of regular trading on the NYSE Arca). Although Authorized Participants who place creation or redemption orders are exposed to market movements until the ETP’s NAV is struck (typically, 4 p.m., Eastern time), they are able to hedge their exposure such that they are willing and able to engage in creation and redemption activity for the purpose of capturing arbitrage opportunities.
services, or prices may be obtained from other sources, such as broker-dealer quotations. Independent pricing services typically value non-exchange traded instruments using a range of market-based inputs and assumptions. For example, when available, pricing services may utilize inputs such as benchmark yields, reported trades, broker-dealer quotes, spreads, and transactions for comparable instruments. In pricing certain instruments, the pricing services may consider information about an instrument’s issuer or market activity provided by the Manager. Independent pricing service valuations of non-exchange traded instruments represent the service’s good faith opinion as to what the holder of an instrument would receive in an orderly transaction for an institutional round lot position under current market conditions. It is possible that these valuations could be materially different from the value that a Fund realizes upon the sale of an instrument. If the pricing services are unable to value an instrument, if the Manager deems the pricing services valuation to be unreliable, or if a significant event occurs such that the valuation provided is deemed unreliable, a Fund may value portfolio instruments(s) at their fair value, which is generally the amount that a Fund might reasonably expect to receive upon the current sale or closing of a position. The fair value of an instrument is based on the Manager’s good faith judgment and may differ from subsequent quoted or published prices. For example, events may occur after the close of the relevant market but prior to the time as of which a Fund’s NAV is calculated, which materially impact the instrument’s value, and the fair value on a given day would take such events into account.

Availability of Information Regarding the Shares

The Web site for the Funds, http://www.nuveen.com/CommodityInvestments, will be publicly accessible at no charge and, following the Conversion, will contain the following information for each Fund, updated daily: (a) The prior business day’s NAV and the reported closing price or mid-point of the bid/ask spread at the time of calculation of such NAV (the “Bid/Ask Price”) 20; (b) calculation of the premium or discount of the closing price or Bid/Ask Price against the NAV; (c) data in chart format displaying the frequency of the discounts and premiums of the daily closing price or Bid/Ask Price against the NAV, within appropriate ranges, for each of the four previous calendar quarters; (d) the prospectus; and (e) other applicable quantitative information.

After the Conversion, on each business day before commencement of trading in Shares on the Exchange, each Fund will disclose on its Web site the Disclosed Portfolio that will form the basis for a Fund’s calculation of NAV at the end of the business day. 21

Each Fund’s portfolio holdings (as of the previous day’s close) will also be disclosed and updated on the Funds’ Web site on each business day that the Exchange is open for trading. Such disclosure of the Funds’ portfolio holdings will include, as applicable to the type of holding: Ticker symbol, name or other identifier, if any; a description of the holding (including the type of holding and the type of futures contract); the identity of the security, commodity or other asset or instrument underlying the holding, if any; quantity held (as measured by, for example, par value, notional value or number of shares, contracts or units); maturity date, if any; effective date, if any; market value of the holding; and the percentage weighting of the holding in a Fund’s portfolio. The values of each Fund’s portfolio holdings will, in each case, be determined in accordance with the Funds’ valuation policies.

The daily settlement prices for the Commodity Futures contracts are publicly available on the Web sites of the futures exchanges trading the particular contracts. Various data vendors and news publications publish futures prices and data. The Exchange represents that futures quotes and last sale information for the commodities contracts will be widely disseminated through a variety of market data vendors worldwide, including Bloomberg and Reuters. In addition, the Exchange further represents that complete real-time futures data for such futures are available by subscription from Reuters and Bloomberg. The relevant futures exchanges also provide delayed futures contract information on current and past trading sessions and market news free of charge on their respective Web sites. The contract specifications for the

20 The Bid/Ask Price of the Funds’ Shares will be determined using the midpoint of the highest bid and the lowest offer on the Exchange as of the time of calculation of a Fund’s NAV. The records relating to Bid/Ask Prices will be retained by the Funds and their service providers.

21 Under accounting procedures followed by the Funds, trades made on the prior business day (“T−1”) will be booked and reflected in NAV on the current business day (“T+1”). Accordingly, the Funds will be able to disclose at the beginning of the business day the portfolio that will form the basis for the NAV calculation at the end of the business day.

futures contracts are also available from the futures exchanges on their Web sites as well as other financial informational sources.

Information regarding market price and trading volume of the Shares will be continually available on a real-time basis throughout the day on brokers’ computer screens and other electronic services. Quotation and last sale information for the Shares will be available via the Consolidated Tape Association (“CTA”) high-speed line. Price information for Collateral will be available from major market data vendors. In addition, the Intraday Indicative Value (“IV”) 22 will be widely disseminated at least every 15 seconds during trading on the Exchange by one or more major market data vendors.23 The dissemination of the IV, together with the Disclosed Portfolio, will allow investors to determine the value of the underlying portfolio of a Fund and provide a close estimate of that value throughout the trading day. In addition, a Basket composition file, which includes the names and weights of the instruments required to be delivered in exchange for a Fund’s Basket, together with estimates and actual cash components, will be publicly disseminated daily prior to the opening of the Exchange.

As described above, the NAV for each Fund will be calculated and disseminated daily. The Manager has represented to the Exchange that the NAV and all portfolio holdings will be disseminated to all market participants at the same time. The Exchange will also make available on its Web site daily trading volume, closing prices, and the NAV. The closing price and settlement prices of the futures contracts held by the Funds are also readily available from the relevant futures exchanges, automated quotation systems, published or other public sources, or on-line information services such as Bloomberg or Reuters. In addition, the Exchange

22 The IV is an approximate per Share value of a Fund’s portfolio holdings, which is disseminated every fifteen seconds throughout the trading day by one or more market data vendors. The IV will be based on the current market value of a Fund’s Disclosed Portfolio. The IV does not necessarily reflect the precise composition of the current portfolio holdings of a Fund at a particular point in time. The IV should not be viewed as a “real-time” update of the NAV of a Fund because the approximate value may not be calculated in the same manner as the NAV. The quotations for certain investments may not be updated during U.S. trading hours if such holdings do not trade in the U.S., except such quotations may be updated to reflect currency fluctuations.

23 It is the Exchange’s current understanding that several major market data vendors display and/or make widely available IVs taken from CTA or other data feeds.
will provide a hyperlink on its Web site to the Funds’ Web site.

As noted above, the NAV of each Fund will be calculated once each trading day shortly after 4:00 p.m. ET. The NAV will be disclosed on the Funds’ Web site and the Exchange’s Web site.

Criteria for Continued Listing

The Funds will be subject to the criteria in Rule 1602 for continued listing of the Shares. A minimum of 100,000 Shares of a Fund will be required to be outstanding at the start of trading upon such Fund’s Conversion. The Exchange believes that the anticipated minimum number of shares outstanding at the start of trading upon the Conversions is sufficient to provide adequate market liquidity and to further each Fund’s objectives. Each Fund has represented to the Exchange in its Prior Release, and continues to represent to the Exchange in its Prior Release, and continues to represent

that, for continued listing of the Shares, it will be in compliance with Section 803 of the NYSE MKT Company Guide (Independent Directors and Audit Committee) and Rule 10A-3 under the Act.

Trading Rules

The Exchange deems the Shares to be equity securities, thus rendering trading in the Shares subject to NYSE MKT Rules governing the trading of equity securities, including, among others, rules governing priority, parity and precedence of orders, DMM responsibilities and account opening and customer suitability (NYSE MKT Rule 405).

The Exchange states that NYSE MKT Rule 15A complies with Rule 611 of Regulation NMS, which requires, among other things, that the Exchange adopt and enforce written policies and procedures that are reasonably designed to prevent trade-throughs of protected quotations. The trading of the Shares will be subject to certain conflict of interest provisions set forth in NYSE MKT Equities Rule 1604.

According to NYSE MKT Rule 1602, trading in Shares of a Fund will be halted if the circuit breaker parameters of NYSE MKT Rule 80B have been reached. In addition, trading may be halted because of market conditions or

for reasons that, in the view of the Exchange, make trading in the Shares inadvisable. These may include: (a) The extent to which trading is not occurring in the underlying futures contracts; or (b) whether other unusual conditions or circumstances detrimental to the maintenance of a fair and orderly market are present. In addition, trading in Shares will be subject to trading halts caused by extraordinary market volatility pursuant to the Exchange’s “circuit breaker” rule or by the halt or suspension of the trading of the underlying futures contracts.

In exercising its discretion to halt or suspend trading in the Shares, the Exchange may consider all factors, such as those set forth in NYSE MKT Rule 953NY(a), in addition to other factors that also may be relevant. In particular, if the portfolio holdings and NAV per Share are not being disseminated as required, the Exchange may halt trading during the day in which the interruption to the dissemination of the portfolio holdings or NAV per Share occurs.

Information Circular

The Exchange will distribute an Information Circular (“Circular”) to its members in connection with the trading of the Shares. The Circular will discuss the special characteristics and risks associated with trading this type of security. Specifically, the Circular, among other things, will discuss: (i) What the Shares are; (ii) NYSE MKT Rule 405, which imposes a duty on member organizations to have a reasonable basis to believe that a customer is suitable for the particular investment prior to recommending to customers transactions in the Shares; (iii) the procedures for purchases and redemptions of Shares in Baskets (and that Shares are not individually redeemable); (iv) how information regarding the IIV and the Disclosed Portfolio is disseminated; (v) the requirement that members and member firms deliver a prospectus to investors purchasing newly issued Shares prior to or concurrently with the confirmation of a transaction; (vi) applicable NYSE MKT rules; and (vii) trading information.

The Circular will also explain that each Fund is subject to various fees and expenses described in its Registration Statement. The Circular will also reference the fact that there is no regulated source of last sale information regarding physical commodities and the respective jurisdictions of the Commission and CFTC over the trading of physical commodities.

The Circular will also discuss any exemptive, no-action and interpretive relief granted by the Commission or the staff from any rules under the Act. The Circular will disclose that the NAV for Shares will be calculated shortly after 4:00 p.m. ET each trading day.

Surveillance

The Exchange represents that, upon conversion of the Funds, trading in the Shares will be subject to the existing trading surveillances administered by the Exchange, as well as cross-market surveillances administered by the Financial Industry Regulatory Authority (“FINRA”) on behalf of the Exchange, which are designed to detect violations of Exchange rules and applicable federal securities laws. The Exchange represents that these procedures are adequate to properly monitor Exchange trading of the Shares in all trading sessions and to deter and detect violations of Exchange rules and federal securities laws applicable to trading on the Exchange.

The surveillances referred to above generally focus on detecting securities trading outside their normal patterns, which could be indicative of manipulative or other violative activity. When such situations are detected, surveillance analysis follows and investigations are opened, where appropriate, to review the behavior of all relevant parties for all relevant trading violations.

The Exchange or FINRA, on behalf of the Exchange, or both, will communicate as needed regarding trading in the Shares and Commodity Futures from other markets that are members of the ISG, and the Exchange or FINRA on behalf of the Exchange, or both, may obtain trading information regarding trading in the Shares and Commodity Futures from such markets. In addition, the Exchange may obtain information regarding trading in the Shares and Commodity Futures from markets that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement.

Not more than 10% of the net assets of a Fund, in the aggregate, shall consist of futures contracts whose principal market is not a member of the ISG or a market with which the Exchange has in

FINRA conducts cross-market surveillances on behalf of the Exchange pursuant to a regulatory services agreement. The Exchange is responsible for FINRA’s performance under this regulatory services agreement.

For a list of the current members of ISG, see www.isgportal.org. The Exchange notes that not all components of the Disclosed Portfolio may trade on markets that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement.


25 FINRA conducts cross-market surveillances on behalf of the Exchange pursuant to a regulatory services agreement. The Exchange is responsible for FINRA’s performance under this regulatory services agreement.

26 For a list of the current members of ISG, see www.isgportal.org. The Exchange notes that not all components of the Disclosed Portfolio may trade on markets that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement.

27 FINRA conducts cross-market surveillances on behalf of the Exchange pursuant to a regulatory services agreement. The Exchange is responsible for FINRA’s performance under this regulatory services agreement.
place a comprehensive surveillance sharing agreement.

The Exchange also has a general policy prohibiting the distribution of material, non-public information by its employees.

All statements and representations made in this filing regarding (a) the description of the portfolio, (b) limitations on portfolio holdings or reference assets, or (c) the applicability of Exchange rules and surveillance procedures shall constitute continued listing requirements for listing the Shares on the Exchange.

The issuer has represented to the Exchange that it will advise the Exchange of any failure by the Funds to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will monitor for compliance with the continued listing requirements. If the Funds are not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures under Sections 1001 through 1010 of the NYSE MKT Guide.

Except for the changes noted above, all other facts presented and representations made in the Prior Releases are unchanged.

2. Statutory Basis

The basis under the Act for this proposed rule change is the requirement under Section 6(b)(5)27 that an exchange have rules that are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to, and perfect the mechanism of, a free and open market and, in general, to protect investors and the public interest.

The Exchange believes that the proposed rule amendments to NYSE MKT Rules 1600 et seq. are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to, and perfect the mechanism of, a free and open market and, in general, to protect investors and the public interest. The Conversions will be made in a fair and orderly manner, as each Fund largely will be structured following its Conversion in the same way as it was before its Conversion: It will remain a commodity pool; shareholders will continue to own the same Shares of a Fund as they owned prior to the Conversion (i.e., there is no forced redemption of currently outstanding Shares, which will continue to be listed and traded on the Exchange); and shareholders will continue to be able to buy and sell Shares of each Fund on the Exchange throughout each business day at then prevailing market prices.

The Exchange believes that the Conversion is consistent with the Act in that the only significant change in the operation of the Funds from that described in the Prior Releases is that each Fund will issue and redeem Shares using a creation/redemption process. The shareholders of each Fund have approved each Fund’s Conversion. Prior to the date of the Conversions, the Manager expects to engage multiple Authorized Participants with respect to the Funds, which the Manager believes will increase the trading volume of the Shares, and reduce the Shares’ discount to NAV. The Manager represents that it believes that, by converting each Fund into an ETP structure that utilizes a creation/redemption process, Shares of each Fund are likely to trade at prices equal to or near NAV.

Moreover, the proposed amendments to the definition of Trust Units in NYSE MKT Rule 1600(b) to provide for continuous issuance and redemption, the addition of requirements relating to the Disclosed Portfolio in NYSE MKT Rule 1600(b)(iii) and the IV in NYSE MKT Rule 1600(b)(iv), would provide an additional level of transparency and enhanced pricing information for Trust Units comparable to requirements applicable to certain other ETPs, such as Managed Fund Shares.

Proposed Commentary .04 to Rule 1600 would provide that, if an issuer’s adviser is affiliated with a broker-dealer, the broker-dealer shall erect a “fire wall” around the personnel who have access to information concerning changes and adjustments to the Disclosed Portfolio. The proposed amendments to Rule 1602(a)(i) will provide that the Exchange will obtain a representation from the issuer of each series of Trust Units that the Disclosed Portfolio as well as the NAV will be made available to all market participants at the same time.

The daily settlement prices of the futures contracts held by the Funds are readily available from the Web sites of the relevant futures exchanges.
automated quotation systems, published or other public sources, or on-line information services such as Bloomberg or Reuters. The relevant futures exchanges also provide delayed futures information on current and past trading sessions and market news free of charge on their respective Web sites. Quotation and last-sale information for the Shares will be available via CTA. In addition, the Funds’ Web site will display each Fund’s daily NAV. An up-to-date value for each Fund’s respective Index will be available through Bloomberg and other market data vendors every 15 seconds. The Funds’ portfolio holdings will be disclosed on the Funds’ Web site daily after the close of trading on the Exchange and prior to the opening of trading on the Exchange the following day. Each of the Manager, SG, the Commodity Subadviser, and the Collateral Subadviser has erected and maintains firewalls within its respective institution to prevent the flow and/or use of non-public information regarding the portfolio of underlying instruments from the personnel involved in the development and implementation of the investment strategy to others such as sales and trading personnel. In addition, the Commodity Subadviser, the Collateral Subadviser, any subadviser of either, and the respective related personnel of both are subject to the provisions of Rule 204A–1 under the Advisers Act relating to codes of ethics.

Each issuer of Shares has represented that the NAV per Share will be calculated daily and that the NAV and the Disclosed Portfolio will be made available to all market participants at the same time. In addition, a large amount of information is (and after the Conversion, will continue to be) publicly available regarding the Funds and the Shares, thereby promoting market transparency. Moreover, the IV applicable to each Fund will be widely disseminated by one or more major market data vendors at least every 15 seconds during the time when the Funds trade on the Exchange. On each business day, before commencement of trading in Shares on the Exchange, each Fund will disclose on its Web site the Disclosed Portfolio that will form the basis for that Fund’s calculation of NAV at the end of the business day. Information regarding market price and trading volume of the Shares will be continually available on a real-time basis throughout the day on brokers’ computer screens and other electronic services. The Web site for the Funds will include (A) a prospectus for each Fund and additional data relating to NAV and other applicable quantitative information. Moreover, as discussed previously, the Exchange will inform its member organizations in an Information Circular of the special characteristics and risks associated with trading the Shares prior to the commencement of trading.

The proposed rule change is designed to perfect the mechanism of a free and open market and, in general, to protect investors and the public interest in that it will facilitate the continued listing and trading of additional types of actively managed ETPs that will enhance competition among market participants, to the benefit of investors and the marketplace. As noted above, the Exchange has in place surveillance procedures relating to trading in the Shares and may obtain information via ISG from other exchanges that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement. In addition, as noted above, investors will have ready access to information regarding each Fund’s holdings, the IV, the Disclosed Portfolio, and quotation and last-sale information for the Shares.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Act. The Exchange notes that the proposed rule change will facilitate the continued listing and trading of an additional type of ETP and that will enhance competition among market participants, to the benefit of investors and the marketplace.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve or disapprove the proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

• Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml); or

• Send an email to rule-comments@sec.gov. Please include File Number SR–NYSEMKT–2016–58 on the subject line.

Paper Comments

• Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEMKT–2016–58. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing will also be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEMKT–2016–58 and should be submitted on or before July 5, 2016.
For the Commission, by the Division of Trading and Markets, pursuant to delegated authority. 28
Robert W. Errett,
Deputy Secretary.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78001; File No. SRNDash;PhlxNDash;2016–63]

Self-Regulatory Organizations; NASDAQ PHLX LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to a Proposal To Relocate and Update the Existing Provisions of Rule 1080.07 to New Rule 1098

June 7, 2016.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), 1 and Rule 19b–4 thereunder, 2 notice is hereby given that on May 27, 2016, NASDAQ PHLX LLC ("Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I, II, a proposal to relocate and update the existing provisions of Rule 1080.07 to new Rule 1098 and III, below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange proposes to a proposal to relocate and update the existing provisions of Rule 1080.07 to new Rule 1098.

The text of the proposed rule change is available on the Exchange’s Web site at http://nasdaqomxphlx.cchwallstreet.com/, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposal is to move the existing provisions regarding complex orders from Rule 1080.07 to new Rule 1098. Complex Orders. The Exchange intends to update and reorganize its rule book in a number of ways. The Exchange believes that the complex orders provisions are easier to read and follow if organized into a separate rule. Various references to Rule 1080.07 within Rule 1080 and in Rules 1047 and 1066 will be changed to refer to Rule 1098. 3

In addition, the Exchange proposes to make a few minor changes. First, the Exchange proposes to replace incorrect references in subparagraph (a)(i) of Rule 1080.07 to Nasdaq Options Services LLC and its abbreviation NOS with Nasdaq Execution Services, LLC and NES. The Exchange now uses NES for this purpose. 4 This will be reflected in new Rule 1098(a)(i).

Second, the Exchange proposes to amend subparagraph (c)(iii)(E) to replace the reference to the risk monitor mechanism with “automatic removal of quotes” and to delete the reference to Rule 993, which was previously deleted and replaced with Rule 1095. 5 Third, the Exchange proposes to refer to the “System” in new Rule 1098 rather than Phlx XL or Phlx XL II to parallel the rules of its affiliated options exchanges 6 and move away from that specific system name in the rules. 7 As a result, the terms “Phlx XL participant” will now be referred to as “participant” and “Phlx XL market maker” will now be referred to as a “Phlx electronic market maker.”

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act 8 in general, and furthers the objectives of Section 6(b)(5) of the Act 9 in particular, in that it is designed to promote just and equitable principles of trade and to protect investors and the public interest, by rendering the complex orders provision easier to read. The proposed relocation and other changes are minor and administrative.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. The proposal merely makes minor organizational corrections and changes.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act 10 and subparagraph (f)(6) of Rule 19b–4 thereunder. 11

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in


6 See e.g., NOM Chapter VI, Section 1(a) defining “System” in general terms.
7 Separately, the Exchange intends to make this change throughout the rules.
furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments
- Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml)
- Send an email to rule-comments@sec.gov. Please include File Number SR-Phlx–2016–63 on the subject line.

Paper Comments
- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR-Phlx–2016–63. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission’s Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-Phlx–2016–63, and should be submitted on or before July 5, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.12

Robert W. Errett,
Deputy Secretary.

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SEcurities AND ExCHANGE ComMISSION


Self-Regulatory Organizations; Bats BZX Exchange, Inc.; Notice of Filing of Amendment No. 5 To Proposed Rule Change, as Modified by Amendments Nos. 1, 3, and 4 thereto, To Amend Rule 14.11(i) To Adopt Generic Listing Standards for Managed Fund Shares

June 7, 2016.

I. Introduction

On November 25, 2015, BATS Exchange, Inc. (now known as Bats BZX Exchange, Inc., “Exchange” or “BZX”)1 filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)2 and Rule 19b–4 thereunder,3 a proposed rule change to amend Rule 14.11(i) by, among other things, adopting generic listing standards for Managed Fund Shares. The proposed rule change was published for comment in the Federal Register on November 25, 2015.4 On January 4, 2016, the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.5 On February 9, 2016, the Exchange filed Amendment No. 1 to the proposed rule change,6 which replaced the originally filed proposed rule change in its entirety.7 On February 11, 2016, the Exchange both filed and withdrew Amendment No. 2 to the proposed rule change. On February 11, 2016, the Exchange filed Amendment No. 3 to the proposed rule change.8 On February 17, 2016, the Exchange filed Amendment No. 4 to the proposed rule change.9 On February 22, 2016, the Commission issued notice of filing of Amendment Nos. 1, 3, and 4 to the proposed rule change and instituted proceedings under Section 19(b)(2)(B) of the Act10 to determine whether to approve or disapprove the proposed rule change, as modified by Amendment Nos. 1, 3, and 4 thereto.11

In the Order

portfolio limit on listed derivatives to require that at least 90% of the weight of such holdings invested in futures, exchange-traded options, and listed swaps shall, on both an initial and continuing basis, consist of futures, options, and swaps for which the Exchange may obtain information via the Intermarket Surveillance Group (“ISG”) from other members or affiliates of the ISG or for which the principal market is a market with which the Exchange has a comprehensive surveillance sharing agreement (“CSSA”).12 Amendment No. 2 modifies the proposed rule change by, among other things, (1) eliminating a proposed rule change that would have required a portfolio to discontinue trading any non-exchange traded (rather than unsponsored) ADRs, and (2) modifying the proposed rule change to require a portfolio to discontinue trading any non-exchange traded (rather than unsponsored) ADRs.8 Amendment No. 3 deletes from the proposal the following two sentences: (1) “Such limitation will not apply to listed swaps because swaps are listed on swap execution facilities (‘‘SEFs’’), the majority of which are not members of ISG.” and (2) “Such limitation would not apply to listed swaps because swaps are listed on SEFs, the majority of which are members of ISG.” Amendment No. 3 also corrects an erroneous statement in Item 11 to indicate that an Exhibit 4 was included in Amendment No. 1. Amendment No. 4 deletes from the proposal the following sentence: “Thus, if the limitation applied to swaps, there would effectively be a cap of 10% of the portfolio invested in listed swaps.” Amendment No. 4 also amends two representations as follows (added language in brackets): The Exchange or FINRA, on behalf of the Exchange, will communicate as needed regarding trading in Managed Fund Shares [and their underlying components] with other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded, or with which the Exchange has in place a CSSA.13 Additionally, the Exchange or FINRA[,] on behalf of the Exchange[,] may obtain information regarding trading in Managed Fund Shares [and their underlying components] from other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded, or with which the Exchange has in place a CSSA.”

5 See Securities Exchange Act Release No. 76820, 81 FR 9899 (Jan. 8, 2016). The Commission designated February 23, 2016 as the date by which the Commission shall either approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change. See id.
6 Amendment No. 1: (1) Clarifies the proposed treatment of convertible securities under the proposed generic listing criteria; (2) modifies the proposed rule change to allow for additional analysis of the proposed rule change’s consistency with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national
Instituting Proceedings, the Commission solicited comments to specified matters related to the proposal.\(^2\) On May 20, 2016, the Commission designated a longer period for Commission action on the proposed rule change.\(^3\) The Commission has not received any comments on the proposed rule change, as modified by Amendment Nos. 1, 3, and 4 thereto.

Pursuant to Section 19(b)(1) of the Act \(^4\) and Rule 19b-4 thereunder,\(^5\) notice is hereby given that, on June 3, 2016, the Exchange filed Amendment No. 5 to the proposed rule change,\(^6\) which replaced the originally filed proposed rule change in its entirety. The proposed rule change, as modified by Amendment No. 5 thereto, is as described in Items II and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change, as modified by Amendment No. 5 thereto, from interested persons.

**II. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change**

The Exchange is proposing a rule change to adopt generic listing standards for shares listed under BZX Rule 14.11(i) (“Managed Fund Shares”). The text of the proposed rule change is available at the Exchange’s Web site at www.batstrading.com, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

**III. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change**

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item V below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant parts of such statements.

**A. Self-Regulatory Organization’s Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change**

1. Purpose

This Amendment No. 5 to SR–BATS–2015–100 amends and replaces in its entirety Amendment No. 1 to the proposal (and subsequent amendments thereto), which was filed on February 10, 2016, which amended and replaced in its entirety the proposal as originally submitted on November 15, 2015. The Exchange submits this Amendment No. 5 in order to clarify certain points about the proposal to describe more accurately how investments in derivative securities will be treated, and provide an example of how portfolio exposure will be calculated.

The Exchange proposes to amend Rule 14.11(i) to adopt generic listing standards for Managed Fund Shares. Under the Exchange’s current rules, a proposed rule change must be filed with the Securities and Exchange Commission (“SEC” or “Commission”) for the listing and trading of each new series of Managed Fund Shares. The Exchange believes that it is appropriate to codify certain rules within Rule 14.11(i) that would generally eliminate the need for such proposed rule changes, which would create greater efficiency and promote uniform standards in the listing process. Prior to listing pursuant to proposed amended Rule 14.11(i), an issuer would be required to represent to the Exchange that it will advise the Exchange of any failure by a series of Managed Fund Shares to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will surveil for compliance with the continued listing requirements. If the Fund is not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures under Exchange Rule 14.12.

**Background**

Rule 14.11(i) sets forth certain rules related to the listing and trading of Managed Fund Shares.\(^7\) Under Rule 14.11(i)(3)(A), the term “Managed Fund Share” means a security that:

(a) Represents an interest in a registered investment company (“Investment Company”) organized as an open-end management investment company or similar entity, that invests in a portfolio of securities selected by the Investment Company’s investment adviser (hereafter “Adviser”) consistent with the Investment Company’s investment objectives and policies;

(b) is issued in a specified aggregate minimum number in return for a deposit of a specified portfolio of securities and/or a cash amount with a value equal to the next determined net asset value; and

(c) when aggregated in the same specified minimum number set may be redeemed at a holder’s request, which holder will be paid a specified portfolio of securities and/or cash with a value equal to the next determined net asset value.

Effectively, Managed Fund Shares are securities issued by an actively-managed open-end Investment Company (i.e., an exchange-traded fund (“ETF”) that is actively managed). Because Managed Fund Shares are actively-managed, they do not seek to replicate the performance of a specified passive index of securities. Instead, they


\(^3\) See id., 81 FR at 9897.


\(^6\) Amendment No. 5: (1) Clarifies the context of “system failures” in the definition of Normal Market Conditions; (2) clarifies the scope of “equity” securities to also include U.S. Component Stocks, Non-U.S. Component Stocks, Derivative Securities Products, and Linked Securities listed pursuant to equivalent rules of another national securities exchange; (3) clarifies the exclusion of U.S. Department of Treasury securities and government-sponsored entity securities from the minimum diversification requirements applicable to fixed income securities; (4) provides that the calculation for complying with the percentage limitations with respect to listed derivatives and OTC derivatives (as defined herein) will be based on aggregate gross notional values of the derivatives; (5) provides additional minimum diversification requirements with respect to listed derivatives, to be calculated based on aggregate gross notional values, including gross notional exposures; (6) clarifies that, to the extent that listed or OTC derivatives (as defined herein) are used to gain exposure to individual equities and/or fixed income securities, or to indexes of equities and/or indexes of fixed income securities, the aggregate gross notional value of such exposure is required to meet the criteria set forth in Rule 14.11(i)(4)(C)(ii) and (iii) (including gross notional exposures), respectively; (7) provides examples on how the percentage limitations applicable to listed and OTC derivatives (as defined herein) would be calculated; and (8) confirms that a holder would be required to represent to the Exchange that it will advise the Exchange of any failure by a series of Managed Fund Shares to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will surveil for compliance with the continued listing requirements, and (b) if the series of Managed Fund Shares is not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures.

\(^7\) See Securities Exchange Act Release No. 65225 (August 30, 2011), 76 FR 55148 (September 6, 2011) (SR–BATS–2011–018) (Order Approving Proposed Rule Change to Adopt Rules for the Qualification, Listing and Delisting of Companies on the Exchange) (the “Approval Order”). The Approval Order approved the rules permitting the listing of both Tier I and Tier II securities on the Exchange and the requirements associated therewith, which includes the listing and trading of Index Fund Shares and Managed Fund Shares, trading hours and halts, and listing fees originally applicable to Managed Fund Shares.
generally use an active investment strategy to seek to meet their investment objectives. In contrast, an open-end Investment Company that issues Index Fund Shares, listed and traded on the Exchange pursuant to Rule 14.11(c), seeks to provide investment results that generally correspond to the price and yield performance of a specific foreign or domestic stock index, fixed income securities index, or combination thereof. All Managed Fund Shares listed pursuant to Rule 14.11(i) are included within the definition of “security” or “securities” as such terms are used in the Rules of the Exchange and, as such, are subject to the full panoply of Exchange rules and procedures that currently govern the trading of securities on the Exchange.

In addition, Rule 14.11(i) currently provides for the criteria that Managed Fund Shares must satisfy for initial and continued listing on the Exchange, including, for example, that a minimum number of Managed Fund Shares are required to be outstanding at the time of commencement of trading on the Exchange. However, the current process for listing and trading new series of Managed Fund Shares on the Exchange requires that the Exchange submit a proposed rule change with the Commission. In this regard, Rule 14.11(i)(2)(A) specifies that the Exchange will file separate proposals under Section 19(b) of the Act (hereafter, a “proposed rule change”) before the listing of Managed Fund Shares, which, in conjunction with the proposed listing standards for Managed Fund Shares, the Exchange is proposing to delete.

Proposed Changes to Rule 14.11(i)

The Exchange is proposing to amend Rule 14.11(i) to specify that the Exchange may approve Managed Fund Shares for listing pursuant to SEC Rule 19b–4(e) under the Act, which pertains to derivative securities products (“SEC Rule 19b–4(e)”). SEC Rule 19b–4(e)(1) provides that the listing and trading of a new derivative securities product by a self-regulatory organization (“SRO”) is not deemed a proposed rule change, pursuant to paragraph (c)(1) of Rule 19b–4, 23 if the Commission has

approved, pursuant to section 19(b) of the Act, the SRO’s trading rules, procedures and listing standards for the product class that would include the new derivative securities product and the SRO has a surveillance program for the product class. This is the current method pursuant to which “passive” ETFs are listed under Rule 14.11.

The Exchange would also specify within Rule 14.11(i)(4)(C) that components of Managed Fund Shares listed pursuant to SEC Rule 19b–4(e) must satisfy the requirements of Rule 14.11(i) on an initial and continued basis, which includes certain specific criteria that the Exchange is proposing to include within Rule 14.11(i)(4)(C), as described in greater detail below. As proposed, the Exchange would continue to file separate proposed rule changes before the listing and trading of Managed Fund Shares with components that do not satisfy the additional criteria described below or components other than those specified below. For example, if the components of a Managed Fund Share exceeded one of the applicable thresholds, the Exchange would file a separate proposed rule change before listing and trading such Managed Fund Share. Similarly, if the components of a Managed Fund Share included a security or asset that is not specified below, the Exchange would file a separate proposed rule change.

The Exchange would also amend the definition of the term “Disclosed Portfolio” under Rule 14.11(i)(3)(B) in order to require that the Web site for each series of Managed Fund Shares listed on the Exchange disclose the following information regarding the Disclosed Portfolio, to the extent applicable: Ticker symbol,CUSIP or other identifier, a description of the holding, identity of the asset upon which the derivative is based, the strike price for any options, the quantity of each security or other asset held as measured by select metrics, maturity date, coupon rate, effective date, market value and percentage weight of the holding in the portfolio. 24

The Exchange would also add to Rule 14.11(i)(4)(A) by specifying that all Managed Fund Shares must have a stated investment objective, which must be adhered to under normal market conditions. 25

Finally, the Exchange would also amend the continuing listing requirement in Rule 14.11(i)(4)(B) by changing the requirement that an Intraday Indicative Value for Managed Fund Shares be widely disseminated by one or more major market data vendors at least every 15 seconds during the time when the Managed Fund Shares trade on the Exchange to a requirement that an Intraday Indicative Value be widely disseminated by one or more major market data vendors at least every 15 seconds during Regular Trading Hours, as defined in Exchange Rule 1.5(w).

Proposed Managed Fund Share Portfolio Standards

The Exchange is proposing standards that would pertain to Managed Fund Shares to qualify for listing and trading pursuant to SEC Rule 19b–4(e). These standards would be grouped according to security or asset type. The Exchange notes that the standards proposed for a Managed Fund Share portfolio that holds equity securities, Derivative Securities Products, and Linked Securities are based in large part on the existing equity security standards applicable to Index Fund Shares in Exchange Rule 14.11(c)(3). The standards proposed for a Managed Fund Share portfolio that holds fixed income securities are based in large part on the existing fixed income security standards applicable to Index Fund Shares in Rule 14.11(c)(4). Many of the standards proposed for other types of holdings in a Managed Fund Share portfolio are based on previous proposed rule changes for specific series of Managed Fund Shares.

22 The Exchange would also add a new defined term under Rule 14.11(i)(3)(E) to specify that the term “normal market conditions” includes, but is not limited to, the absence of trading halts in the applicable financial markets generally; operational issues causing dissemination of inaccurate market information or system failures; or force majeure-type events such as natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption, or any similar intervening circumstance.

Proposed Rule 14.11(i)(4)(C)(i) would describe the standards for a Managed Fund Share portfolio that holds equity securities, which are defined to be U.S. Component Stocks, Non-U.S. Component Stocks, Derivative Securities Products, and Linked Securities listed on a national securities exchange. For Derivative Securities Products and Linked Securities, no more than 25% of the equity weight of the portfolio could include leveraged and/or inverse leveraged Derivative Securities Products or Linked Securities. To the extent that a portfolio includes convertible securities, the equity security into which such security is converted shall meet the criteria of this Rule 14.11(i)(4)(C)(i) after converting.

As proposed in Rule 14.11(i)(4)(C)(i)(a), the component stocks of the equity portion of a portfolio that are U.S. Component Stocks shall meet the following criteria initially and on a continuing basis:

1. Component stocks (excluding Derivative Securities Products and Linked Securities) that in the aggregate account for at least 90% of the equity weight of the portfolio (excluding such Derivative Securities Products and Linked Securities) each must have a minimum market value of at least $75 million; 28

2. Component stocks (excluding Derivative Securities Products and Linked Securities) that in the aggregate account for at least 70% of the equity weight of the portfolio (excluding such Derivative Securities Products and Linked Securities) each must have a minimum monthly trading volume of 250,000 shares, or minimum notional volume traded per month of $25,000,000, averaged over the last six months; 29

3. The most heavily weighted component stock (excluding Derivative Securities Products and Linked Securities) must not exceed 30% of the equity weight of the portfolio, and, to the extent applicable, the five most heavily weighted component stocks (excluding Derivative Securities Products and Linked Securities) must not exceed 65% of the equity weight of the portfolio; 30

4. Where the equity portion of the portfolio does not include Non-U.S. Component Stocks, the equity portion of the portfolio shall include a minimum of 13 component stocks; provided, however, that there would be no minimum number of component stocks if (a) one or more series of Derivative Securities Products or Linked Securities constitute, at least in part, components underlying a series of Managed Fund Shares, or (b) one or more series of Derivative Securities Products or Linked Securities account for 100% of the equity weight of the portfolio of a series of Managed Fund Shares; 31

5. Except as provided in proposed Rule 14.11(i)(4)(C)(i)(a), equity

28 The proposed text is identical to the corresponding text of Rule 14.11(i)(3)(A)(i)(a), except for the omission of the reference to “index,” which is not applicable, and the addition of the reference to Linked Securities.

29 The proposed text is identical to the corresponding text of Rule 14.11(i)(3)(A)(i)(b), except for the omission of the reference to “index,” which is not applicable, and the addition of the reference to Linked Securities.

30 This proposed text is identical to the corresponding representation from the Non-U.S. Component Stocks, the equity portion of the portfolio shall include a minimum of 20 component stocks; provided, however, that there shall be no minimum number of component stocks if (a) one or more series of Derivative Securities Products or Linked Securities constitute, at least in part, components underlying a series of Managed Fund Shares, or (b) one or more series of Derivative Securities Products or Linked Securities account for 100% of the equity weight of the portfolio of a series of Managed Fund Shares; 31

31 Except as provided in proposed Rule 14.11(i)(4)(C)(i)(a), equity

32 17 CFR 240.600. This proposed text is identical to the corresponding text of Section 240.600, except for the addition of “equity” to make clear that the standard applies to “equity securities” and the omission of the reference to “index,” which is not applicable.

33 The proposed text is identical to the corresponding representation from the Non-U.S. Component Stocks, as defined in footnote 24, below. The proposed text is also identical to the corresponding text of Rule 14.11(i)(3)(A)(i)(a), except for the omission of the reference to “index,” which is not applicable, and the addition of the reference to Linked Securities.

34 The proposed text is identical to the corresponding representation from the Non-U.S. Component Stocks, as defined in footnote 24, below. The proposed text is also identical to the corresponding text of Rule 14.11(i)(3)(A)(i)(a), except for the omission of the reference to “index,” which is not applicable, and the addition of the reference to Linked Securities.

35 The proposed text is identical to the corresponding representation from the Non-U.S. Component Stocks, as defined in footnote 24, below. The proposed text is also identical to the corresponding text of Rule 14.11(i)(3)(A)(i)(a), except for the omission of the reference to “index,” which is not applicable, and the addition of the reference to Linked Securities.

24 For the purposes of Rule 14.11(i) and this proposal, the term “U.S. Component Stocks” will have the same meaning as defined in Rule 14.11(i)(1)(D).

25 For the purposes of Rule 14.11(i) and this proposal, the term “Non-U.S. Component Stocks” will have the same meaning as defined in Rule 14.11(i)(1)(E).

26 For the purposes of Rule 14.11(i) and this proposal, the term “Derivative Securities Products” will have the same meaning as defined in Rule 14.11(i)(3)(A)(ii)(a) and will include both those Derivative Securities Products listed on the Exchange as well as each of the equivalent security types listed on another national securities exchange.

27 Linked Securities are securities listed on the Exchange under Rule 14.11(d) and each of the equivalent security types listed on another national securities exchange.
of Managed Fund Shares, or (b) one or more series of Derivative Securities Products or Linked Securities account for 100% of the equity weight of the portfolio of a series of Managed Fund Shares; 36 and

(5) Each Non-U.S. Component Stock shall be listed and traded on an exchange that has last-sale reporting. 37

The Exchange notes that, as approved by the Commission for certain Managed Fund Shares 38 and also not required under corresponding Rule 14.11(c)(3)(A)(ii), related to Index Fund Shares, 39 it is not proposing to require that any of the equity portion of the equity portfolio composed of Non-U.S. Component Stocks be listed on markets that are either a member of the Intermarket Surveillance Group ("ISG") or a market with which the Exchange has a comprehensive surveillance sharing agreement ("CSSA"). 40 However, as further detailed below, the Exchange or the Financial Industry Regulatory Authority, Inc. ("FINRA"), on behalf of the Exchange, will communicate as needed regarding trading in Managed Fund Shares with other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded.

Proposed Rule 14.11(i)(4)(C)(iii) would describe the standards for a Managed Fund Share portfolio that holds fixed income securities, which are debt securities 41 that are notes, bonds, debentures or evidence of indebtedness that include, but are not limited to, U.S. Department of Treasury securities ("Treasury Securities"), government-sponsored entity securities ("GSE Securities"), municipal securities, trust preferred securities, supranational debt and debt of a foreign country or a subdivision thereof, investment grade and high yield corporate debt, bank loans, mortgage and asset backed securities, 42 and commercial paper. To the extent that a portfolio includes convertible securities, the fixed income security into which such security is converted shall meet the criteria of proposed Rule 14.11(i)(4)(C)(ii) after converting. The components of the fixed income portion of a portfolio shall meet the following criteria initially and on a continuing basis:

(1) Components that in the aggregate account for at least 75% of the fixed income weight of the portfolio shall each have a minimum original principal amount outstanding of $100 million or more; 43

(2) No component fixed-income security (excluding Treasury Securities and GSE Securities) could represent more than 30% of the fixed income weight of the portfolio, and the five most heavily weighted fixed income securities in the portfolio (excluding Treasury Securities and GSE Securities) shall not in the aggregate account for more than 65% of the fixed income weight of the portfolio;

(3) An underlying portfolio (excluding exempted securities) that includes fixed income securities shall include a minimum of 13 non-affiliated issuers, provided, however, that there shall be no minimum number of non-affiliated issuers required for fixed income securities if at least 70% of the weight of the portfolio consists of equity securities as described in Rule 14.11(i)(4)(C)(i); 45

(4) Component securities that in aggregate account for at least 90% of the fixed income weight of the portfolio must be either: (a) From issuers that are required to file reports pursuant to Sections 13 and 15(d) of the Act; (b) From issuers that have a worldwide market value of its outstanding common equity held by non-affiliates of $700 million or more; (c) From issuers with stock that is listed on an exchange that has last-sale reporting.

Compliance issues considered in connection with this proposed standard include:

36 This proposed text is identical to the corresponding text of Rule 14.11(c)(3)(A)(ii), except for the omission of the reference to "index," which is not applicable, the addition of the reference to "equity" to make clear that the standard applies to "equity" securities, and the omission of the reference to "index," which is not applicable, the addition of the reference to "equity" to make clear that the standard applies to "equity" securities. 41 This proposed text is identical to the corresponding text of Rule 14.11(c)(3)(A)(ii), except for the omission of the reference to "index," which is not applicable, and the exclusion of "GSE Securities," which is consistent with the corresponding text of Rule 14.11(c)(3)(A)(ii).

37 17 CFR 240.600. This proposed text is identical to the corresponding text of Rule 14.11(c)(3)(A)(ii), except for the addition of the reference to "index," which is not applicable.


39 Under Rule 14.11(c)(3)(A)(ii), index fund shares with components that include Non-U.S. Component Stocks can hold a portfolio that is entirely composed of Non-U.S. Component Stocks that are listed on markets that are neither members of ISG, nor with which the Exchange has in place a CSSA.

40 ISG is comprised of an international group of exchanges, market centers, and market regulators that perform front-line market surveillance in their respective jurisdictions. See https://www.isgportal.org/home.html.

41 Debt securities include a variety of fixed income obligations, including, but not limited to, corporate debt securities, government securities, municipal securities, convertible securities, and mortgage-backed securities. Debt securities include investment-grade securities, non-investment-grade securities, and unrated securities. Debt securities also include various types of mortgage debt instruments.

42 The Exchange notes that, for purposes of this proposal, the issuer of asset backed securities will be considered the issuer of the underlying debt.

43 This proposed text of 14.11(i)(4)(C)(ii) is based on the corresponding text of 14.11(c)(4)(B)(ii)(b).

45 Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included the ability for such Managed Fund Share holdings to include cash and cash equivalents. See, e.g., Shares U.S. Fixed Income Balanced Risk Approval at 9789, SPDR Blackstone/GSO Senior Loan Approval at 9768–69, and First Trust Preferred Securities and Income Approval at 76150.

46 Proposed rule changes for previously-listed series of Managed Fund Shares have similarly specified short-term instruments with respect to their inclusion in Managed Fund Share holdings, See, e.g., First Trust Preferred Securities and Income Approval at 76150–51.
and loan associations for a stated period of time at a fixed rate of interest; (6) commercial paper, which are short-term unsecured promissory notes; and (7) money market funds.

Proposed Rule 14.11(i)(4)(C)(iv) describes the standards for a Managed Fund Share portfolio that holds listed derivatives, including futures, options and swaps on commodities, currencies and financial instruments (e.g., stocks, fixed income, interest rates, and volatility) or a basket or index of any of the foregoing. There would be no limitation to the percentage of the portfolio invested in such holdings; provided, however, that, in the aggregate, at least 90% of the weight of such holdings invested in futures, exchange-traded options, and listed swaps shall, on both an initial and continuing basis, consist of futures, options, and swaps for which the Exchange may obtain information via the ISG from other members or affiliates or for which the principal market is a market with which the Exchange has a CSSA, calculated using the aggregate gross notional value of such holdings. In addition, the aggregate gross notional value of listed derivatives based on any five or fewer underlying reference assets shall not exceed 65% of the weight of the portfolio (including gross notional exposures), and the aggregate gross notional value of listed derivatives based on any single underlying reference asset shall not exceed 30% of the weight of the portfolio (including gross notional exposures). The Exchange notes that, for purposes of calculating this limitation, a portfolio’s investment in listed derivatives will be calculated as the gross notional value of the listed derivatives.

Proposed Rule 14.11(i)(4)(C)(v) describes the standards for a Managed Fund Share portfolio that holds over the counter (“OTC”) derivatives, including forwards, options and swaps on commodities, currencies and financial instruments (e.g., stocks, fixed income, interest rates, and volatility) or a basket or index of any of the foregoing. Proposed Rule 14.11(i)(4)(C)(v) also provides that the aggregate gross notional value of OTC Derivatives shall not exceed 20% of the weight of the portfolio (including gross notional exposures).

Proposed Rule 14.11(i)(4)(C)(vi) provides that, to the extent that listed or OTC derivatives are used to gain exposure to individual equities and/or fixed income securities, or to indexes of equities and/or fixed income securities, the aggregate gross notional value of such exposure shall meet the criteria set forth in Rule 14.11(i)(4)(C)(ii) and 14.11(i)(4)(C)(iii) (including gross notional exposures), respectively. The Exchange notes that, for purposes of this proposal, a portfolio’s investment in OTC derivatives will be calculated as the gross notional value of the OTC derivatives.

The Exchange believes that the proposed standards would continue to ensure transparency surrounding the listing process for Managed Fund Shares. Additionally, the Exchange believes that the proposed portfolio standards for listing and trading Managed Fund Shares, many of which track existing Exchange rules relating to Index Fund Shares, are reasonably designed to promote a fair and orderly market for such Managed Fund Shares. These proposed standards would also work in conjunction with the existing initial and continued listing criteria related to surveillance procedures and trading guidelines.

As an example of how the Exchange would determine whether a series of Managed Fund Shares meets these proposed portfolio exposure requirements, see the following examples based on a hypothetical portfolio. For purposes of these examples, it will be assumed that the portfolio meets proposed Rules 14.11(i)(4)(C)(i)(1), (2), (4), (5), and (6), 14.11(i)(4)(C)(ii)(1), (2), (4), (5), and (6), 14.11(i)(4)(C)(iii)(a), (c), and (d).

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<td>intl Equity 1</td>
<td>9,000</td>
<td>25</td>
<td>225,000</td>
<td>4.50</td>
</tr>
<tr>
<td>Intl Equity 2</td>
<td>5,000</td>
<td>50</td>
<td>250,000</td>
<td>5.00</td>
</tr>
<tr>
<td>Intl Equity 3</td>
<td>5,000</td>
<td>100</td>
<td>500,000</td>
<td>10.00</td>
</tr>
<tr>
<td>Intl Equity 4</td>
<td>10,000</td>
<td>75</td>
<td>750,000</td>
<td>15.00</td>
</tr>
<tr>
<td>Intl Equity 5</td>
<td>2,000</td>
<td>75</td>
<td>150,000</td>
<td>3.00</td>
</tr>
<tr>
<td>Fixed Income 1</td>
<td>5,000</td>
<td>25</td>
<td>125,000</td>
<td>2.50</td>
</tr>
<tr>
<td>Fixed Income 2</td>
<td>6,400</td>
<td>50</td>
<td>320,000</td>
<td>6.40</td>
</tr>
<tr>
<td>Fixed Income 3 (Private label ABS)</td>
<td>2,000</td>
<td>75</td>
<td>150,000</td>
<td>3.00</td>
</tr>
<tr>
<td>TBill 1 (2 months)</td>
<td>12,500</td>
<td>50</td>
<td>625,000</td>
<td>12.50</td>
</tr>
<tr>
<td>TBill 2 (6 months)</td>
<td>2,000</td>
<td>50</td>
<td>100,000</td>
<td>2.00</td>
</tr>
<tr>
<td>Total Fixed Income</td>
<td></td>
<td></td>
<td></td>
<td>1,320,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>5,000,000</td>
<td>100.00</td>
</tr>
</tbody>
</table>


49 See supra note 40.

50 Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included the ability for such Managed Fund Shares to include OTC derivatives, specifically OTC down-and-in put options, which are not NMS Stocks as defined in Rule 600 of Regulation NMS and therefore would not satisfy the requirements of Rule 14.11(c)(3)(A)(i) or the analogous rule on another listing exchange. See, e.g., Securities Exchange Act Release No. 69373 (April 15, 2013), 78 FR 23601 (April 19, 2013) [SR–NYSEArca–2012–108] at 23602.
In this hypothetical portfolio, proposed Rule 14.11(i)(4)(C)(i)(a)(3) is met because the most heavily weighted single U.S. equity component stock (both U.S. Equity 2 and U.S. Equity 3) represents 13.6% of the equity weight of the portfolio (500,000/3,680,000) and the five most heavily weighted U.S. equity component stocks represent 49% of the equity weight of the portfolio (1,805,000/3,680,000) and proposed Rule 14.11(i)(4)(C)(i)(b)(3) is met because the most heavily weighted Non-U.S. Component Stock composes 20.4% of the equity weight of the portfolio (750,000/3,680,000) and the five most heavily weighted Non-U.S. Component Stocks composes 51% of the equity weight of the portfolio (1,875,000/3,680,000). Proposed Rules 14.11(i)(4)(C)(ii) and (e) are met because the most heavily weighted fixed income security (excluding Treasury Securities) represents 24.2% of the fixed income weight of the portfolio (320,000/1,320,000), the five most heavily weighted fixed income securities (excluding Treasury Securities) represent 45% of the fixed income weight of the portfolio (595,000/1,320,000), and the non-agency, non-GSE, and privately-issued mortgage-related and other asset-backed securities components represent 11.4% of the fixed income weight of the portfolio (150,000/1,320,000). For purposes of this analysis, both TBill 1 and TBill 2 will be counted as fixed income securities even though TBill 1 would be included in the definition of cash and cash equivalents. There is no portfolio analysis specific to the cash and cash equivalents portion of the portfolio because there are no limitations to the percentage of the portfolio invested in instruments that qualify as cash and cash equivalents.

Suppose that the hypothetical portfolio laid out above added the following instruments:

<table>
<thead>
<tr>
<th>Instrument type</th>
<th>Units of reference asset in the contract(s)</th>
<th>Price or face value of reference asset</th>
<th>Absolute notional exposure</th>
<th>Percent of portfolio (including gross notional exposures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed Derivative 1 (Option on U.S. Equity 1)</td>
<td>10,000</td>
<td>20</td>
<td>200,000</td>
<td>3.20</td>
</tr>
<tr>
<td>Listed Derivative 2 (Treasury Futures)</td>
<td>5</td>
<td>100,000</td>
<td>500,000</td>
<td>8.00</td>
</tr>
<tr>
<td>Listed Derivative 3 (Commodity Swap)</td>
<td>200</td>
<td>250</td>
<td>50,000</td>
<td>0.80</td>
</tr>
<tr>
<td>OTC Derivative 1 (Credit Default Swap)</td>
<td>N/A</td>
<td>500,000</td>
<td>500,000</td>
<td>8.00</td>
</tr>
<tr>
<td>Total Derivative</td>
<td></td>
<td></td>
<td>1,250,000</td>
<td></td>
</tr>
<tr>
<td>Listed Derivative</td>
<td></td>
<td></td>
<td>750,000</td>
<td></td>
</tr>
<tr>
<td>Derivative Equity</td>
<td></td>
<td></td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Derivative FI</td>
<td></td>
<td></td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>Derivative Other</td>
<td></td>
<td></td>
<td>550,000</td>
<td></td>
</tr>
<tr>
<td>Total Equity</td>
<td></td>
<td></td>
<td>3,880,000</td>
<td></td>
</tr>
<tr>
<td>Total Fixed Income</td>
<td></td>
<td></td>
<td>1,820,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>6,250,000</td>
<td></td>
</tr>
</tbody>
</table>

In this hypothetical portfolio, proposed Rule 14.11(i)(4)(C)(vi) provides that the calculations provided above related to Rules 14.11(i)(4)(C)(i) and (ii) would now need to include the aggregate gross notional value of Listed Derivative 1 and Listed Derivative 2, respectively. As such, the $200,000 absolute notional exposure from Listed Derivative 1 would be added to the existing exposure to U.S. Equity 1 and proposed Rule 14.11(i)(4)(C)(i)(a)(3) would be met because the most heavily weighted single U.S. equity component stock (now U.S. Equity 1) represents 14.8% of the equity weight of the portfolio (575,000/3,880,000) and the five most heavily weighted U.S. equity component stocks represent 51.7% of the equity weight of the portfolio (2,005,000/3,880,000). Similarly, proposed Rule 14.11(i)(4)(C)(i)(b)(3) is met because the additional $500,000 in aggregate gross notional exposure to fixed income securities (in particular, Treasury Securities) gained through Listed Derivative 2 is added included in the calculation such that the most heavily weighted fixed income security (excluding Treasury Securities) represents 17.6% of the fixed income weight of the portfolio (320,000/1,820,000), the five most heavily weighted fixed income securities (excluding Treasury Securities) represent 32.7% of the fixed income weight of the portfolio (595,000/1,820,000), and the non-agency, non-GSE, and privately-issued mortgage-related and other asset-backed securities components represent 8.2% of the fixed income weight of the portfolio (150,000/1,820,000). Proposed Rule 14.11(i)(4)(C)(iv)(a) would be met if both Listed Derivative 1 and Listed Derivative 2 are derivatives for which the Exchange may obtain information via the ISG, from other members or affiliates of the ISG or for which the principal market is a market with which the Exchange has a comprehensive surveillance sharing agreement. However, if Listed Derivative 1 or Listed Derivative 2 did not meet that requirement, the portfolio would not meet proposed Rule 14.11(i)(4)(C)(iv)(a) [(500,000 + 50,000)/750,000] = 73.3% < 90%; [(200,000 + 50,000)/750,000] = 33.3% < 90%]. Proposed Rule 14.11(i)(4)(C)(iv)(b) is met because the aggregate gross notional value of listed derivatives is 12% of the portfolio (750,000/6,250,000), which is less than both standards in the proposed rule. Proposed Rule 14.11(i)(4)(C)(v) would be met because the aggregate gross notional exposure of OTC Derivatives is 8% of the weight of the portfolio (500,000/6,250,000).

In support of this proposal, the Exchange represents that: (1) generically listed Managed Fund Shares will conform to the initial and continued listing criteria under Rule 14.11(i)(4)(A) and (B); (2) the Exchange’s surveillance procedures are adequate to continue to properly monitor the trading of the Managed Fund Shares in all trading sessions and to deter and detect violations of Exchange rules. Specifically, the Exchange intends to utilize its existing surveillance procedures applicable to derivative products, which will include Managed Fund Shares, to monitor trading in the Managed Fund Shares; (3) prior to the
commencement of trading of a particular series of Managed Fund Shares, the Exchange will inform its Members in an information circular of the special characteristics and risks associated with trading the Managed Fund Shares, including procedures for purchases and redemptions of Managed Fund Shares, suitability requirements under Rule 3.7, the risks involved in trading the Managed Fund Shares during the Pre-Opening and After Hours Trading Sessions when an updated Intraday Indicative Value will not be calculated or publicly disseminated, how information regarding the Intraday Indicative Value and Disclosed Portfolio is disseminated, prospectus delivery requirements, and other trading information. In addition, the information circular will disclose that the Managed Fund Shares are subject to various fees and expenses, as described in the registration statement, and will discuss any exemptive, no-action, and interpretive relief granted by the Commission from any rules under the Act. Finally, the Bulletin will disclose that the net asset value for the Managed Fund Shares will be calculated after 4 p.m. ET each trading day; and (4) the issuer of a series of Managed Fund Shares will be required to comply with Rule 10A-3 under the Act for the initial and continued listing of Managed Fund Shares, as provided under Rule 14.10(c)(3).

The Exchange notes that the proposed change is not otherwise intended to address any other issues and that the Exchange is not aware of any problems that Members or issuers would have in complying with the proposed change.

2. Statutory Basis

The Exchange believes that the proposal is consistent with Section 6(b) of the Act in general and Section 6(b)(5) of the Act in particular in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest.

The proposed rule change is designed to perfect the mechanism of a free and open market and, in general, to protect investors and the public interest because it would facilitate the listing and trading of additional Managed Fund Shares, which would enhance competition among market participants, to the benefit of investors and the marketplace. Specifically, after more than six years under the current process, whereby an exchange is required to file a proposed rule change with the Commission for the listing and trading of each new series of Managed Fund Shares, the Exchange believes that it is appropriate to codify certain rules within Rule 14.11(i) that would generally eliminate the need for separate proposed rule changes. The Exchange believes that this would facilitate the listing and trading of additional types of Managed Fund Shares that have investment characteristics that are similar to investment portfolios for Index Fund Shares, which have been approved for listing and trading, thereby creating greater efficiencies in the listing process for the Exchange and the Commission. In this regard, the Exchange notes that the standards proposed for Managed Fund Share portfolios that include equity securities, Derivative Securities Products, and Linked Securities are based in large part on the existing equity security standards applicable to Index Fund Shares based on either a U.S. index or portfolio or an international or global index or portfolio found in Rule 14.11(c)(3)(A)(i)53 and (ii),54 respectively, and that the standards proposed for Managed Fund Share portfolios that include fixed income securities are based in large part on the existing fixed income standards applicable to Index Fund Shares in Rule 14.11(c)(4). Additionally, many of the standards proposed for other types of holdings of series of Managed Fund Shares are based on previous proposed rule changes for series of Managed Fund Shares.55 The Exchange notes that prior to listing pursuant to proposed amended Rule 14.11(i), an issuer would be required to represent to the Exchange that it will advise the Exchange of any failure by a series of Managed Fund Shares to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Exchange Act, the Exchange will surveil for compliance with the continued listing requirements. If the Fund is not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures under Exchange Rule 14.12. With respect to the proposed addition to the criteria of Rule 14.11(i)(3)(B) to provide that the Web site for each series of Managed Fund Shares shall disclose certain information regarding the Disclosed Portfolio, to the extent applicable, the Exchange notes that proposed rule changes approved by the Commission for previously-listed series of Managed Fund Shares have similarly included disclosure requirements with respect to each portfolio holding, as applicable to the type of holding.56 With respect to the proposed exclusion of Derivative Securities Products and Linked Securities from the requirements of proposed Rule 14.11(i)(4)(C)(i)(a) and (b), the Exchange believes it is appropriate to exclude Linked Securities as well as Derivative Securities Products from certain component stock eligibility criteria for Managed Fund Shares in so far as Derivative Securities Products and Linked Securities are themselves subject to specific quantitative listing and continued listing requirements of a national securities exchange on which such securities are listed. Derivative Securities Products and Linked Securities that are components of a fund’s portfolio would have been listed and traded on a national securities exchange pursuant to a proposed rule change approved by the Commission pursuant to Section 19(b)(2) of the Act or submitted by a national securities exchange pursuant to the requirements of Rule 19b-4(e) under the Act.57 The Exchange also notes that Derivative Securities Products and Linked Securities are derivatively priced, and, therefore, the Exchange believes that it would not be necessary to apply the proposed generic quantitative criteria (e.g., market capitalization, trading volume, or portfolio component weighting) applicable to equity securities other than Derivative Securities Products or Linked Securities (e.g., common stocks) to such products. With respect to the proposed amendment to the continued listing requirement in Rule 14.11(i)(4)(B)(i) to require dissemination of an Intraday Indicative Value at least every 15 seconds during Regular Trading Hours, such requirement conforms to the requirement applicable to the dissemination of the Intraday Indicative Value for Index Fund Shares in Rule 14.11(c)(3)(C) and 14.11(c)(6)(A). In addition, such dissemination is consistent with representations made in proposed rule changes for issues of Managed Fund Shares previously approved by the Commission.58

53 See supra notes 28 through 32.
54 See supra notes 33 through 40.
55 See supra note 23.
56 See supra note 21.
58 See supra note 21.
60 See supra note 23.
As proposed, pursuant to Rule 14.11(i)(4)(C)(iii) an underlying portfolio (excluding exempted securities) that includes fixed income securities must include a minimum of 13 non-affiliated issuers, provided, however, that there would be no minimum number of non-affiliated issuers required for fixed income securities if at least 70% of the weight of the portfolio consists of equity securities. The Exchange notes that when evaluated in conjunction with proposed Rule 14.11(i)(4)(C)(iii)(b), the proposed rule is consistent with current rules 14.11(c)(4)(B)(ii)(d) and (e) in that it provides for a maximum weighting of a fixed income portion of the portfolio of a fund that is comparable to the existing rules applicable to Index Fund Shares based on fixed income indexes.

With respect to the proposed amendment to Rule 14.11(i)(4)(C)(iii) relating to listed and cash equivalents, while there is no limitation on the amount of cash and cash equivalents can make up of the portfolio, such instruments are short-term, highly liquid, and of high credit quality, making them less susceptible than other asset classes both to price manipulation and volatility. Further, the requirement is consistent with representations made in proposed rule changes for issues of Managed Fund Shares previously approved by the Commission.61

With respect to proposed Rule 14.11(i)(4)(C)(iv) relating to listed derivatives, the Exchange believes that it is appropriate that there be no limit to the percentage of a portfolio invested in such holdings, provided that, in the aggregate, at least 90% of the weight of such holdings invested in futures, exchange-traded options, and listed swaps shall, on both an initial and continuing basis, consist of futures, options, and swaps for which the Exchange may obtain information via the ISG from other members or affiliates or for which the principal market is a market with which the Exchange has a comprehensive surveillance sharing agreement CSSA, calculated using the aggregate gross notional value of such holdings. Such a requirement would facilitate information sharing among market participants trading shares of a series of Managed Fund Shares as well as futures and options that such series may hold. In addition, the aggregate gross notional value of listed derivatives based on any five or fewer underlying reference assets shall not exceed 65% of the weight of the portfolio (including gross notional exposures), and the aggregate gross notional value of listed derivatives based on any single underlying reference asset shall not exceed 30% of the weight of the portfolio (including gross notional exposures). Such a requirement would act to limit the concentration of any single or group of five or fewer underlying reference assets in the portfolio. In addition, listed swaps would be centrally cleared, reducing counterparty risk and thereby furthering investor protection.62

With respect to proposed Rule 14.11(i)(4)(C)(v) relating to OTC derivatives, the Exchange believes that the limitation to 20% of a fund’s assets would assure that, to the extent that a fund holds derivatives, the preponderance of fund investments would not be in derivatives that are not listed and centrally cleared. The Exchange believes that such a limitation is sufficient to mitigate the risks associated with price manipulation because a 20% cap on OTC derivatives will ensure that any series of Managed Fund Shares will be sufficiently broad-based in scope to minimize potential manipulation associated with OTC derivatives because the remaining 80% of the portfolio will consist of instruments subject to numerous restrictions designed to prevent manipulation, including equity securities (which, as proposed, would be subject to market cap, trading volume, and diversity requirements, among others), fixed income securities (which, as proposed, would be subject to principal amount outstanding, diversity, and issuer requirements, among others), cash and cash equivalents (which, as proposed, would be limited to short-term, highly liquid, and high credit quality instruments), and/or listed derivatives (which, as proposed, 90% of the weight of futures and options will be futures and options whose principal market is a member of ISG). With respect to proposed Rule 14.11(i)(4)(C)(vi) related to a fund’s use of listed or OTC derivatives to gain exposure to individual equities and/or fixed income securities, or to indexes of equities and/or indexes of fixed income securities, the Exchange notes that such exposure would be required to meet the numerical and other criteria set forth in proposed Rule 14.11(i)(4)(C)(i) and 14.11(i)(4)(C)(ii), respectively.

Quotation and other market information relating to listed futures and options is available from the exchanges listing such instruments as well as from market data vendors. With respect to centrally-cleared swaps63 and non-centrally-cleared swaps regulated by the Commodity Futures Trading Commission (the “CFTC”),64 the Dodd-Frank Act mandates that swap information be reported to swap data repositories (“SDRs”).65 SDRs provide a central facility for swap data reporting and recordkeeping and are required to comply with data standards set by the CFTC, including real-time public reporting of swap transaction data to a derivatives clearing organization or SEF.66 SDRs require real-time reporting of all OTC and centrally cleared derivatives, including public reporting of the swap price and size. The parties responsible for reporting swaps information are CFTC-registered swap dealers (“RSDs”), major swap participants, and SEFs. If swap counterparties do not fall into the above categories, then one of the parties to the swap must report the trade to the SDR. Cleared swaps regulated by the CFTC must be executed on a Designated Contract Market (“DCM”) or SEF. Such cleared swaps have the same reporting requirements as futures, including end-of-day price, volume, and open interest. CFTC swaps reporting requirements require public dissemination of, among other items, product ID (if available); asset class; underlying reference asset, reference issuer, or reference index; termination date; date and time of execution; price, including currency; notional amounts, including currency; whether direct or indirect counterparties include an RSD; whether cleared or un-cleared; and platform ID of where the contract was executed (if applicable).

With respect to security-based swaps regulated by the Commission, the Commission has adopted Regulation SBSR under the Act implementing

61 See supra note 46.

requirements for regulatory reporting and public dissemination of security-based swap transactions set forth in Title VII of the Dodd-Frank Act. Regulation SBSR provides for the reporting of security-based swap information to registered security-based swap data repositories (“Registered SDRs”) or the Commission, and the public dissemination of security-based swap transaction, volume, and pricing information by Registered SDRs.67

Price information relating to forwards and OTC options will be available from major market data vendors. The Exchange notes that a fund’s investments in derivative instruments would be subject to limits on leverage imposed by the 1940 Act. Section 18(f) of the 1940 Act and related Commission guidance limit the amount of leverage an investment company can obtain. A fund’s investments would be consistent with its investment objective and would not be used to enhance leverage. To limit the potential risk associated with a fund’s use of derivatives, a fund will segregate or “earmark” assets determined to be liquid by a fund in accordance with the 1940 Act (or, as permitted by applicable regulation, enter into certain offsetting positions) to cover its obligations under derivative instruments. A fund’s investments will not be used to seek performance that is the multiple or inverse multiple (i.e., 2xs or 3xs) of a fund’s broad-based securities market index (as defined in Form N–1A).68

The proposed rule change is also designed to protect investors and the public interest because Managed Fund Shares listed and traded pursuant to Rule 14.11(i), including pursuant to the proposed new portfolio standards, would continue to be subject to the full panoply of Exchange rules and procedures that currently govern the trading of equity securities on the Exchange, as further described in the Approval Order. The proposed rule change is also designed to protect investors and the public interest as well as to promote just and equitable principles of trade in that any Non-U.S. Component Stocks will each meet the following criteria initially and on a continuing basis: (1) Have a minimum market value of at least $100 million; (2) have a minimum global monthly trading volume of 250,000 shares, or minimum global notional volume traded per month of $25,000,000, averaged over the last six months; (3) most heavily weighted Non-U.S. Component Stock shall not exceed 25% of the equity weight of the portfolio, and, to the extent applicable, the five most heavily weighted Non-U.S. Component Stocks shall not exceed 60% of the equity weight of the portfolio; and (4) each Non-U.S. Component Stock shall be listed and traded on an exchange that has last-sale reporting. The Exchange believes that such quantitative criteria are sufficient to mitigate any concerns that may arise on the basis of a series of Managed Fund Shares potentially holding 100% of its assets in Non-U.S. Component Stocks that are neither listed on members of ISG nor exchanges with which the Exchange has in place a CSSA because, as stated above, such criteria are either the same or more stringent than the portfolio requirements for Index Fund Shares that hold Non-U.S. Component Stocks and there are no such requirements related to such securities being listed on an exchange that is a member of ISG or with which the Exchange has in place a CSSA. Further, the Exchange has not encountered and is not aware of any instances of manipulation or other negative impact in any series of Index Fund Shares that has occurred by virtue of the Index Fund Shares holding such Non-U.S. Component Stocks. As such, the Exchange believes that there should be no difference in the portfolio requirements for Managed Fund Shares and Index Fund Shares as it relates to holding Non-U.S. Component Stocks that are not listed on an exchange that is a member of ISG or with which the Exchange has in place a CSSA.

The Exchange believes that the proposed rule change is designed to prevent fraudulent and manipulative acts and practices. The Managed Fund Shares will be listed and traded on the Exchange pursuant to the initial and continued listing criteria in Rule 14.11(i). The Exchange has in place surveillance procedures that are adequate to properly monitor trading in the Managed Fund Shares in all trading sessions and to deter and detect violations of Exchange rules and applicable federal securities laws. The Exchange or FINRA, on behalf of the Exchange, will communicate as needed regarding trading in Managed Fund Shares and their underlying components with other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded, or with which the Exchange has in place a CSSA. In addition, the Exchange or FINRA on behalf of the Exchange may obtain information regarding trading in Managed Fund Shares and their underlying components from other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded, or with which the Exchange has in place a CSSA.

The Exchange also believes that the proposed rule change would fulfill the intended objective of Rule 19b–4(e) under the Act by allowing Managed Fund Shares that satisfy the proposed listing standards to be listed and traded without separate Commission approval. However, as proposed, the Exchange would continue to file separate proposed rule changes before the listing and trading of Managed Fund Shares that do not satisfy the additional criteria described above.

For the above reasons, the Exchange believes that the proposed rule change is consistent with the requirements of Section 6(b)(5) of the Act.

B. Self-Regulatory Organization’s Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Act. Instead, the Exchange believes that the proposed rule change would facilitate the listing and trading of additional types of Managed Fund Shares and result in a significantly more efficient process surrounding the listing and trading of Managed Fund Shares, which will enhance competition among market participants, to the benefit of investors and the marketplace. The Exchange believes that this would reduce the time frame for bringing Managed Fund Shares to market, thereby reducing the burdens on issuers and other market participants and promoting competition. In turn, the Exchange believes that the proposed change would make the process for listing Managed Fund Shares more competitive by applying uniform listing standards with respect to Managed Fund Shares.

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange has neither solicited nor received written comments on the proposed rule change.
IV. Date of Effectiveness of the Proposed Rule Change, as Modified by Amendment No. 5 Thereto, and Timing for Commission Action

Section 19(b)(2) of the Act provides that, after initiating disapproval proceedings, the Commission shall issue an order approving or disapproving the proposed rule change not later than 180 days after the date of publication of notice of the filing of the proposed rule change. The Commission may, however, extend the period for issuing an order approving or disapproving the proposed rule change by not more than 60 days if the Commission determines that a longer period is appropriate and publishes the reasons for such determination. The Commission determined that it was appropriate to designate a longer period within which to issue an order approving or disapproving the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act, designated July 22, 2016, as the date by which the Commission shall either approve or disapprove the proposed rule change, as modified by Amendment No. 5 thereto (File No. SR–BATS–2015–100).

V. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether Amendment No. 5 to the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments
• Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml); or
• Send an email to rule-comments@sec.gov. Please include File Number SR–BATS–2015–100 on the subject line.

Paper Comments
• Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090. All submissions should refer to File Number SR–BATS–2015–100. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission’s Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing will also be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–BATS–2015–100 and should be submitted on or before June 28, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.

Robert W. Errett, Deputy Secretary.

[FR Doc. 2016–13825 Filed 6–10–16; 8:45 am]
Act. 3 Applicants also request an order of the limits in section 12(d)(1)(B) of the Fund to the Fund of Funds in excess of the limits in section 12(d)(1)(B) of the Act to sell shares of the Underlying principal underwriters and any broker from, the Funds of Funds. 4 Applicants their shares to, and redeem their shares certain affiliated transactions in section of the Act from the prohibition on exemption under sections 6(c) and 17(b) (Division of Investment Management, Branch Chief, at (202) 551–6821 (202) 551–6826, or David J. Marcinkus, 38258 Federal Register Funds’’) to acquire shares of Underlying Underlying Fund. Applicants nevertheless request sell shares of an Underlying Fund that operates as securities exchange. and registered closed-end investment companies fund (‘‘ETF’’). and, accordingly, to operate as an exchange-traded BDCs, that hold themselves out to investors as any two or more registered investment companies, the term ‘‘group of investment companies’’ means jurisdiction or a change in the type of business order, ‘‘successor’’ is limited to an entity that ‘‘group of investment companies’’ as the Trusts or under common control with GPIM or Security Investors or their successors or by any other means, controlling, controlled by, or under common control with GPIM or Security Investors or their successors and is part of the same “group of investment companies” as the Trusts (each, a “Fund”). For purposes of the requested order, “successor” is limited to an entity that results from a reorganization into another jurisdiction or a change in the type of business organization. For purposes of the request for relief, the term “group of investment companies” means any two or more registered investment companies, including closed-end investment companies or BDCs, that hold themselves out to investors as related companies for purposes of investment and investor services. 2 Certain of the Underlying Funds have obtained exemptions from the Commission necessary to permit their shares to be listed and traded on a national securities exchange at negotiated prices and, accordingly, to operate as an exchange-traded fund (‘‘ETF’’). 3 Applicants do not request relief for the Funds of Funds to invest in reliance on the order in BDCs and registered closed-end investment companies that are not listed and traded on a national securities exchange. 4 A Fund of Funds generally would purchase and sell shares of an Underlying Fund that operates as an ETF through secondary market transactions rather than through principal transactions with the Underlying Fund. Applicants nevertheless request relief from section 17(a) to permit a Fund of Funds to purchase or redeem shares from the ETF. A Fund of Funds will purchase and sell shares of an state that such transactions will be consistent with the policies of each Fund of Funds and each Underlying Fund and with the general purposes of the Act and will be based on the net asset values of the Underlying Funds.

2. Certain Underlying Funds may invest up to 25% of their assets in a wholly-owned and controlled subsidiary of the Underlying Fund organized under the laws of the Cayman Islands as an exempted company or under the laws of another non-U.S. jurisdiction (each, a “Cayman Sub”), in order to invest in commodity-related instruments and certain other instruments. Applicants state that these Cayman Subs are created for tax purposes in order to ensure that the Underlying Fund would remain qualified as a regulated investment company for U.S. federal income tax purposes. 3. Applicants agree that any order granting the requested relief will be subject to the terms and conditions stated in the application. Such terms and conditions are designed to, among other things, help prevent any potential (i) undue influence over an Underlying Fund that is not in the same “group of investment companies” as the Fund of Funds through control or voting power, or in connection with certain services, transactions, and underwritings, (ii) excessive layering of fees, and (iii) overly complex fund structures, which are the concerns underlying the limits in sections 12(d)(1)(A), (B), and (C) of the Act.

4. Section 12(d)(1)(J) of the Act provides that the Commission may exempt any person, security, or transaction, or any class or classes of persons, securities, or transactions, from any provision of section 12(d)(1) if the exemption is consistent with the public interest and the protection of investors.

Section 17(b) of the Act authorizes the Commission to grant an order permitting a transaction otherwise prohibited by section 17(a) if it finds that (a) the terms of the proposed transaction are fair and reasonable and do not involve overreaching on the part of any person concerned; (b) the proposed transaction is consistent with the policies of each registered investment company involved; and (c) the proposed transaction is consistent with the general purposes of the Act.

Summary of the Application

1. Applicants request an order to permit (a) a Fund 4 (each a “Fund of Funds”) to acquire shares of Underlying Funds 2 in excess of the limits in sections 12(d)(1)(A) and (C) of the Act and (b) the Underlying Funds that are registered open-end investment companies or series thereof, their principal underwriters and any broker or dealer registered under the Exchange Act to sell shares of the Underlying Fund to the Fund of Funds in excess of the limits in section 12(d)(1)(B) of the Act. Applicants also request an order of exemption under sections 6(c) and 17(b) of the Act from the prohibition on certain affiliated transactions in section 17(a) of the Act to the extent necessary to permit the Underlying Funds to sell their shares to, and redeem their shares from, the Funds of Funds. Applicants request (a) a Fund 1 (each a “Fund of Funds”) to acquire shares of Underlying Funds 2 in excess of the limits in sections 12(d)(1)(A) and (C) of the Act and (b) the Underlying Funds that are registered open-end investment companies or series thereof, their principal underwriters and any broker or dealer registered under the Exchange Act to sell shares of the Underlying Fund to the Fund of Funds in excess of the limits in section 12(d)(1)(B) of the Act.

2. Certain Underlying Funds may invest up to 25% of their assets in a wholly-owned and controlled subsidiary of the Underlying Fund organized under the laws of the Cayman Islands as an exempted company or under the laws of another non-U.S. jurisdiction (each, a “Cayman Sub”), in order to invest in commodity-related instruments and certain other instruments. Applicants state that these Cayman Subs are created for tax purposes in order to ensure that the Underlying Fund would remain qualified as a regulated investment company for U.S. federal income tax purposes.

3. Applicants agree that any order granting the requested relief will be subject to the terms and conditions stated in the application. Such terms and conditions are designed to, among other things, help prevent any potential (i) undue influence over an Underlying Fund that is not in the same “group of investment companies” as the Fund of Funds through control or voting power, or in connection with certain services, transactions, and underwritings, (ii) excessive layering of fees, and (iii) overly complex fund structures, which are the concerns underlying the limits in sections 12(d)(1)(A), (B), and (C) of the Act.

SECURITIES AND EXCHANGE COMMISSION


Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Designation of a Longer Period for Commission Action on Proceedings To Determine Whether To Approve or Disapprove a Proposed Rule Change, as Modified by Amendment No. 1 Thereto, Relating to Listing and Trading of Shares of the Cumberland Municipal Bond ETF Under NYSE Arca Equities Rule 8.600

June 7, 2016.

On November 24, 2015, NYSE Arca, Inc. (“Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) 1 and Rule 19b–4 thereunder, 2 a proposed rule change to list and trade shares of the Cumberland Municipal Bond ETF, a series of the ETF Series Trust I. The proposed rule change was published for comment in the Federal Register on December 14, 2015. 3 On December 29, 2015, the Exchange submitted Amendment No. 1 to the proposed rule change. 4 On

In Amendment No. 1, the Exchange clarified that each Municipal Bond [as defined herein] held by the Fund must be a constituent of a deal where the deal’s original offering amount was at least $100 million, clarified whether certain securities would be exchange-traded or over-the-counter, deleted a statement relating to redemption of Shares, clarified pricing information for certain assets, and corrected a typographical error. Because Amendment No. 1 to the proposed rule change is technical in nature and does not materially alter the substance of the proposed rule change or raise any novel regulatory issues, it is not subject to notice and comment. Amendment No. 1, which amended and replaced the original proposal in its entirety, is available on the Commission’s Web site at: http://www.sec.gov/ comments/sr-nysearca-2015-93/nysearca201593–1.pdf]
January 21, 2016, pursuant to Section 19(b)(2) of the Act, the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change. On March 10, 2016, the Commission instituted proceedings under Section 19(b)(2)(B) of the Act to determine whether to approve or disapprove the proposed rule change, as modified by Amendment No. 1 thereto. In the Order Instituting Proceedings, the Commission solicited comments to specified matters related to the proposal. The Commission received no comments on the proposed rule change.

Section 19(b)(2) of the Act provides that, after instituting disapproval proceedings, the Commission shall issue an order approving or disapproving the proposed rule change not later than 180 days after the date of publication of notice of the filing of the proposed rule change. The Commission may, however, extend the period for issuing an order approving or disapproving the proposed rule change by not more than 60 days if the Commission determines that a longer period is appropriate and publishes the reasons for such determination. The proposed rule change was published for notice and comment in the Federal Register on December 14, 2015. The 180th day after publication of the notice of the filing of the proposed rule change in the Federal Register is June 11, 2016. The Commission finds that it is appropriate to designate a longer period within which to issue an order approving or disapproving the proposed rule change so that it has sufficient time to consider the proposed rule change, as modified by Amendment No. 1 thereto. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act, designates August 10, 2016, as the date by which the Commission shall either approve or disapprove the proposed rule change, as modified by Amendment No. 1 thereto (File No. SR–NYSEArca–2015–93).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.

Robert W. Errett,
Deputy Secretary.

[FR Doc. 2016–13823 Filed 6–10–16; 8:45 am]

BILLING CODE 8011–01–P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14734 and #14735]

Mississippi Disaster #MS–00087

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a notice of an Administrative declaration of a disaster for the State of Mississippi dated 06/06/2016. Incident: Torrential Rains and Flooding. Incident Period: 03/09/2016 through 03/14/2016. Effective Date: 06/06/2016. Physical Loan Application Deadline Date: 08/05/2016. Economic Injury (EIDL) Loan Application Deadline Date: 03/06/2017.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.


SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the Administrator’s disaster declaration, applications for disaster loans may be filed at the address listed above or other locally announced locations. The following areas have been determined to be adversely affected by the disaster:

Primary Counties: Walthall
Contiguous Counties: Mississippi: Lawrence, Lincoln, Marion, Pike

The number assigned to this disaster for physical damage is 14734 6 and for economic injury is 14735 0. The States which received an EIDL Declaration # are Mississippi, Louisiana.

The Interest Rates are:

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Physical Damage:</td>
<td></td>
</tr>
<tr>
<td>Homeowners With Credit Available Elsewhere</td>
<td>3.625</td>
</tr>
<tr>
<td>Homeowners Without Credit Available Elsewhere</td>
<td>1.813</td>
</tr>
<tr>
<td>Businesses With Credit Available Elsewhere</td>
<td>6.250</td>
</tr>
<tr>
<td>Businesses Without Credit Available Elsewhere</td>
<td>4.000</td>
</tr>
<tr>
<td>Non-Profit Organizations With Credit Available Elsewhere</td>
<td>2.625</td>
</tr>
<tr>
<td>Non-Profit Organizations Without Credit Available Elsewhere</td>
<td>2.625</td>
</tr>
<tr>
<td>For Economic Injury:</td>
<td></td>
</tr>
<tr>
<td>Businesses &amp; Small Agricultural Cooperatives Without Credit Available Elsewhere</td>
<td>4.000</td>
</tr>
</tbody>
</table>

SOCIAL SECURITY ADMINISTRATION

[Docket No. SSA 2016–0066]

Privacy Act of 1974, as Amended; Computer Matching Program (SSA/ Centers for Medicare and Medicaid Services (CMS))—Match Number 1076

AGENCY: Social Security Administration (SSA).

ACTION: Notice of a renewal of an existing computer matching program that will expire on April 19, 2016.

SUMMARY: In accordance with the provisions of the Privacy Act, as amended, this notice announces a renewal of an existing computer matching program that we are currently conducting with CMS.

DATES: We will file a report of the subject matching program with the Committee on Homeland Security and Governmental Affairs of the Senate; the Committee on Oversight and Government Reform of the House of Representatives; and the Office of Information and Regulatory Affairs, Office of Management and Budget.
The matching program will be effective as indicated below.

**ADDRESSES:** Interested parties may comment on this notice by either telefaxing to (410) 966–0869 or writing to the Executive Director, Office of Privacy and Disclosure, Office of the General Counsel, Social Security Administration, 617 Altmeyer Building, 6401 Security Boulevard, Baltimore, MD 21235–6401. All comments received will be available for public inspection at this address.

**FOR FURTHER INFORMATION CONTACT:** The Executive Director, Office of Privacy and Disclosure, Office of the General Counsel, as shown above.

**SUPPLEMENTARY INFORMATION:**

**A. General**


The Privacy Act, as amended, regulates the use of computer matching by Federal agencies when records in a system of records are matched with other Federal, State, or local government records. It requires Federal agencies involved in computer matching programs to:

1. Negotiate written agreements with the other agency or agencies participating in the matching programs;
2. Obtain approval of the matching agreement by the Data Integrity Boards of the participating Federal agencies;
3. Publish notice of the computer matching program in the Federal Register;
4. Furnish detailed reports about matching programs to Congress and OMB;
5. Notify applicants and beneficiaries that their records are subject to matching; and
6. Verify match findings before reducing, suspending, terminating, or denying a person’s benefits or payments.

**B. SSA Computer Matches Subject to the Privacy Act**

We have taken action to ensure that all of our computer matching programs comply with the requirements of the Privacy Act, as amended.

**Glenn Sklar,**
*Acting Executive Director, Office of Privacy and Disclosure, Office of the General Counsel.*

**Notice of Computer Matching Program, SSA With the Centers for Medicare and Medicaid Services (CMS)**

**A. Participating Agencies**

SSA and CMS.

**B. Purpose of the Matching Program**

The purpose of this matching program is to establish the terms, conditions, and safeguards under which CMS will disclose to us certain individuals’ admission and discharge information for care received in a nursing care facility. We will use this information to administer the Supplemental Security Income (SSI) program efficiently and to identify Special Veterans’ Benefits (SVB) beneficiaries who are no longer residing outside of the United States.

**C. Authority for Conducting the Matching Program**

The legal authority for this agreement is the Privacy Act (5 U.S.C. 552a), as amended by the Computer Matching and Privacy Protection Act of 1988 (Pub. L. 100–503) and the regulations promulgated thereunder.

Legal authority for the SSI portion of the matching program is contained in sections 1611(e)(1) and 1631(f) of the Social Security Act (42 U.S.C. 1382(e)(1) and 1383(f)), and 20 CFR 416.211. Section 1611(e)(1)(B) of the Act (42 U.S.C. 1382(e)(1)(B)) limits the amounts of SSI benefits that eligible individuals or their eligible spouse may receive when that individual is, throughout any month, in a medical treatment facility receiving payments (with respect to such individual or spouse), under a State plan approved under Title XIX of the Act, or the amount of benefits an eligible child under 18 may receive who is receiving payments under any health insurance policy issued by a private provider.

The legal authorities for the SVB portion of the matching program are contained in sections 801 and 806(a) and (b) of the Act (42 U.S.C. 1001 and 1006(a) and (b)).

The legal authority for CMS’ disclosures under this CMA to our data request is section 1631(f) of the Act (42 U.S.C. 1383(f)), which requires Federal agencies to provide us with such information as necessary to establish eligibility for SSI payments, or the amount of benefits owed, and 45 CFR 164.512(a) Standard: Uses and disclosures required by law (Health Insurance Affordability and Accountability Act of 1996 (HIPPA) Privacy Rule).

The legal authority for the agencies to enter this interagency transaction is the Economy Act, 31 U.S.C. 1535.

**D. Categories of Records and Persons Covered by the Matching Program**

We will use this information to administer the SSI program efficiently and to identify SVB beneficiaries who are no longer residing outside of the United States. We will provide CMS with a finder file on a monthly basis extracted from our Supplemental Security Income Record and Special Veterans Benefits (SSR/SVB), SSA/ODSSIS 60–0103, last published on December 19, 2007 (72 FR 69723).

CMS will match our finder file against the system of records that applies to individuals on the Long Term Care–Minimum Data Set (LTC/–MDS 09–70–0528) and submit its response file to us no later than 21 days after receipt of our finder file.

This matching program employs CMS systems that contain Protected Health Information (PHI), as defined by 45 CFR 160.103, and disclosures of PHI are permitted under 45 CFR 164.512(a).

**E. Inclusive Dates of the Matching Program**

The effective date of this matching program is June 6, 2016, provided that the following notice periods have lapsed: 30 days after publication of this notice in the Federal Register and 40 days after notice of the matching program is sent to Congress and OMB. The matching program will continue for 18 months from the effective date and, if both agencies meet certain conditions, it may extend for an additional 12 months thereafter.

[FR Doc. 2016–13803 Filed 6–10–16; 8:45 am]

**BILLING CODE 4191–02–P**

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**DEPARTMENT OF TRANSPORTATION**

**Office of the Secretary**

[Docket No. DOT–OST–2016–0095]

**Senior Executive Service Performance Review Boards Membership**

**AGENCY:** Office of the Secretary, Department of Transportation (DOT).

**ACTION:** Notice of Performance Review Board (PRB) appointments.

**SUMMARY:** DOT publishes the names of the persons selected to serve on Departmental PRBs as required by 5 U.S.C. 4314(c)(4).
FOR FURTHER INFORMATION CONTACT:
Karen Filipponi, Deputy Director,

SUPPLEMENTARY INFORMATION: The persons named below may be selected to serve on one or more Departmental PRBs.

Issued in Washington, DC, on June 6, 2016.

Keith Washington,
Deputy Assistant Secretary for Administration.

Department of Transportation

Federal Highway Administration
Alicandri, Elizabeth
Alonzi, Achille
Arnold, Robert
Audet, Anne
Ayele, Moges
Bezio, Brian
Brown, Janice
Christian, James
Echikson, Thomas
Elston, Debra
Evans, Monique
Everett, Thomas
Finstock, Arlan
Fleury, Nicole
Furst, Anthony
Griffith, Michael
Hartmann, Joseph
Hughes Rayman, Caitlin
Kalla, Hari
Kehrli, Mark
Kim, David
Knopp, Martin
Leonard, Kenneth
Lindley, Jeffrey
Lucero, Amy
Mammano, Vincent
Marchese, April
Osborn, Peter
Otto, Sandra
Petty, Kenneth
Pridemore, Virgil
Ridenour, Melissa
Rohlf, John
Saunders, Ian
Schaeftlein, Shari
Schmidt, Robert
Shepherd, Gloria
Shores, Sarah
Solomon, Gerald
Stephanos, Peter
Suarez, Ricardo
Trentacoste, Michael
Turner, Derrell
Valdez, Vincent
Welbes, Matthew

Federal Motor Carrier Administration
Collins, Anne
Delorenzo, Joseph
Fromm, Charles
Horan, Charles
Jefferson, Daphne

Federal Transit Administration
Ahmad, Mokhtee
Biehl, Scott
Buchanan-Smith, Henrik
Crouch, Matthew
Flowers, Carolyn
Garcia Crews, Theresa
Garlaukas, Lucy
Gehrke, Linda
Hartong, Mark
Hill, Corey
Inderbitzin, Sarah
Lauby, Robert
Lestini, Michael
Nissenbaum, Paul
Pennington, Rebecca
Rennert, Jamie
Riggs, Tamela
Tunna, John
Warren, Patrick

Pipeline and Hazardous Materials Safety Administration
Abe, John
Brown, Michael
Coggins, Colleen
Donaldson, K. John
Giuseppe, Jeffrey
Gunnels, Mary
Hemmersbaugh, Paul
Hines, David
Johnson, Tim
Marshall, John
Mclaughlin, Susan
Michael, Jeffrey
Posten, Raymond
Shelton, Terry
Sprague, Mary
Wood, Stephen

Office of the Secretary
Abraham, Julie
Amerling, Kristin
Augustine, John
Aylward, Anne
Baldwin, Kristen
Carlson, Terence
Chang, William
Farley, Audrey
Filipponi, Karen
Fleming, Gregg
Geier, Paul
Herlihy, Thomas
Homan, Todd
Horn, Donald
Hu, Patricia
Hurdle, Lana
Ishihara, David
Jackson, Ronald
Kaleta, Judith
Lawrence, Christine
Lefever, Maria
Lowder, Michael
Martin, Harold
Mccann, Barbara
Mcdermott, Susan
Medina, Yvonne
Moss, Jonathan
Orndorff, Andrew
Paiewonsky, Luisa
Petrosnowoolverton, Marie
Popkin, Stephen
Raat, Maria
Schmitt, Rolf
Smith, Willie
Washington, Keith
Widawski, Louis
Womack, Kevin
Workie, Blane
Ziff, Laura

Saint Lawrence Seaway Development Corporation
Lavigne, Thomas
The FHWA’s Buy America policy in
23 CFR 635.410 requires a domestic
manufacturing process for any steel or
iron products (including protective
coatings) that are permanently
incorporated in a Federal-aid
construction project. The regulation also
provides for a waiver of the Buy
America requirements when the
application would be inconsistent with
the public interest or when satisfactory
quality domestic steel and iron products
are not sufficiently available. This
notice provides information regarding
FHWA’s finding that a Buy America
waiver is appropriate for the use of non-
domestic galvanized steel cable,
galvanized cylindrical sockets,
galvanized spherical nuts, galvanized
open spelter socket, and stainless steel
bollard lamps for the San Elijo Lagoon
Pedestrian Bridge/I–5 North Bikeway in
the State of California.

In accordance with Division K,
section 122 of the Consolidated and
Further Continuing Appropriations Act
of 2015 (PL 113–235), FHWA published
a notice of intent to issue a waiver on
its Web site (http://www.fhwa.dot.gov/
construction/contracts/
waivers.cfm?id=122) on March 29th.
The FHWA received no comments in
response to the publication. Based on all
the information available to the agency,
FHWA concludes that there are no
domestic manufacturers of galvanized
steel cable, galvanized cylindrical
sockets, galvanized spherical nuts,
galvanized open spelter socket, and
stainless steel bollard lamps that meets
the corrosion protection specifications
for the San Elijo Lagoon Pedestrian
Bridge/I–5 North Bikeway in the State of
California.

In accordance with the provisions of
section 117 of the SAFETEA–LU
Technical Corrections Act of 2008 (PL
110–244, 122 Stat. 1572), FHWA is
providing this notice of finding that a
waiver of Buy America requirements is
appropriate. The FHWA invites public
comment on this finding for an
additional 15 days following the
effective date of the finding. Comments
may be submitted to FHWA’s Web site
via the link provided to the waiver page
noted above.

Authority: 23 U.S.C. 313; Pub. L. 110–161,
23 CFR 635.410.

Issued on: June 3, 2016.

Gregory G. Nadeau,
Administrator, Federal Highway
Administration.

SUPPLEMENTARY INFORMATION:
Electronic Access
An electronic copy of this document
can be downloaded from the Federal
Register’s Web site at http://
www.archives.gov and the Government
www.access.gpo.gov/nara.

Background
The FHWA’s Buy America policy in
23 CFR 635.410 requires a domestic
manufacturing process for any steel or
iron products (including protective
coatings) that are permanently
incorporated in a Federal-aid
construction project. The regulation also
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America requirements when the
application would be inconsistent with
the public interest or when satisfactory
quality domestic steel and iron products
are not sufficiently available. This
notice provides information regarding
FHWA’s finding that a Buy America
waiver is appropriate for the use of non-
domestic galvanized steel cable,
level that would be achieved by complying with the current regulation 49 CFR 391.41(b)(8).

The physical qualification standard for drivers regarding epilepsy found in 49 CFR 391.41(b)(8) states that a person is physically qualified to drive a CMV if that person:

Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a CMV.

In addition to the regulations, FMCSA has published advisory criteria to assist medical examiners in determining whether drivers with certain medical conditions are qualified to operate a CMV in interstate commerce. [49 CFR part 391, APPENDIX A TO PART 391—MEDICAL ADVISORY CRITERIA, section H. Epilepsy: § 391.41(b)(8), paragraphs 3, 4, and 5.]

The advisory criteria states that if an individual has had a sudden episode of a non-epileptic seizure or loss of consciousness that resulted from metabolic disturbance, certification in place to provide the minimum physical standard to drive commercially and granting these exemptions would "increase the likelihood of a terrible accident due to an unexpected seizure". The Agency acknowledges this commenter’s concerns regarding the safety of individuals with a history of seizure driving commercially. The Agency’s decision to grant seizure exemptions is based on the 2007 Evidence Report, the 2007 MEP Recommendations, and an individual evaluation of the driver’s medical history and driving record to ensure an acceptable level of safety for drivers who have been seizure-free for an extended period of time.

IV. Basis for Exemption Determination

The Agency has determined that five applicants should be granted an exemption. Under 49 U.S.C. 31136(e) and 31315(b), FMCSA may grant an exemption from the epilepsy/seizure standard in 49 CFR 391.41(b)(8) if the exemption is likely to achieve an equivalent or greater level of safety than would be achieved without the exemption. The exemption allows the operators to operate CMVs in interstate commerce.

The Agency’s decision regarding these exemption applications is based on an individualized assessment of each applicant’s medical information, including the root cause of the respective seizure(s) and medical information about the applicant’s seizure history, the length of time that has elapsed since the individual’s last seizure, the stability of each individual’s treatment regimen and the duration of time on or off of anti-seizure medication. In addition, the Agency reviewed the treating clinician’s medical opinion related to the ability of the driver to safely operate a CMV with a history of seizure and each applicant’s driving record found in the Commercial Driver’s License Information System (CDLIS) for commercial driver’s license (CDL) holders, and interstate and intrastate inspections recorded in the Motor Carrier Management Information System (MCMIS). For non-CDL holders, the Agency reviewed the driving records from the State Driver’s Licensing Agency (SDLA). The Agency acknowledged the potential consequences of a driver experiencing a seizure while operating a CMV. However, the Agency believes the drivers granted this exemption have demonstrated that they are unlikely to have a seizure and their medical condition does not pose a risk to public safety.

Consequently, FMCSA finds that in each case exempting these five applicants from the epilepsy/seizure standard in 49 CFR 391.41(b)(8) is likely to achieve a level of safety equal to that existing without the exemption. A decision will be made on the other seven applicants on a later date.

V. Conditions and Requirements

The terms and conditions of the exemption will be provided to the applicants in the exemption document and includes the following: (1) Each individual must remain seizure-free and maintain a stable treatment during the 2-year exemption period; (2) each individual must submit annual reports from their treating physicians attesting to the stability of treatment and that the driver has remained seizure-free; (3) each individual must undergo an annual medical examination by a certified Medical Examiner, as defined by 49 CFR 390.5; and (4) each individual must provide a copy of the annual medical certification to the employer for retention in the driver’s qualification file, or keep a copy of his/her driver’s qualification file if he/she is self-employed. The driver must also have a copy of the exemption when driving, for presentation to a duly authorized Federal, State, or local enforcement official.

---

VI. Conclusion

Based upon its evaluation of the five exemption applications, FMCSA exempts the following drivers from the epilepsy/seizure standard in 49 CFR 391.41(b)(8), subject to the requirements cited above: Eric Joseph Barnwell (MI); Jason S. Coleman (NJ); Charles A. McCarthy III (MA); Randy P. Schuelke (WI); and Cory R. Wagner (IL).

In accordance with 49 U.S.C. 31315(b)(1), each exemption is valid for 2 years, unless revoked earlier by FMCSA. The exemption will be revoked if the following occurs: (1) The individual fails to comply with the terms and conditions of the exemption; (2) the exemption has resulted in a lower level of safety than was maintained prior to being granted; or (3) continuation of the exemption would not be consistent with the goals and objectives of 49 U.S.C. 31136 and 31135. If the exemption is still effective at the end of the 2-year period, the individual may apply to FMCSA for a renewal under procedures in effect at that time.

Issued on: June 3, 2016.

Larry W. Minor,
Associate Administrator for Policy.

DEPARTMENT OF TRANSPORTATION
Office of the Secretary
[Docket No. DOT–OST–2016–0069]

Agency Information Collection
Activities: Request for Comments;
Clearance of a New Information
Collection(s): U.S. Department of
Transportation Accessibility Concern
Form

AGENCY: Department of
Transportation—Office of the Secretary.

ACTION: Notice and request for
comments.

SUMMARY: In accordance with the
Paperwork Reduction Act of 1995, (44
U.S.C. 3501 et seq.), this notice
announces the U.S. Department of
Transportation’s (DOT) intention to
request the Office of Management and
Budget’s (OMB) approval for the
utilization of the U.S. Department of
Transportation Accessibility Concern
Form when reporting accessibility
challenges faced during travel on our
Nation’s streets, sidewalks, crosswalks,
buses, trains, airports, and planes. The
system will provide an accessible,
coordinated, and seamless web-based
portal for the traveling public to submit
accessibility problems or challenges
they face during travel on the Nation’s
streets, sidewalks, crosswalks, buses,
trails, airports, and planes. The
establishment of the system is in
response the President’s National
Council on Disability (NCD) Report,
“Transition Update: Where We’ve Been
and What We’ve Learned,” released in
2015, as well as a letter to the Secretary
of Transportation from the NCD dated
May 12, 2015.

The information received through the
system will strengthen DOT’s ability to
understand the challenges and impacts
that passengers with disabilities face
every day when they use our nation’s
transportation systems.

DATES: Comments on this notice must be
received by August 12, 2016.

ADDRESSES: You may submit comments
identified by Docket No. DOT–OST–
2016–0069 by any of the following
methods:

• Federal eRulemaking Portal: http://
  www.regulations.gov. Follow the online
  instructions for submitting comments.

• Fax: 202–493–2251.

• Mail: Docket Management,
  U.S. Department of Transportation,
  1200 New Jersey Avenue SE,
  West Building, Room W12–140,
  Washington, DC 20590.

• Hand Delivery: Docket Management
  Facility, U.S. Department of
  Transportation, 1200 New Jersey
  Avenue SE., West Building, Room
  W12–140, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT:
Yvette Rivera, Departmental Office of
Civil Rights, Office of the Secretary, U.S.
Department of Transportation, 1200 new
Jersey Avenue SE., Washington, DC
20590; 202–366–4648; adaconcerns@
dot.gov.

SUPPLEMENTARY INFORMATION:
OMB Control Number: XXXX–NEW.
Title: Transportation Accessibility
Concern Form.
Form Numbers: None.
Type of Review: OMB Approval.
Background: The current process for
submitting concerns about American
with Disabilities Act, as amended,
(ADA) and other related civil rights
violations is fragmented across the
Department—sometimes being time
consuming and cumbersome for the
traveling public. Establishing a
streamlined and consistent process
would respond directly to the
President’s National Council on
Disability, and more importantly, the
information received through this new
system would strengthen our ability to
understand the challenges and impacts
that persons with disabilities face every
day as they travel using our nation’s
transportation systems. This would also
offer significant improvements to
ensuring that access to all modes of
transportation is available to persons
with disabilities and members of the
public.

Estimated Number of Respondents:
The U.S. Department of Transportation
currently collects data on ADA and
other civil rights-related concerns based
on information provided by the public
via written submission, or through a
toll-free telephone number. Based on
our analysis of data collected through
present formats, DOT receives
approximately 850 separate responses
from the general public on accessibility-
related concerns, including:

• 150 pieces of correspondence on
  one-time accessibility-related incidents
• 120 email messages
• 400 telephone calls
• 172 formal accessibility-related
  complaints.

Currently, the estimated Total Burden
on Respondents: 15 to 30 minutes per
submission.

Public Comments Invited: You are
asked to comment on any aspect of this
information collection, including, (a)
whether the proposed collection of
information is necessary for the proper
processing of transportation-related
accessibility issues; (b) the accuracy of
the estimated burden; (c) ways for the
DOT to enhance the quality, utility, and
certainty of the information collection;
and (d) ways that the burden could be
minimized without reducing the quality
of the collected information. All
responses to the notice will be
summarized and included in the request
for OMB approval. All comments will
also become a matter of public record.

Issued in Washington, DC on June 6, 2016.

Habib Azarsina,
OST Privacy and PRA Officer.

BILLING CODE 4910–9X–P
Department of Energy

10 CFR Part 430

Energy Conservation Program: Energy Conservation Standards for Battery Chargers; Final Rule
A link to the docket Web page can be found at: http://www.regulations.gov/#/docketDetail;D=EERE-2008-BT-STD-0005. The www.regulations.gov Web page will contain instructions on how to access all documents, including public comments, in the docket.

For further information on how to review the docket, contact Ms. Brenda Edwards at (202) 586–2945 or by email: brenda.edwards@ee.doe.gov.

FOR FURTHER INFORMATION CONTACT:
Telephone: (202) 586–9870. Email: battery_chargers_and_external_power_supplies@ee.doe.gov.
Telephone: (202) 586–8145. Email: michael.kido@hq.doe.gov.

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U.S. Code, Part B was redesignated Part A.

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I. Synopsis of the Final Rule

Title III, Part B of the Energy Policy and Conservation Act of 1975 ("EPCA" or, in context, "the Act"), Public Law 94–163 (42 U.S.C. 6291–6309, as codified), established the Energy Conservation Program for Consumer Products Other Than Automobiles. These products include battery chargers, the subject of this document.

Pursuant to EPCA, any new or amended energy conservation standard must be designed to achieve the maximum improvement in energy efficiency that DOE determines is technologically feasible and economically justified. (42 U.S.C. 6295(o)(3)(B)) EPCA also provides that not later than 6 years after issuance of any final rule establishing or amending a standard, DOE must publish either (1) a notice of determination that standards for the product do not need to be amended or (2) a notice of proposed rulemaking including new proposed energy conservation standards. (42 U.S.C. 6295(m)(1))

DOE had previously proposed to establish new energy conservation standards for battery chargers in March 2012. See 77 FR 18478 (March 27, 2012). Since the publication of that proposal, the State of California finalized new energy conservation standards for battery chargers sold within that State. See 45 Z Cal. Reg. 1663, 1664 (Nov. 9, 2012) (summarizing proposed regulations and their final effective dates). Those new standards were not factored into DOE’s analysis supporting its initial battery charger proposal. To assess whether DOE’s proposal would satisfy the requirements under 42 U.S.C. 6295, DOE revisited its analysis in light of these new California standards. Consequently, DOE proposed new energy conservation standards for battery chargers in September 2015. See 80 FR 52856. (September 1, 2015). After evaluating the comments it received, DOE is adopting the energy conservation standards for battery chargers proposed in the SNOPR. These standards will apply to all products listed in Table I–1 and manufactured in, or imported into, the United States starting on June 13, 2018. This lead-in period, which is consistent with DOE’s proposal, is based on information provided by commenters as well as research conducted by DOE with respect to the efforts made by battery charger manufacturers in response to the CEC energy conservation standards—both of which suggest that a two-year period would be sufficient to enable manufacturers to readily meet the standards adopted in this rule.

### TABLE I–1— ENERGY CONSERVATION STANDARDS FOR BATTERY CHARGERS

<table>
<thead>
<tr>
<th>Product class</th>
<th>Product class description</th>
<th>Battery energy</th>
<th>Special characteristic or battery voltage</th>
<th>Adopted standard as a function of battery energy (kWh/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low-Energy</td>
<td>≤5 Wh</td>
<td>Inductive Connection in Wet Environments.</td>
<td>3.04</td>
</tr>
<tr>
<td>2</td>
<td>Low-Energy, Low-Voltage</td>
<td>&lt;100 Wh</td>
<td>&lt;4 V</td>
<td>0.1440 * E&lt;sub&gt;batt&lt;/sub&gt; + 2.95</td>
</tr>
<tr>
<td>3</td>
<td>Low-Energy, Medium-Voltage</td>
<td>=10–40 V</td>
<td>≥10 V</td>
<td>For E&lt;sub&gt;batt&lt;/sub&gt; ≤10 Wh, UEC = 1.42 kWh/yr</td>
</tr>
<tr>
<td>4</td>
<td>Low-Energy, High-Voltage</td>
<td>&gt;50 Wh</td>
<td>Special characteristic</td>
<td>E&lt;sub&gt;batt&lt;/sub&gt; ≥10 Wh, UEC = 0.0255 * E&lt;sub&gt;batt&lt;/sub&gt; + 1.16</td>
</tr>
<tr>
<td>5</td>
<td>Medium-Energy, Low-Voltage</td>
<td>&gt;20 Wh</td>
<td>Special characteristic</td>
<td>0.11 * E&lt;sub&gt;batt&lt;/sub&gt; + 3.18</td>
</tr>
<tr>
<td>6</td>
<td>Medium-Energy, High-Voltage</td>
<td>&gt;20 Wh</td>
<td>Special characteristic</td>
<td>0.0257 * E&lt;sub&gt;batt&lt;/sub&gt; + 4.15</td>
</tr>
<tr>
<td>7</td>
<td>High-Energy</td>
<td>&gt;3000 Wh</td>
<td>Special characteristic</td>
<td>0.0778 * E&lt;sub&gt;batt&lt;/sub&gt; + 2.4</td>
</tr>
</tbody>
</table>

1 For editorial reasons, upon codification in the U.S. Code, Part B was redesignated Part A.
2 All references to EPCA in this document refer to the statute as amended through the Energy Efficiency Improvement Act of 2015, Public Law 114–11 (April 30, 2015).
A. Benefits and Costs to Consumers

Table I–2 presents DOE’s evaluation of the economic impacts of the adopted standards on consumers of battery chargers, as measured by the average life-cycle cost ("LCC") savings and the simple payback period ("PBP"). The average LCC savings are positive for all product classes, and the PBP is less than the average lifetime of battery chargers, which is estimated to be between 3.5 and 9.7 years, depending on product class ("PC") (see section IV.F.6).

<table>
<thead>
<tr>
<th>Product class</th>
<th>Average LCC savings (2013$)</th>
<th>Simple payback period (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 1—Low E, Inductive</td>
<td>0.71</td>
<td>1.5</td>
<td>5.0</td>
</tr>
<tr>
<td>PC 2—Low E, Low Voltage</td>
<td>0.07</td>
<td>0.6</td>
<td>4.0</td>
</tr>
<tr>
<td>PC 3—Low E, Medium Voltage</td>
<td>0.08</td>
<td>0.8</td>
<td>4.9</td>
</tr>
<tr>
<td>PC 4—Low E, High Voltage</td>
<td>0.11</td>
<td>1.4</td>
<td>3.7</td>
</tr>
<tr>
<td>PC 5—Medium E, Low Voltage</td>
<td>0.84</td>
<td>2.7</td>
<td>4.0</td>
</tr>
<tr>
<td>PC 6—Medium E, High Voltage</td>
<td>1.89</td>
<td>1.1</td>
<td>9.7</td>
</tr>
<tr>
<td>PC 7—High E</td>
<td>51.06</td>
<td>0.0</td>
<td>3.5</td>
</tr>
</tbody>
</table>

DOE’s analysis of the impacts of the adopted standards on consumers is described in section IV.F of this document.

B. Impact on Manufacturers

The industry net present value ("INPV") is the sum of the discounted cash flows to the industry from the reference year through the end of the analysis period (2015 to 2047). Using a real discount rate of 9.1 percent, DOE estimates that the INPV for manufacturers of battery chargers in the no-standards case is $79.9 billion in 2013$. Under the adopted standards, DOE expects that manufacturers may lose up to 0.7 percent of this INPV, which is approximately $529 million. Additionally, based on DOE’s interviews with the domestic manufacturers of battery chargers, DOE does not expect significant impacts on manufacturing capacity or loss of employment for the industry as a whole to result from the standards for battery chargers.

DOE’s analysis of the impacts of the adopted standards on manufacturers is described in section IV.J of this document.

C. National Benefits and Costs

DOE’s analyses indicate that the adopted energy conservation standards for battery chargers would save a significant amount of energy. Relative to the case without new standards, the lifetime energy savings for battery chargers purchased in the 30-year period that begins in the anticipated year of compliance with the standards (2018–2047), amount to 0.173 quadrillion British thermal units ("Btu"), or "quads." This represents a savings of 11.2 percent relative to the energy use of these products in the case without adopted standards (referred to as the "no-standards case").

The cumulative net present value ("NPV") of total consumer costs and savings of the standards for battery chargers ranges from $0.6 billion (at a 7-percent discount rate) to $1.2 billion (at a 3-percent discount rate). This NPV expresses the estimated total value of future operating-cost savings minus the estimated increased product costs for battery chargers purchased in 2018–2047.

In addition, the standards for battery chargers are projected to yield significant environmental benefits. DOE estimates that the standards would result in cumulative greenhouse gas ("GHG") emission reductions (over the same period as for energy savings) of 10.79 million metric tons (Mt) of carbon dioxide (CO$_2$), 6.58 thousand tons of sulfur dioxide (SO$_2$), 18.83 thousand tons of nitrogen oxides (NO$_x$), 43.6 thousand tons of methane (CH$_4$), 0.136 thousand tons of nitrous oxide (N$_2$O), and 0.024 tons of mercury (Hg). The cumulative reduction in CO$_2$ emissions through 2030 amounts to 4.4 Mt, which is equivalent to the emissions resulting from the annual electricity use of approximately 600,000 homes.

The value of the CO$_2$ reductions is calculated using a range of values per metric ton of CO$_2$ (otherwise known as the "Social Cost of Carbon" or "SCC") developed by a Federal interagency working group. The derivation of the SCC values is discussed in section IV.L. Using discount rates appropriate for each set of SCC values (see Table I–3), DOE estimates that the net present monetary value of the CO$_2$ emissions reduction (not including CO$_2$-equivalent emissions of other gases with global warming potential) is between $0.086 billion and $1.121 billion, with a value of $0.370 billion using the central SCC case represented by $40.0/t in 2015. DOE also estimates that the net present monetary value of the NO$_x$ emissions reduction to be $20.84 million at a 7-percent discount rate, and $41.55 million at a 3-percent discount rate.

The annual energy consumption in the reference year is 1.55 quadrillion Btu (quads). This value is projected to increase by 4.6 percent per year through 2047. The average expected rate of energy use is 2.7 quads per year. The average expected rate of emissions is 4.4 quads per year.

Regulations for which implementing regulations were available as of October 31, 2014.


DOE estimated the monetized value of NO$_x$ emissions reductions associated with electricity savings using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s
Table I–3 summarizes the economic benefits and costs expected to result from the adopted standards for battery chargers.

**Table I–3—Summary of Economic Benefits and Costs of Adopted Energy Conservation Standards for Battery Chargers (TSL 2)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Present value (billion 2013$)</th>
<th>Discount rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>0.7</td>
<td>7</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($12.2/t case)**</td>
<td>1.4</td>
<td>3</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($40.0/t case)**</td>
<td>0.1</td>
<td>5</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($62.3/t case)**</td>
<td>0.4</td>
<td>3</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($117/t case)**</td>
<td>0.6</td>
<td>2.5</td>
</tr>
<tr>
<td>NOₓ Reduction Monetized Value†</td>
<td>1.1</td>
<td>3</td>
</tr>
<tr>
<td>Total Benefits ††</td>
<td>1.1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1.8</td>
<td>3</td>
</tr>
</tbody>
</table>

| **Costs**                             |                               |                  |
| Consumer Incremental Installed Costs  | 0.1                           | 7                |
|                                       | 0.2                           | 3                |

| **Total Net Benefits**                |                               |                  |
| Including Emissions Reduction Monetized Value †† | 1.0                           | 7                |
|                                       | 1.6                           | 3                |

*This table presents the costs and benefits associated with battery chargers shipped in 2018–2047. These results include benefits to consumers which accrue after 2047 from the products purchased in 2018–2047. The costs account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule.

**The CO₂ values represent global monetized values of the SCC, in 2013$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5%, 3%, and 2.5% discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3% discount rate. The SCC time series incorporate an escalation factor. The value for NOₓ is the average of high and low values found in the literature.

† DOE estimated the monetized value of NOₓ emissions reductions associated with electricity savings using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality Planning and Standards. (Available at: http://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-regulatory-impact-analysis.) Section IV.L.2 further discusses this estimate. DOE is primarily using a national benefit-per-ton estimate for NOₓ emissions from the Electricity Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). If the benefit-per-ton estimates were based on the Six Cities study (Lepule et al., 2011), the values would be nearly two-and-a-half times larger.

†† Total Benefits for both the 3% and 7% cases are derived using the series corresponding to average SCC with 3-percent discount rate ($40.0/t case).

The benefits and costs of the adopted standards for battery chargers sold in 2018–2047 can also be expressed in terms of annualized values. The annualized monetary values are the sum of (1) the annualized national economic value of the benefits from consumer operation of products that meet the new standards (consisting primarily of operating cost savings from using less energy, minus increases in product purchase prices and installation costs, which is another way of representing consumer NPV), and (2) the annualized monetary value of the benefits of emission reductions, including CO₂ emission reductions.

Although combining the values of operating savings and CO₂ emission reductions provides a useful perspective, two issues should be considered. First, the national operating cost savings are domestic U.S. consumer monetary savings that occur as a result of market transactions, whereas the value of CO₂ reductions is based on a global value. Second, the assessments of operating cost savings and CO₂ savings are performed with different methods that use different time frames for analysis. The national operating cost savings is measured for the lifetime of battery chargers shipped in 2018–2047. Because CO₂ emissions have a very long residence time in the atmosphere, the SCC values in future years reflect future 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO₂ reductions, for which DOE used case-specific discount rates, as shown in Table I–3. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year, which yields the same present value.

10 To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2015, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year’s shipments in the year in which the shipments occur (e.g., 2020 or 2030), and then discounted the present value from each year to the year 2015.

CO\(2\)-emissions impacts that continue beyond 2100. Estimates of annualized benefits and costs of the adopted standards are shown in Table I–4. The results under the primary estimate are as follows. Using a 7-percent discount rate for benefits and costs other than CO\(2\) reduction, for which DOE used a 3-percent discount rate along with the SCC series that has a value of $40.0/t in 2015, the estimated cost of the standards in this rule is $9 million per year in increased equipment costs, while the estimated annual benefits are $68 million per year in reduced equipment operating costs, $20 million in CO\(2\) reductions, and $1.92 million in reduced NO\(X\) emissions. In this case, the net benefit amounts to $81 million per year. Using a 3-percent discount rate for all benefits and costs and the SCC series has a value of $40.5/t in 2015, the estimated cost of the standards is $10 million per year in increased equipment costs, while the estimated annual benefits are $75 million per year in reduced operating costs, $20 million in CO\(2\) reductions, and $2.25 million in reduced NO\(X\) emissions. In this case, the net benefit amounts to $88 million per year.

**TABLE I–4—ANNUALIZED BENEFITS AND COSTS OF STANDARDS FOR BATTERY CHARGERS (TSL 2)**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Discount rate</th>
<th>Primary estimate*</th>
<th>Low net benefits estimate*</th>
<th>High net benefits estimate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>7%</td>
<td>68</td>
<td>68</td>
<td>69.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>75</td>
<td>74</td>
<td>76.</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>83</td>
<td>83</td>
<td>83.</td>
</tr>
<tr>
<td>CO(2) Reduction Monetized Value ($12.2/t case)**</td>
<td>3</td>
<td>20</td>
<td>20</td>
<td>20.</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>29</td>
<td>29</td>
<td>29.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>61</td>
<td>61</td>
<td>61.</td>
</tr>
<tr>
<td>CO(2) Reduction Monetized Value ($40.0/t case)**</td>
<td>7</td>
<td>1.92</td>
<td>1.92</td>
<td>4.34.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2.25</td>
<td>2.25</td>
<td>5.13.</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>76 to 131</td>
<td>80 to 134</td>
<td>94.</td>
</tr>
<tr>
<td>NO(X) Reduction Monetized Value</td>
<td>3</td>
<td>90</td>
<td>90</td>
<td>90.</td>
</tr>
<tr>
<td></td>
<td>3 plus CO(2) range</td>
<td>82 to 136</td>
<td>83 to 138</td>
<td>101.</td>
</tr>
<tr>
<td>Total Benefits ††</td>
<td>3</td>
<td>97</td>
<td>97</td>
<td>97.</td>
</tr>
<tr>
<td>Costs</td>
<td>3</td>
<td>10</td>
<td>10</td>
<td>10.</td>
</tr>
</tbody>
</table>

**Net Benefits**

| Total †† | 7% plus CO\(2\) range | 67 to 122 | 67 to 121 | 73 to 128. |
| | 7 | 81 | 81 | 87. |
| | 3 plus CO\(2\) range | 74 to 128 | 73 to 128 | 81 to 136. |
| | 3 | 88 | 87 | 95. |

* This table presents the annualized costs and benefits associated with battery chargers shipped in 2018–2047. These results include benefits to consumers which accrue after 2047 from the products purchased in 2018–2047. The results account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule. The Primary, Low Benefits, and High Benefits Estimates utilize projections of energy prices from the Annual Energy Outlook for 2015 (“AEO 2015”) Reference case, Low Economic Growth case, and High Economic Growth case, respectively. Additionally, the High Benefits Estimates include a price trend on the incremental product costs.

** The CO\(2\) values represent global monetized values of the SCC in 2013$/ metric ton (t), in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5%, 3%, and 2.5% discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3% discount rate. The SCC time series incorporate an escalation factor. The value for NO\(X\) is the average of high and low values found in the literature.

†† DOE estimated the monetized value of NO\(X\) emissions reductions associated with electricity savings using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality Planning and Standards. (Available at: http://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-regulatory-impact-analysis.) See section IV.L.2 for further discussion. For the Primary Estimate and Low Net Benefits Estimate, DOE used a national benefit-per-ton estimate for NO\(X\) emitted from the Electric Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). For DOE’s High Net Benefits Estimate, the benefit-per-ton estimates were based on the Six Cities study (Lepule et al., 2011), which are nearly two-and-a-half times larger than those from the ACS study.

††† Total Benefits for both the 3% and 7% cases are derived using the series corresponding to the average SCC with a 3-percent discount rate ($40.0/t case). In the rows labeled “7% plus CO\(2\) range” and “3% plus CO\(2\) range,” the operating cost and NO\(X\) benefits are calculated using the labeled discount rate, and those values are added to the full range of CO\(2\) values.

DOE’s analysis of the national impacts of the adopted standards is described in sections IV.H, IV.K, and IV.L of this document.

**D. Conclusion**

Based on the analyses culminating in this final rule, DOE found the benefits to the Nation of the standards (energy savings, consumer LCC savings, positive NPV of consumer benefit, and emission reductions) outweigh the burdens (loss of INPV and LCC increases for some users of these products). DOE has concluded that the standards in this final rule represent the maximum improvement in energy efficiency that is technologically feasible and economically justified, and would result in significant conservation of energy.

**II. Introduction**

The following section briefly discusses the statutory authority underlying this final rule, as well as some of the relevant historical
background related to the establishment of standards for battery chargers.
Generally, battery chargers are power conversion devices that transform input voltage to a suitable voltage for the battery they are powering. A portion of the energy that flows into a battery charger flows out to a battery and, thus, cannot be considered to be consumed by the battery charger.

A. Authority

Title III, Part B of EPCA established the Energy Conservation Program for Consumer Products Other Than Automobiles,\(^\text{12}\) a program covering most major household appliances (collectively referred to as “covered products”). Battery chargers are among the products affected by these provisions. Section 309 of the Energy Independence and Security Act (“EISA 2007”) amended EPCA by directing DOE to prescribe, by rule, definitions and test procedures for the power use of battery chargers (42 U.S.C. 6295(u)(1)), and to issue a final rule that prescribes energy conservation standards for battery chargers or classes of battery chargers or to determine that no energy conservation standard is technologically feasible and economically justified. (42 U.S.C. 6295(u)(1)(E))

Pursuant to EPCA, DOE’s energy conservation program for covered products consists essentially of four parts: (1) Testing; (2) labeling; (3) the establishment of Federal energy conservation standards; and (4) certification and enforcement procedures. The Federal Trade Commission (“FTC”) is primarily responsible for labeling, and DOE implements the remainder of the program. Subject to certain criteria and conditions, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of each covered product. (42 U.S.C. 6295(o)(3)(A) and (r)) Manufacturers of covered products must use the prescribed DOE test procedures as the basis for certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA and when making representations to the public regarding the energy use or efficiency of those products. (42 U.S.C. 6293(c) and 6295(s)) Similarly, DOE must use these test procedures to determine whether the products comply with standards adopted pursuant to EPCA. (42 U.S.C. 6295(s)) The DOE test procedures for battery chargers appear at title 10 of the Code of Federal Regulations (“CFR”) part 430, subpart B, appendix Y.

DOE must follow specific statutory criteria for prescribing new or amended standards for covered products, including battery chargers. Any new or amended standard for a covered product must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A) and (3)(B)) Furthermore, DOE may not adopt any standard that would not result in the significant conservation of energy. (42 U.S.C. 6295(o)(3)) Moreover, DOE may not prescribe a standard: (1) For certain products, including battery chargers, if no test procedure has been established for the product, or (2) if DOE determines by rule that the standard is not technologically feasible or economically justified. (42 U.S.C. 6295(o)(3)(A)–(B))

In deciding whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. (42 U.S.C. 6295(o)(2)(B)(i)) DOE must make this determination after receiving comments on the proposed standard, and by considering, to the greatest extent practicable, the following seven statutory factors:

(1) The economic impact of the standard on manufacturers and consumers of the products subject to the standard;

(2) The savings in operating costs throughout the estimated average life of the covered products in the type (or class) compared to any increase in the price, initial charges, or maintenance expenses for the covered products that are likely to result from the standard;

(3) The total projected amount of energy (or as applicable, water) savings likely to result directly from the standard;

(4) Any lessening of the utility or the performance of the covered products likely to result from the standard;

(5) The impact of any lessening of competition, as determined in writing by the Secretary, on what is likely to result from the standard;

(6) The need for national energy and water conservation; and

(7) Other factors the Secretary of Energy (Secretary) considers relevant. (42 U.S.C. 6295(o)(2)(B)(i)(I)–(VII))

Further, EPCA, as codified, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the energy savings during the first year that the consumer will receive as a result of the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii))

EPCA, as codified, also contains what is known as an “anti-backsliding” provision, which prevents the Secretary from prescribing any amended standard that either increases the maximum allowable energy use or decreases the minimum required energy efficiency of a covered product. (42 U.S.C. 6295(o)(1)) Also, the Secretary may not prescribe an amended or new standard if interested persons have established by a preponderance of the evidence that the standard is likely to result in the unavailability in the United States in any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States. (42 U.S.C. 6295(o)(4))

Additionally, EPCA specifies requirements when promulgating an energy conservation standard for a covered product that has two or more subcategories. DOE must specify a different standard level for a type or class of products that has the same function or intended use if DOE determines that products within such group: (A) Consume a different kind of energy from that consumed by other covered products within such type (or class); or (B) have a capacity or other performance-related feature which other products within such type (or class) do not have and such feature justifies a higher or lower standard. (42 U.S.C. 6295(q)(1)) In determining whether a performance-related feature justifies a different standard for a group of products, DOE must consider such factors as the utility to the consumer of such a feature and other factors DOE deems appropriate. Id. Any rule prescribing such a standard must include an explanation of the basis on which such higher or lower level was established. (42 U.S.C. 6295(q)(2)) Federal energy conservation requirements generally supersede State laws or regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6297(a)–(c)) DOE may, however, grant waivers of Federal preemption for particular State laws or regulations, in accordance with the procedures and other provisions set forth under 42 U.S.C. 6297(d).

Finally, pursuant to the amendments contained in the Energy Independence and Security Act of 2007 (“EISA 2007”), Public Law 110–140, any final rule for new or amended energy conservation standards promulgated after July 1, \(^{12}\) For editorial reasons, upon codification in the U.S. Code, Part B was redesignated as Part A.
2010, is required to address standby mode and off mode energy use. (42 U.S.C. 6295(gg)(3)) Specifically, when DOE adopts a standard for a covered product after that date, it must, if justified by the criteria for adoption of standards under EPCA (42 U.S.C. 6295(o)), incorporate standby mode and off mode energy use into a single standard, or, if that is not feasible, adopt a separate standard for such energy use for that product. (42 U.S.C. 6295(gg)(3)(A)–(B)) DOE’s current test procedures and new standards adopted in this final rule for battery chargers address standby mode and off mode energy use.

Section 135 of the Energy Policy Act of 2005 (“EPACT 2005”), Public Law 109–58 (Aug. 8, 2005), amended sections 321 (42 U.S.C. 6291) and 325 (42 U.S.C. 6295) of EPCA by defining the term “battery charger.” That provision also directed DOE to prescribe definitions and test procedures related to the energy consumption of battery chargers and to issue a final rule that determines whether to set energy conservation standards for battery chargers or classes of battery chargers. (42 U.S.C. 6295(u)(1)(A) and (E))

B. Background

1. Current Standards

Currently, there are no Federal energy conservation standards for battery chargers.

2. History of Standards Rulemaking for Battery Chargers

On December 8, 2006, consistent with EPACT 2005, DOE published a final rule that prescribed test procedures for a variety of products. 71 FR 71340, 71365–71375. That rule, which was codified in multiple sections of the CFR, included a definition and test procedures for battery chargers. The test procedures for these products are found in 10 CFR part 430, subpart B, Appendix Y (“Uniform Test Method for Measuring the Energy Consumption of Battery Chargers”).

On December 19, 2007, Congress enacted EISA 2007. Section 309 of EISA 2007 amended section 325(u)(1)(E) of EPCA by directing DOE to issue a final rule that prescribes energy conservation standards for battery chargers or classes of battery chargers or to determine that no energy conservation standard is technologically feasible and economically justified. (42 U.S.C. 6295(u)(1)(E))

EISA 2007 (section 310) also established definitions for active, standby, and off modes, and directed DOE to amend its test procedures for battery chargers to include a means to measure the energy consumed in standby mode and off mode. (42 U.S.C. 6295(gg)(2)(B)(i)) Consequently, DOE published a final rule incorporating standby- and off-mode measurements into the DOE test procedures for battery chargers. 74 FR 13318, 13334–13336 (March 27, 2009). Additionally, DOE amended the test procedures for battery chargers to include an active mode measurement. 76 FR 31750 (June 1, 2011).


On September 15, 2010, after having considered comments from interested parties, gathered additional information, and performed preliminary analyses for the purpose of developing potential amended energy conservation standards for Class A EPSs and new energy conservation standards for battery chargers and non-Class A EPSs, DOE announced a public meeting and the availability of a preliminary technical support document (“preliminary TSD”). 75 FR 56021. The preliminary TSD is available at: http://www.regulations.gov/#!documentDetail;D=EERE-2008-BT- STD-0005-0031. The preliminary TSD discussed the comments DOE received at the framework stage of this rulemaking and described the actions DOE took in response to those comments. That document also described in detail the analytical framework DOE used, and the content and results of DOE’s preliminary analyses. Id. at 56023–56024. DOE convened the public meeting to discuss and receive comments on: (1) The product classes DOE analyzed, (2) the analytical framework, models, and tools that DOE was using to evaluate potential standards, (3) the results of the preliminary analyses performed by DOE, (4) potential standard levels that DOE might consider, and (5) other issues participants believed were relevant to the rulemaking. Id. at 56021 and 56024. DOE also invited written comments on these matters. The public meeting took place on October 13, 2010. Many interested parties participated, twelve of whom submitted written comments during the comment period; two additional parties filed comments following the close of the formal comment period.

After considering all of these comments, DOE published its notice of proposed rulemaking (“NOPR”). 77 FR 18478 (March 27, 2012). DOE also released the NOPR technical support document (“TSD”), which incorporated the analyses DOE conducted and accompanying technical documentation. The TSD included the LCC spreadsheet, the national impact analysis (“NIA”) spreadsheet, and the manufacturer impact analysis (“MIA”) spreadsheet—all of which are available at: http://www.regulations.gov/#!documentDetail;D=EERE-2008-BT-STD-0005-0070. In the March 2012 NOPR, DOE proposed establishing energy conservation standards for battery chargers according to the following classes:

<table>
<thead>
<tr>
<th>Product class</th>
<th>Product class description</th>
<th>Proposed standard as a function of battery energy (kWh/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low-Energy, Inductive</td>
<td>3.04.</td>
</tr>
<tr>
<td>2</td>
<td>Low-Energy, Low-Voltage</td>
<td>0.2095 * (E_{bat}) + 5.87. For E_{bat} &lt; 9.74 Wh, 4.68;</td>
</tr>
<tr>
<td>3</td>
<td>Low-Energy, Medium-Voltage</td>
<td>For E_{bat} ≥ 9.74 Wh, 0.0933 * (E_{bat}) + 3.77. For E_{bat} &lt; 9.71 Wh, 9.03;</td>
</tr>
<tr>
<td>4</td>
<td>Low-Energy, High-Voltage</td>
<td>For E_{bat} ≥ 9.71 Wh, 0.2411 * (E_{bat}) + 6.69.</td>
</tr>
</tbody>
</table>
TABLE II–1—NOPR PROPOSED ENERGY CONSERVATION STANDARDS FOR BATTERY CHARGERS—Continued

<table>
<thead>
<tr>
<th>Product class</th>
<th>Product class description</th>
<th>Proposed standard as a function of battery energy (kWh/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 ............</td>
<td>Medium-Energy, Low-Voltage</td>
<td>For ( E_{\text{batt}} &lt; 355.18 \text{ Wh}, 20.06; )</td>
</tr>
<tr>
<td>6 ............</td>
<td>Medium-Energy, High-Voltage</td>
<td>For ( E_{\text{batt}} \geq 355.18 \text{ Wh}, 0.0219 * (E_{\text{batt}}) + 12.28. )</td>
</tr>
<tr>
<td>7 ............</td>
<td>High-Energy</td>
<td>For ( E_{\text{batt}} &lt; 239.48 \text{ Wh}, 30.37; )</td>
</tr>
<tr>
<td>8 ............</td>
<td>Low-Voltage DC Input</td>
<td>For ( E_{\text{batt}} \geq 239.48 \text{ Wh}, 0.0495 * (E_{\text{batt}}) + 18.51. )</td>
</tr>
<tr>
<td>9 ............</td>
<td>High-Voltage DC Input</td>
<td>0.0502 * (E_{\text{batt}}) + 4.53.</td>
</tr>
<tr>
<td>10a ..........</td>
<td>AC Output, VFD (Voltage and Frequency Dependent)</td>
<td>0.1140 * (E_{\text{batt}}) + 0.42;</td>
</tr>
<tr>
<td>10b ..........</td>
<td>AC Output, VI (Voltage Independent)</td>
<td>For ( E_{\text{batt}} &lt; 1.17 \text{ Wh}, 0.55 \text{ kWh/yr}. )</td>
</tr>
</tbody>
</table>

In the March 2012 NOPR, DOE identified 24 specific issues on which it sought the comments and views of interested parties. Id. at 18642–18644. In addition, DOE also specifically requested comments and data that would allow DOE to clarify certain issues and potential solutions to address them. DOE also held a public meeting in Washington, DC, on May 2, 2012, to receive public comments on its proposal. DOE also received many written comments responding to the March 2012 NOPR. All comments, along with their corresponding abbreviations and organization type, are listed in Table II–2 of this section.

TABLE II–2—LIST OF NOPR COMMENTERS

<table>
<thead>
<tr>
<th>Organization</th>
<th>Abbreviation</th>
<th>Organization type</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuant Electric</td>
<td>Actuant Electric</td>
<td>Manufacturer</td>
<td>146</td>
</tr>
<tr>
<td>ARRIS Group, Inc</td>
<td>ARRIS Broadband</td>
<td>Manufacturer</td>
<td>90</td>
</tr>
<tr>
<td>Appliance Standards Awareness Project</td>
<td>ASAP</td>
<td>Energy Efficiency Advocates</td>
<td>162</td>
</tr>
<tr>
<td>Association of Home Appliance Manufacturers</td>
<td>AHAM</td>
<td>Industry Trade Association</td>
<td>124</td>
</tr>
<tr>
<td>Brother International Corporation</td>
<td>Brother International</td>
<td>Manufacturer</td>
<td>111</td>
</tr>
<tr>
<td>California Building Industry Association</td>
<td>CBIA</td>
<td>Industry Trade Association</td>
<td>126</td>
</tr>
<tr>
<td>California Energy Commission</td>
<td>California Energy Commission</td>
<td>State Agency</td>
<td>117</td>
</tr>
<tr>
<td>California Investor-Owned Utilities</td>
<td>CA IOUs</td>
<td>Utilities</td>
<td>138</td>
</tr>
<tr>
<td>City of Cambridge, MA</td>
<td>City of Cambridge, MA</td>
<td>Local Government</td>
<td>155</td>
</tr>
<tr>
<td>Cobra Electronics Corporation</td>
<td>Cobra Electronics</td>
<td>Manufacturer</td>
<td>130</td>
</tr>
<tr>
<td>Consumer Electronics Association</td>
<td>CEA</td>
<td>Industry Trade Association</td>
<td>106</td>
</tr>
<tr>
<td>Duracell</td>
<td>Duracell</td>
<td>Manufacturer</td>
<td>113</td>
</tr>
<tr>
<td>Earthjustice</td>
<td>Earthjustice</td>
<td>Energy Efficiency Advocates</td>
<td>118</td>
</tr>
<tr>
<td>ECOVA</td>
<td>ECOVA</td>
<td>Private Entity</td>
<td>97</td>
</tr>
<tr>
<td>Energizer</td>
<td>Energizer</td>
<td>Manufacturer</td>
<td>123</td>
</tr>
<tr>
<td>Flextronics Power</td>
<td>Flextronics</td>
<td>Manufacturer</td>
<td>145</td>
</tr>
<tr>
<td>GE Healthcare</td>
<td>GE Healthcare</td>
<td>Manufacturer</td>
<td>142</td>
</tr>
<tr>
<td>Information Technology Industry Council</td>
<td>ITI</td>
<td>Industry Trade Association</td>
<td>131</td>
</tr>
<tr>
<td>Korean Agency for Technology and Standards</td>
<td>Republic of Korea</td>
<td>Foreign Government</td>
<td>148</td>
</tr>
<tr>
<td>Lester Electrical</td>
<td>Lester</td>
<td>Manufacturer</td>
<td>87, 139</td>
</tr>
<tr>
<td>Microsoft Corporation</td>
<td>Microsoft</td>
<td>Manufacturer</td>
<td>110</td>
</tr>
<tr>
<td>Motorola Mobility, Inc.</td>
<td>Motorola Mobility</td>
<td>Manufacturer</td>
<td>121</td>
</tr>
<tr>
<td>National Electrical Manufacturers Association</td>
<td>NEMA</td>
<td>Industry Trade Association</td>
<td>134</td>
</tr>
<tr>
<td>Natural Resources Defense Council</td>
<td>NRDC</td>
<td>Energy Efficiency Advocate</td>
<td>114</td>
</tr>
<tr>
<td>Nebraska Energy Office</td>
<td>Nebraska Energy Office</td>
<td>State Government</td>
<td>98</td>
</tr>
<tr>
<td>Nintendo of America Inc</td>
<td>Nintendo of America</td>
<td>Manufacturer</td>
<td>135</td>
</tr>
<tr>
<td>Nokia Inc</td>
<td>Nokia</td>
<td>Manufacturer</td>
<td>132</td>
</tr>
<tr>
<td>Northeast Energy Efficiency Partnerships</td>
<td>NEEP</td>
<td>Energy Efficiency Advocate</td>
<td>144, 160</td>
</tr>
<tr>
<td>Panasonic Corporation of North America</td>
<td>Panasonic</td>
<td>Manufacturer</td>
<td>120</td>
</tr>
<tr>
<td>PG&amp;E</td>
<td>PG&amp;E</td>
<td>Utility</td>
<td>16</td>
</tr>
<tr>
<td>PG&amp;E and SDG&amp;E</td>
<td>PG&amp;E and SDG&amp;E</td>
<td>Utilities</td>
<td>163</td>
</tr>
<tr>
<td>Philips Electronics</td>
<td>Philips</td>
<td>Manufacturer</td>
<td>128</td>
</tr>
<tr>
<td>Power Sources Manufacturers Association</td>
<td>PSMA</td>
<td>Industry Trade Association</td>
<td>147</td>
</tr>
<tr>
<td>Power Tool Institute, Inc</td>
<td>PTI</td>
<td>Industry Trade Association</td>
<td>133</td>
</tr>
<tr>
<td>Power Tool Institute, Inc., Association of Home Appliance Manufacturers, Consumer Electronics Association, NOPR Public Meeting Transcript, various parties</td>
<td>PTI, AHAM, CEA</td>
<td>Industry Trade Association</td>
<td>161</td>
</tr>
<tr>
<td>Representatives of Various State Legislatures</td>
<td>Pub. Mtg. Tr</td>
<td>Public Meeting</td>
<td>104</td>
</tr>
<tr>
<td>Salcomp Plc</td>
<td>Salcomp Plc</td>
<td>Manufacturer</td>
<td>73</td>
</tr>
<tr>
<td>Schneider Electric</td>
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<td>Manufacturer</td>
<td>119</td>
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<tr>
<td>Schumacher Electric</td>
<td>Schumacher Electric</td>
<td>Manufacturer</td>
<td>143</td>
</tr>
<tr>
<td>Southern California Edison</td>
<td>SCE</td>
<td>Public Utility</td>
<td>164</td>
</tr>
<tr>
<td>Telecommunications Industry Association</td>
<td>TIA</td>
<td>Industry Trade Association</td>
<td>127</td>
</tr>
</tbody>
</table>
Of particular interest to commenters was the potential interplay between DOE’s proposal and a competing battery charger energy efficiency requirement that had been approved by the California Energy Commission (“the CEC”) on January 12, 2012. (The CEC is California’s primary energy policy and planning agency.) The CEC standards, which took effect on February 1, 2013,13 created an overlap between the classes of battery chargers covered by the CEC rule and those classes of battery chargers DOE proposed to regulate in the March 2012 NOPR. Additionally, the standards proposed by DOE differed from the ones issued by the CEC, with some being more stringent and others being less stringent than the CEC standards. To better understand the impact of the CEC standards on the battery charger market in the U.S., DOE published a request for information (“RFI”) on March 26, 2013 that sought stakeholder comment on a variety of issues related to the CEC standards. 78 FR 18253.

Many of these RFI comments reiterated the points that commenters made in response to the NOPR. Additionally, many commenters listed in the table above indicated that there was evidence that the market had accepted the CEC standards and that technology improvements were made to meet the CEC standards at costs aligned with DOE’s estimates in the March 2012 NOPR. (See AHAM et al., No. 203 at p. 5) Some manufacturers argued that while some of their units are CEC-compliant, they continue to sell non-compliant units in other parts of the U.S. for various reasons associated with cost. (See Schumacher Electric, No. 192 at p. 2) DOE addressed these comments by updating and revising its analysis in the September 2015 SNOPR by considering, among other things, the impacts attributable to the standards issued by the CEC. Specifically, based on the responses to the RFI, DOE collected additional data on new battery chargers identified in the CEC database as being compliant with the CEC standards. These data supplemented DOE’s earlier analysis from the March 2012 NOPR. DOE’s analysis and testing of units within the CEC database showed that many battery chargers are CEC-compliant. The teardown and economic analysis incorporating these units also showed that setting standards that approximated the CEC standards were technologically feasible and economically justified for the U.S. as a whole. Therefore, the SNOPR outlined standards that were approximately equivalent, or where justified, more stringent than the CEC standards. The revisions to the analysis, which addressed the comments received from stakeholders in response to DOE’s RFI, are explained in the analysis sections below and summarized in Table II–4.

In addition to updating its proposal to account for the impact of the CEC standards, DOE made several other changes in preparing these revised standards—including adjusting its analyses in line with updated information and data. These post-NOPR changes are presented in Table II–4.

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13 http://www.energy.ca.gov/appliances/battery_chargers/
DOE announced that it will investigate the potential benefits and burdens of Federal efficiency standards for Computers and Battery Backup Systems in a Framework Document published on July 11, 2014. DOE had planned to include uninterruptible power supplies (“UPSs”) within the scope of coverage of that rulemaking effort and as a result, DOE did not consider these products within the scope of the battery chargers rulemaking. However, since the publication of the SNOPR and Computer and Battery Backup Systems Framework document, DOE, after consideration of stakeholder comments, is now considering including UPSs within the scope of its battery charger regulations. Accordingly, DOE published a Notice of Proposed Test Procedure for Battery Chargers proposing specific testing requirements for UPSs on May 19, 2016. See 81 FR 31542. DOE is not finalizing standards for UPSs at this time, but will continue to conduct rulemaking activities to consider test procedures and energy conservation standards for UPSs as part of ongoing and future battery charger rulemaking proceedings.

Lastly, in the September 2015 SNOPR, DOE identified 10 specific issues on which it sought comments and views of interested parties. *Id.* at 52931–52932. DOE also held a public meeting in Washington, DC, on September 15, 2015, to receive public comments on its revised proposal. DOE also received written comments responding to the September 2015 SNOPR, which are further presented and addressed throughout this document. All commenters, along with their corresponding abbreviations and organization type, are listed in Table II–5 of this Preamble.

### TABLE II–4—SUMMARY OF SIGNIFICANT CHANGES BETWEEN NOPR AND SNOPR

<table>
<thead>
<tr>
<th>Item</th>
<th>NOPR</th>
<th>Changes for SNOPR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Standard Levels</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Standard for PC 1</td>
<td>3.04</td>
<td>No Change.</td>
</tr>
<tr>
<td>Proposed Standard for PC 2</td>
<td>2.095(E\text{batt}) + 5.87</td>
<td>0.1440(E\text{batt}) + 2.95.</td>
</tr>
<tr>
<td>Proposed Standard for PC 3</td>
<td>0.0933(E\text{batt}) + 3.77</td>
<td>For E\text{batt} &lt; 10 Wh, = 1.42; E\text{batt} ≥ 10 Wh, 0.0255(E\text{batt}) + 1.16.</td>
</tr>
<tr>
<td>Proposed Standard for PC 4</td>
<td>9.03</td>
<td>0.11(E\text{batt}) + 3.18.</td>
</tr>
<tr>
<td>Proposed Standard for PC 5</td>
<td>20.06</td>
<td>For E\text{batt} &lt; 19 Wh, 1.32 kWh/yr; For E\text{batt} ≥ 19 Wh, 0.0257(E\text{batt}) + 8.15.</td>
</tr>
<tr>
<td>Proposed Standard for PC 6</td>
<td>30.37</td>
<td>For E\text{batt} &lt; 18 Wh, 3.88 kWh/yr; For E\text{batt} ≥ 18 Wh, 0.0778(E\text{batt}) + 2.4.</td>
</tr>
<tr>
<td>Proposed Standard for PC 7</td>
<td>0.0495(E\text{batt}) + 18.51</td>
<td>No Change.</td>
</tr>
<tr>
<td>Proposed Standard for PC 8</td>
<td>0.0502(E\text{batt}) + 4.53</td>
<td>Removed, covered under PC 2 proposed standards.</td>
</tr>
<tr>
<td>Proposed Standard for PC 9</td>
<td>0.1140(E\text{batt}) + 0.42</td>
<td>Deferred to Future Rulemaking.</td>
</tr>
<tr>
<td>Proposed Standard for PC 10a</td>
<td>0.0733(E\text{batt})—0.18</td>
<td>Deferred to Future Rulemaking.</td>
</tr>
<tr>
<td>Proposed Standard for PC 10b</td>
<td>0.0733(E\text{batt}) + 3.45</td>
<td></td>
</tr>
</tbody>
</table>

### Changes in Analysis

| Engineering Analysis—Representative Units | Combination of test data and manufacturer inputs | Used new or updated units in PC 2, PC 3, PC 4, and PC 5, while keeping the same representative units for PC 1, PC 6, and PC 7 and same Max Tech units for all PCs. |
| Usage Profiles | Weighted average of application specific usage | PC 2, PC 3, PC 4, PC 5, and PC 6 usage profiles updated based on new shipment data (See Section IV.F.3). |
| Efficiency Distributions | From Market Assessment | Obtained from the CEC's database of Small Battery Chargers. |

### TABLE II–5—LIST OF SNOPR COMMENTERS

<table>
<thead>
<tr>
<th>Organization</th>
<th>Abbreviation</th>
<th>Organization type</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARRIS Group, Inc. and Cisco Systems, Inc</td>
<td>ARRIS and Cisco</td>
<td>Manufacturer</td>
<td>250</td>
</tr>
<tr>
<td>Association of Home Appliance Manufacturers</td>
<td>AHAM</td>
<td>Standard Development Organization</td>
<td>246</td>
</tr>
<tr>
<td>California Energy Commission</td>
<td>CEC</td>
<td>State Agency</td>
<td>241</td>
</tr>
<tr>
<td>California Investor Owned Utilities</td>
<td>CA IOUs</td>
<td>Utility Association</td>
<td>251</td>
</tr>
<tr>
<td>Delta-Q Technologies Corp</td>
<td>Delta-Q Technologies</td>
<td>Manufacturer</td>
<td>238</td>
</tr>
<tr>
<td>Environmental Defense Fund, Institute for Policy Integrity at NYU School of Law, Natural Resources Defense Council, Union of Concerned Scientists</td>
<td>EDF, Institute for Policy Integrity, NRDC, UCS.</td>
<td>Energy Efficiency Advocacy Group</td>
<td>239</td>
</tr>
<tr>
<td>Information Technology Industry Council</td>
<td>ITI</td>
<td>Trade Association</td>
<td>248</td>
</tr>
<tr>
<td>Ingersoll Rand</td>
<td>Ingersoll Rand</td>
<td>Manufacturer</td>
<td>240</td>
</tr>
</tbody>
</table>

TABLE II–5—LIST OF SNOPR COMMENTERS—Continued

<table>
<thead>
<tr>
<th>Organization</th>
<th>Abbreviation</th>
<th>Organization type</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>iRobot Corporation</td>
<td>iRobot</td>
<td>Manufacturer</td>
<td>237</td>
</tr>
<tr>
<td>National Electrical Manufacturers Association</td>
<td>NEMA</td>
<td>Trade Association</td>
<td>246</td>
</tr>
<tr>
<td>Natural Resources Defense Council, Appliance Standards</td>
<td>NRDC, ASAP, NEEA</td>
<td>Energy Efficiency Advocate Group</td>
<td>252</td>
</tr>
<tr>
<td>Awareness Project, Northwest Energy Efficiency Alliance</td>
<td>Philips</td>
<td>Manufacturer</td>
<td>245</td>
</tr>
<tr>
<td>Philips Electronics North America Corporation</td>
<td>P. R. China</td>
<td>Foreign Government</td>
<td>254</td>
</tr>
<tr>
<td>Power MergerCo, Inc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Tool Institute, Inc</td>
<td>PTI</td>
<td>Trade Association</td>
<td>244</td>
</tr>
<tr>
<td>Schneider Electric</td>
<td>Schneider</td>
<td>Manufacturer</td>
<td>253</td>
</tr>
<tr>
<td>SNOPR Public Meeting Transcript, various parties</td>
<td>Pub. Mtg. Tr</td>
<td>Public Meeting</td>
<td>234</td>
</tr>
<tr>
<td>U.S. Chamber of Commerce, ACC, ACCCI, AF&amp;PA, AFPM</td>
<td>U.S. Chamber of Commerce, et al</td>
<td>Trade Association</td>
<td>242</td>
</tr>
<tr>
<td>API, BIA, CIBO, NAM, NMA, NOPA, PCA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wahl Clipper Corporation</td>
<td>Wahl Clipper</td>
<td>Manufacturer</td>
<td>243</td>
</tr>
</tbody>
</table>

After considering and responding to all comments submitted by these stakeholders, DOE is adopting the proposed standards for battery chargers from the SNOPR in this final rule. Table II–6 of this Preamble presents major changes between the SNOPR and the final rule.

TABLE II–6—SUMMARY OF SIGNIFICANT CHANGES BETWEEN SNOPR AND FINAL RULE

<table>
<thead>
<tr>
<th>Item</th>
<th>SNOPR</th>
<th>Changes for final rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard for PC 1</td>
<td>= 3.04</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 2</td>
<td>0.1440(E_{batt}) + 2.95</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 3</td>
<td>For E_{batt} &lt; 10 Wh, = 1.42; E_{batt} ≥ 10 Wh, 0.0255(E_{batt}) + 1.16</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 4</td>
<td>0.11(E_{batt}) + 3.18</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 5</td>
<td>For E_{batt} &lt; 10 Wh, 1.32 kWh/yr; For E_{batt} ≥ 10 Wh, 0.0257(E_{batt}) + 0.815</td>
<td>0.0257(E_{batt}) + 0.815 (Removed Boundary Condition).</td>
</tr>
<tr>
<td>Standard for PC 6</td>
<td>For E_{batt} &lt; 18 Wh, 3.88 kWh/yr; For E_{batt} ≥ 18 Wh, 0.0778(E_{batt}) + 2.4</td>
<td>0.0778(E_{batt}) + 2.4 (Removed Boundary Condition).</td>
</tr>
<tr>
<td>Standard for PC 7</td>
<td>= 0.0502(E_{batt}) + 4.53</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 8</td>
<td>Removed, covered under PC 2 proposed standards</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 9</td>
<td>No Standard</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 10a</td>
<td>No Standard</td>
<td>No Change.</td>
</tr>
<tr>
<td>Standard for PC 10b</td>
<td>No Standard</td>
<td>No Change.</td>
</tr>
</tbody>
</table>

III. General Discussion

DOE developed this final rule after considering verbal and written comments, data, and information from interested parties that represent a variety of interests. The following discussion addresses issues raised by these commenters.

A. Test Procedure

Prior to the publication of the SNOPR regarding energy conservation standards for battery chargers, DOE also published a NOPR proposing to clarify certain aspects related to the battery charger test procedure. These revisions include harmonizing with the instrumentation resolution and uncertainty requirements of the second edition of the International Electrotechnical Commission ("IEC") 62301 standard for standby power measurements, updates to the battery selection criteria for multivoltage, multi-capacity battery chargers to eliminate ambiguity, exclusion of back-up battery chargers from scope, a provision for the conditioning of lead acid batteries prior to testing and updates to the requirements for certification and enforcement testing of battery chargers. DOE has since finalized the proposed revisions and has updated the test procedures for battery chargers in Appendix Y to 10 CFR part 430 subpart B. DOE notes that none of the amendments to the battery charger test procedure will have an impact on the standards adopted in this document and advises stakeholders to review them in Appendix Y to 10 CFR part 430 subpart B.15

15 DOE notes that its procedures found at 10 part CFR 430, subpart C, appendix A provide general procedures, interpretations, and policies to guide DOE in the consideration and promulgation of new or revised efficiency standards under EPCA for consumer products. While these procedures are a general guide to the steps DOE typically follows in promulgating energy conservation standards, appendix A recognizes that DOE can and will, on occasion deviate from the typical process. Accordingly, to the extent that such deviation may occur, such as with the publication timing of the relevant test procedure and standards final rule notices, DOE has concluded that there is no basis to delay the final rule adopting standards for battery chargers.

B. Product Classes and Scope of Coverage

When evaluating and establishing energy conservation standards, DOE often divides covered products into product classes by the type of energy used or by capacity or other performance-related features that justify a different standard. In making a determination whether a performance-related feature justifies a different standard, DOE must consider such factors as the utility of the feature to the consumer and other factors DOE determines are appropriate. (42 U.S.C. 6295(q))

C. Federal Preemption and Compliance Date

Since the publication of its SNOPR regarding energy conservation standards for battery chargers, DOE has received several stakeholder comments related to Federal preemption of the CEC's
standards for battery chargers and the compliance date of any new Federal energy conservation standards that DOE may adopt for these products. First, NRDC argued that DOE’s adoption of the SNOPR standards as a final rule will preempt CEC’s standard for UPSs, which, in its view, will result in a loss of potential energy savings. NRDC specifically requested either the removal of UPSs from covered products under this rulemaking or the adoption of standards proposed in the NOPR for UPSs. NRDC also requested that any final rule issued by DOE clarify the application of Federal preemption in such a way to ensure that UPSs will remain covered under the CEC standards until DOE sets standards for these devices. (NRDC, Pub. Mtg. Tr., No. 234, p. 22–24) Additionally, NEEA inquired if State standards for battery chargers are preempted at the publication of Federal final rule or when the Federal final rule becomes effective. (NEEA, Pub. Mtg. Tr., No. 234, p. 24–25) ITI submitted comments emphasizing the need for clarity in the scope of both the test procedures and energy conservation standards for battery chargers in terms of Federal preemption. (ITI, No. 248, p. 1) Similarly, iRobot recommended that DOE add clarifying language in this rulemaking stating that all battery chargers will be covered regardless of connectivity or use except where explicitly exempted. In iRobot’s view, if a category of battery charger is not covered, preemption would not apply and States could then develop their own efficiency. (iRobot, No. 237, p. 1) PTI inquired whether Product Class 9 is still subject to Federal preemption even if DOE is proposing a no-standard standard for it. (PTI, Pub. Mtg. Tr., No. 234, p. 19.)

DOE notes that under 42 U.S.C. 6295(ii), the preemption of any State or local energy conservation standard that has already been prescribed or enacted for battery chargers prior to DOE’s issuance of energy conservation standards for these products shall not apply until the DOE standards take effect. In DOE’s view, the standards for these products do not take effect until the compliance date has been reached. Accordingly, the CEC standards, along with any other State or local standards, including for back-up battery chargers and UPSs, prescribed or enacted before publication of this final rule, will not be preempted until the compliance date of Federal energy conservation standards for battery chargers—in this case, 2018. (42 U.S.C. 6295(ii)(1)). DOE also received stakeholder comments on the compliance date of energy conservation standards for battery chargers. AHAM supported a compliance date of two (2) years after the publication of any final rule establishing energy conservation standards for battery chargers provided that the adopted levels do not exceed EL 1 for PC 1, and EL 2 for PCs 2, 3, 4, and 4. If DOE adopts anything more stringent than these levels, AHAM requested that a second SNOPR be issued seeking comments on the newly proposed levels and accompanying compliance date. Lastly, in the absence of an opportunity to comment on levels other than EL 2 for PCs 2, 3, 4 and EL 0 or EL 1 for PC 1, AHAM opposed a compliance date lead-time of only two years but offered no alternative and accompanying rationale for DOE to consider. (AHAM, No. 249, p. 4.)

DOE has made an effort to consider candidate standards levels for battery chargers that closely approximate the CEC standards and as a result, for PCs 2 through 6, the standards DOE is adopting for these classes are approximately equivalent to the corresponding CEC standards. DOE’s efficiency distribution analysis for the SNOPR also shows that 95 percent of battery chargers sold in the United States already meet the CEC standards. Therefore, for PCs 2 through 6, a vast majority (95 percent) of the battery chargers sold in the United States will already comply with the standards DOE is adopting for these battery charger classes.

For PCs 1 and 7, DOE is adopting standards more stringent than the comparable CEC standards. These more stringent levels were determined to be both technically feasible and economically justified under DOE’s detailed analysis. This analysis also indicates that the battery charger industry is characterized by rapid product development lifecycles. These rapid development lifecycles have led DOE to conclude that a two-year lead-time is sufficient to enable manufacturers of battery chargers that do not currently comply with the standards that DOE is adopting in this rule (i.e. PCs 1 and 7 and the remaining 5 percent of battery chargers falling under PCs 2 through 6 that do not meet the current CEC standards) to satisfy these new standards by the time the 2018 compliance date is reached.

D. Technological Feasibility

The following sections address the manner in which DOE assessed the technological feasibility of the new standards adopted in this final rule. Energy conservation standards promulgated by DOE must be technologically feasible.

1. General

In each energy conservation standards rulemaking, DOE conducts a screening analysis based on information gathered on all current technology options and prototype designs that could improve the efficiency of the products or equipment that are the subject of the rulemaking. As the first step in such an analysis, DOE develops a list of technology options for consideration in consultation with manufacturers, design engineers, and other interested parties. DOE then determines which of those means for improving efficiency are technologically feasible. DOE considers technologies incorporated in commercially-available products or in working prototypes to be technologically feasible. See, e.g. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(i) (providing that “technologies incorporated in commercially-available products or in working prototypes will be considered technologically feasible.”).

After DOE has determined that particular technology options are technologically feasible, it further evaluates each technology option in light of the following additional screening criteria: (1) Practicability to manufacture, install, and service; (2) adverse impacts on product utility or availability; and (3) adverse impacts on health or safety. See 10 CFR part 430, subpart C, appendix A, section 4(a)(4). Additionally, it is DOE policy not to include in its analysis any proprietary technology that is a unique pathway to achieving a certain efficiency level (“EL”). Section I.B of this final rule discusses the results of the screening analysis for battery chargers, particularly the designs DOE considered, those it screened out, and those that are the basis for the standards considered in this rulemaking. For further details on the screening analysis for this rulemaking, see chapter 4 of the final rule TSD.

Additionally, DOE notes that it has received no comments from interested parties regarding patented technologies and proprietary designs that would inhibit manufacturers from achieving the energy conservation standards contained in its September 2015 supplemental proposal, which this rule adopts. At this time, based on the information analyzed and relied on in support of this rulemaking, DOE believes that the standards adopted in this rule will not require the use of any such technologies.
2. Maximum Technologically Feasible Levels

When DOE proposes to adopt an amended standard for a type or class of covered product, it must determine the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible for such product. (42 U.S.C. 6295(p)(1)) Accordingly, in the engineering analysis, DOE determined the maximum technologically feasible ("max-tech") improvements in energy efficiency for battery chargers by examining a variety of relevant sources of information, including the design parameters used by the most efficient products available on the market, conducting interviews with manufacturers, vetting available manufacturer data with subject matter experts, and obtaining public feedback on DOE's analytical results. In preparing this final rule, which incorporates into its analysis the max-tech levels for the seven product classes initially addressed in DOE's preliminary analysis, DOE developed a means to create max-tech levels for those classes that were previously not assigned max-tech levels. For the product classes that DOE had previously not generated max-tech efficiency levels, DOE used multiple approaches to develop levels for these classes. During the NOPR phase, DOE solicited manufacturers for information and extrapolated performance parameters from its best-in-market efficiency levels. Extrapolating from the best-in-market performance efficiency levels required an examination of the devices. From this examination, DOE determined which design options could be applied and what effects they would likely have on the various battery charger performance parameters. (See Chapter 5, Section 5.4 of the accompanying final rule TSD.) Table III-1 of this Preamble shows the reduction in energy consumption when increasing efficiency from the no-standards to the max-tech efficiency level.

<table>
<thead>
<tr>
<th>Product class</th>
<th>Max-tech unit energy consumption (kWh/yr)</th>
<th>Reduction of energy consumption relative to the no-standards case (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Low-Energy, Inductive)</td>
<td>1.29</td>
<td>85</td>
</tr>
<tr>
<td>2 (Low-Energy, Low-Voltage)</td>
<td>1.11</td>
<td>79</td>
</tr>
<tr>
<td>3 (Low-Energy, Medium-Voltage)</td>
<td>0.70</td>
<td>80</td>
</tr>
<tr>
<td>4 (Low-Energy, High-Voltage)</td>
<td>3.05</td>
<td>75</td>
</tr>
<tr>
<td>5 (Medium-Energy, Low-Voltage)</td>
<td>9.45</td>
<td>89</td>
</tr>
<tr>
<td>6 (Medium-Energy, High-Voltage)</td>
<td>16.79</td>
<td>86</td>
</tr>
<tr>
<td>7 (High-Energy)</td>
<td>131.44</td>
<td>48</td>
</tr>
</tbody>
</table>

Additional discussion of DOE’s max-tech efficiency levels can be found in the discussion of efficiency levels ("ELs") in Section IV.C.4. Specific details regarding which design options were considered for the max-tech efficiency levels (and all other ELs) can be found in Chapter 5, Section 5.4 of the accompanying final rule TSD, which has been developed as a stand-alone document for this final rule and supports all of the standard levels adopted.

E. Energy Savings

1. Determination of Savings

For each trial standard level ("TSL"), DOE projected energy savings from application of the TSL to battery chargers purchased in the 30-year period that begins in the year of compliance with any adopted standards (2018–2047). The savings are measured over the entire lifetime of products purchased in the 30-year analysis period.16 DOE quantified the energy savings attributable to each TSL as the difference in energy consumption between each standards case and the no-standards case. The no-standards case represents a projection of energy consumption in the absence of new energy conservation standards, and considers market forces and policies that may affect future demand for more efficient products.

DOE used its national impact analysis ("NIA") spreadsheet models to estimate energy savings from potential new standards for battery chargers. The NIA spreadsheet model (described in section IV.H.6 of this final rule) calculates savings in site energy, which is the energy directly consumed by products at the locations where they are used. For electricity, DOE calculates national energy savings on an annual basis in terms of primary energy savings, which is the savings in the energy that is used to generate and transmit the site electricity. To calculate primary energy savings from site electricity savings, DOE derives annual conversion factors from data provided in the Energy Information Administration’s ("EIA") most recent Annual Energy Outlook ("AEO").

In addition to primary energy savings, DOE also calculates full-fuel-cycle ("FFC") energy savings. As discussed in DOE’s statement of policy and notice of policy amendment, the FFC metric includes the energy consumed in extracting, processing, and transporting primary fuels (i.e., coal, natural gas, petroleum fuels), and thus presents a more complete picture of the impacts of energy conservation standards. 76 FR 51281 (August 18, 2011), as amended at 77 FR 49701 (August 17, 2012). DOE’s approach is based on the calculation of an FFC multiplier for each of the energy types used by covered products or equipment. For more information, see section IV.H.6.

2. Significance of Savings

To adopt standards for a covered product, DOE must determine that such action would result in significant energy savings. (42 U.S.C. 6295(o)(3)(B)) Although the term “significant” is not defined in the Act, the U.S. Court of Appeals, for the District of Columbia Circuit in Natural Resources Defense Council v. Herrington, 768 F.2d 3455, 1373 (D.C. Cir. 1985), indicated that Congress intended “significant” energy savings in the context of EPCA to be savings that are not “genuinely trivial.” The energy savings for all the TSLs considered in this rulemaking, including the adopted standards, are nontrivial, and, therefore, DOE considers them “significant” within the meaning of section 325 of EPCA.

16In the past DOE presented energy savings results for only the 30-year period that begins in the year of compliance. In the calculation of economic impacts, however, DOE considered operating cost savings measured over the entire lifetime of products purchased in the 30-year period. DOE has chosen to modify its presentation of national energy savings to be consistent with the approach used for its national economic analysis.
F. Economic Justification

1. Specific Criteria

EPCA provides seven factors to be evaluated in determining whether a potential energy conservation standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)) The following sections discuss how DOE has addressed each of those seven factors in this rulemaking.

a. Economic Impact on Manufacturers and Consumers

In determining the impacts of a potential new standard on manufacturers, DOE conducts an MIA, as discussed in section IV.J. DOE first uses an annual cash-flow approach to determine the quantitative impacts. This step includes both a short-term assessment—based on the cost and capital requirements during the period between when a regulation is issued and when entities must comply with the regulation—and a long-term assessment over a 30-year period. The industry-wide impacts analyzed include: (1) Industry net present value (i.e. INPV), which values the industry on the basis of expected future cash flows; (2) cash flows by year; (3) changes in revenue and income; and (4) other measures of impact, as appropriate. Second, DOE analyzes and reports the impacts on different types of manufacturers, including impacts on small manufacturers. Third, DOE considers the impact of standards on domestic manufacturer employment and manufacturing capacity, as well as the potential for standards to result in plant closures and loss of capital investment. Finally, DOE takes into account cumulative impacts of various DOE regulations and other regulatory requirements on manufacturers.

For individual consumers, measures of economic impact include the changes in LCC and PBP (i.e. the payback period) associated with new standards. These measures are discussed further in the following section. For consumers in the aggregate, DOE also calculates the national net present value of the economic impacts applicable to a particular rulemaking. DOE also evaluates the LCC impacts of potential standards on identifiable subgroups of consumers that may be affected disproportionately by a national standard.

b. Savings in Operating Costs Compared To Increase in Price (LCC and PBP)

EPCA requires DOE to consider the savings in operating costs throughout the estimated average life of the covered product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the covered product that are likely to result from a standard. (42 U.S.C. 6295(o)(2)(B)(ii)(III)) DOE conducts this comparison in its LCC and PBP analysis.

The LCC is the sum of the purchase price of a product (including its installation) and the operating cost (including energy, maintenance, and repair expenditures) discounted over the lifetime of the product. The LCC analysis requires a variety of inputs, such as product prices, product energy consumption, energy prices, maintenance and repair costs, product lifetime, and discount rates appropriate for consumers. To account for uncertainty and variability in specific inputs, such as product lifetime and discount rate, DOE uses a distribution of values, with probabilities attached to each value.

The PBP is the estimated amount of time (in years) it takes consumers to recover the increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost due to a more-stringent standard by the change in annual operating cost for the year that standards are assumed to take effect.

For its LCC and PBP analysis, DOE assumes that consumers will purchase the covered products in the first year of compliance with the new standards. The LCC savings for the considered efficiency levels are calculated relative to the case that reflects projected market trends in the absence of new standards. DOE's LCC and PBP analysis is discussed in further detail in section I.F.

c. Energy Savings

Although the significant conservation of energy is a separate statutory requirement for adopting an energy conservation standard, EPCA requires DOE, in determining the economic justification of a standard, to consider the total projected energy savings that are expected to result directly from the standard. (42 U.S.C. 6295(o)(2)(B)(ii)(III)) As discussed in section I.H, DOE uses the NIA spreadsheet models to project national energy savings.

d. Lessening of Utility or Performance of Products

In establishing product classes, and in evaluating design options and the impact of potential standard levels, DOE evaluates potential standards that would not lessen the utility or performance of the considered products. (42 U.S.C. 6295(o)(2)(B)(ii)(IV)) Based on data available to DOE, the standards adopted in this final rule would not reduce the utility or performance of the products under consideration in this rulemaking.

DOE received no comments that these standards would increase battery charger size and reduce their convenience, increase the length of time to charge a product, shorten the intervals between chargers, or cause any other significant adverse impacts on consumer utility.

e. Impact of Any Lessening of Competition

EPCA directs DOE to consider the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from DOE's adoption of a given standard. (42 U.S.C. 6295(o)(2)(B)(ii)(V)) It also directs the Attorney General to determine the impact, if any, of any lessening of competition likely to result from a standard and to transmit such determination to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. (42 U.S.C. 6295(o)(2)(B)(iii)) DOE followed this requirement after publication of the March 2012 NOPR. DOE transmitted a copy of its proposed rule to the Attorney General with a request that the Department of Justice (DOJ) provide its determination on this issue. DOE also provided DOJ with a copy of its supplemental proposal in September 2015. DOE received no adverse comments from DOJ regarding either proposal.

f. Need for National Energy Conservation

In general, the energy savings from new standards are likely to provide improvements to the security and reliability of the Nation's energy system. (42 U.S.C. 6295(o)(2)(B)(ii)(VI)) Consistent with this result, the energy savings from the adopted standards are also likely to provide improvements to the security and reliability of the Nation's energy system. Reductions in the demand for electricity also may result in reduced costs for maintaining the reliability of the Nation's electricity system. DOE conducts a utility impact analysis to estimate how standards may affect the Nation’s needed power generation capacity, as discussed in section M.

Additionally, apart from the savings described above, the adopted standards are likely to result in environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases associated with energy production and use. DOE conducts an emissions analysis to estimate how
potential standards may affect these emissions, as discussed in section I.K; the emissions impacts are reported in section 6 of this final rule. DOE also estimates the economic value of emissions reductions resulting from the considered TSLs, as discussed in section I.L.

g. Other Factors

In determining whether an energy conservation standard is economically justified, DOE may consider any other factors that the Secretary deems to be relevant. (42 U.S.C. 6295(o)(2)(B)(i)(VII)) To the extent interested parties submit any relevant information regarding economic justification that does not fit into the other categories described above, DOE could consider such information under “other factors.”

2. Rebuttable Presumption

As set forth in 42 U.S.C. 6295(o)(2)(B)(iii), EPCA creates a rebuttable presumption that an energy conservation standard is economically justified if the additional cost to the consumer of a product that meets the standard is less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable DOE test procedure. DOE’s LCC and PBP analyses generate values used to calculate the effect potential new (or amended) energy conservation standards would have on the payback period for consumers. These analyses include, but are not limited to, the 3-year payback period contemplated under the rebuttable-preemption test. In addition, DOE routinely conducts an economic analysis that considers the full range of impacts to consumers, manufacturers, the Nation, and the environment, as required under 42 U.S.C. 6295(o)(2)(B)(i). The results of this analysis serve as the basis for DOE’s evaluation of the economic justification for a potential standard level (thereby supporting or rebutting the results of any preliminary determination of economic justification). The rebuttable presumption payback calculation is discussed in section V.B.1.c of this final rule.

G. General Comments

During the September 15, 2015, public meeting, and in subsequent written comments responding to the SNOPR, stakeholders provided input regarding general issues pertinent to the rulemaking, such as issues regarding the proposed standard levels. These issues are discussed in this section.

1. Proposed Standard Levels

In response to the standard level proposed for product class (“PC”) 1, AHAM suggested that DOE update its analysis by further interviewing manufacturers and conducting more testing. AHAM suggested setting a standard at CSL 0. (AHAM, No. 249, p. 4) Philips did not support DOE’s proposed standard for PC 1 and asserted that the standard for inductive chargers in PC 1 should be less stringent than for direct connect chargers in PC 2. (Philips, No. 245, p. 2) DOE notes that its analysis is based on the latest available data, which includes manufacturer interviews, testing, and product tear downs. DOE’s analysis shows that the standard levels adopted for each product class are economically justified. PC 1 has only two applications, whereas PC 2 has many applications with a variety of usage profiles. The standard for PC 1 that DOE is adopting in this final rule specifically targets the two analyzed applications of PC 1 to capture maximum energy savings while being technically feasible and economically justified for both applications. The standard for PC 2 that DOE is adopting in this final rule covers numerous applications and captures maximum energy savings while being technically feasible and economically justified for all applications, which have varying levels of fixed energy loss. Stakeholders did not provide DOE with any additional data that could be used to update the analysis.

In response to the standard level proposed for PC 2, the CEC, CA IOUs, NRDC, ASAP, and NEEA urged DOE to consider setting a standard at CSL 2 instead of CSL 1, based on the LCC results for PC 2. (CEC, No. 241, p. 2–3; CA IOUs, No. 251, p. 2–4; NRDC, ASAP, NEEA, No. 252, p. 4–6) In contrast, AHAM, PTI, and ITI supported DOE’s proposal of CSL 1 for PC 2. (AHAM, No. 249, p. 2–3; PTI, No. 244, p. 2; ITI, No. 248, p. 5)

In response to the standard levels proposed for PCs 4, 5, and 6, Ingersoll Rand supported DOE’s proposed standard levels. (Ingersoll Rand, No. 240, p. 2)

The Department appreciates the stakeholder comments with regard to its proposed standards. In selecting a given standard, DOE must choose the level that achieves the maximum energy savings that is determined to be technologically feasible and economically justified. In making such a determination, DOE must consider, to the extent practicable, the benefits and burdens based on the seven criteria described in EPCA (see 42 U.S.C. 6295(o)(2)(B)(i)(I)–(VII)). DOE’s weighing of the benefits and burdens based on the final rule analysis and rationale for the standard selection is discussed in section V.

With regard to PC 2 specifically, DOE notes that the SNOPR analysis showed that the distribution of impacts at CSL 2 is such that a small proportion of consumers experience a very positive LCC result, skewing the average to appear nearly as favorable as CSL 1, despite significantly more consumers being negatively impacted. Additionally, the application-specific LCC results for PC 2 show that half of all applications analyzed, including the two applications with the largest shipments (smartphones and mobile phones), have negative average LCC results. At CSL 1, no application in PC 2 has a negative average LCC. Finally, in the SNOPR consumer subgroup analysis, DOE identified the small business subgroup as being negatively impacted by a standard set at CSL 2 for PC 2, whereas no subgroup is negatively impacted by a standard set at CSL 1. For these reasons, DOE determined that CSL 2 for PC 2 was not economically justified in the SNOPR. DOE’s analysis and determination have not changed for the final rule. Results are discussed further in section V of this document and in Chapter 11 of the final rule TSD.

IV. Methodology and Discussion

This section addresses the analyses DOE has performed for this rulemaking with regard to battery chargers. Separate subsections address each component of DOE’s analyses.

DOE used the Government Regulatory Impact Model (“GRIM”) to assess manufacturer impacts of potential standards. These three spreadsheet tools are available in the docket for this rulemaking: http://www.regulations.gov/#/docketDetail?D=EERE-2008-BT-STD-0005. Additionally, DOE used output from the latest version of EIA’s Annual Energy Outlook (“AEO”), a widely known energy forecast for the United States, for the emissions and utility impact analyses.
A. Market and Technology Assessment

When beginning an energy conservation standards rulemaking, DOE develops information in the market and technology assessment that provides an overall picture of the market for the products concerned, including the purpose of the products, the industry structure, manufacturers, market characteristics, and technologies used in the products. This activity includes both quantitative and qualitative assessments, based primarily on publicly-available information. The subjects addressed in the market and technology assessment for this rulemaking include: (1) A determination of the scope of the rulemaking and product classes; (2) manufacturers and industry structure; (3) existing efficiency programs; (4) shipments information; (5) market trends; and (6) technologies or design options that could improve the energy efficiency of battery chargers. See chapter 3 of the final rule TSD for further discussion of the market and technology assessment.

1. Products Included in This Rulemaking

This section addresses the scope of coverage for this final rule and details which products are subject to the standards adopted in this document. The comments DOE received on the scope of these standards are also summarized and addressed in this section.

A battery charger is a device that charges batteries for consumer products, including battery chargers embedded in other consumer products. (42 U.S.C. 6291(32)) Functionally, a battery charger is a power conversion device used to transform input voltage to a suitable voltage for charging the battery. Battery chargers are used in conjunction with other end-use consumer products, such as cell phones and digital cameras. However, the battery charger definition prescribed by Congress is not limited solely to products that are only powered from AC mains (or “mains”)—i.e. products that plug into a wall outlet. Further, battery chargers may be wholly embedded in another consumer product, wholly separate from another consumer product, or partially inside and partially outside another consumer product. While devices that meet the statutory definition are within the scope of this rulemaking, DOE is not setting standards for all battery chargers. The following subsections summarize and address stakeholder comments received on the SNOPR regarding the scope of this rulemaking.

a. Consumer Products

EPCA defines a consumer product as any article of a type that consumes or is designed to consume energy and which, to any significant extent, is distributed in commerce for personal use or consumption by individuals without regard to whether such article of such type is in fact distributed in commerce for personal use or consumption by an individual. See 42 U.S.C. 6291(1). Manufacturers of battery chargers are advised to use this definition (in conjunction with the battery charger definition) to determine whether a given device is subject to the battery charger standards adopted in this final rule. Consistent with these definitions, any battery charger that is of a type that is capable of charging batteries for a consumer product is considered a covered product and possibly subject to DOE’s energy conservation standards, without regard to whether that battery charger was in fact distributed in U.S. commerce to operate a consumer product. Only those battery chargers that have identifiable design characteristics that would make them incapable of charging batteries for a consumer product would be considered to not meet EPCA’s definition of a battery charger. DOE considers the inability of a battery charger to operate using residential mains power—Standard 110–120 VAC, 60 Hz input—as an identifiable design characteristic when considering whether a battery charger is not capable of charging the batteries of a consumer product.

DOE received comments on the SNOPR from Delta Q requesting that DOE follow the CEC’s lead in setting energy conservation standards for non-consumer and high-power (above 2 kW input power or with higher input voltages) battery chargers. Delta Q also suggested that DOE explicitly specify that the CEC’s standards for non-consumer and high-power battery chargers will not be preempted in case DOE decides not to regulate these battery chargers. (Delta Q, No. 238, p. 2) DOE’s authority to establish energy conservation standards for battery chargers comes from Title III, Part B of EPCA, which empowers DOE to establish energy conservation standards for consumer products other than automobiles. As such, DOE does not have the statutory authority to establish energy conservation standards for battery chargers that do not meet the definition prescribed by EPCA. See 42 U.S.C. 6291(1). Furthermore, this final rule does not set, nor does it rely on, minimum or maximum input power restrictions for its scope of covered consumer products. A product that meets the definition of a battery charger as stated in 10 CFR 430.2 (and that charges a product that is consistent with EPCA’s consumer product definition) is a covered product under the scope of this rulemaking and subject to Federal preemption in a manner consistent with 42 U.S.C. 6295(ii) and 6297. DOE notes that some of the products that meet these conditions can also be employed in commercial applications and as such, DOE’s analysis has taken into consideration the impact of this regulation on commercial entities that are affected by it.

b. Basic Model of Battery Charger

This rule requires manufacturers to certify compliance of the basic models of their battery chargers to the energy conservation standards DOE is adopting. In response to the SNOPR, DOE received comments from AHAM highlighting that the definition of basic model in 10 CFR 430.2 indicates that manufacturers may group into one basic model products having “essentially identical electrical, physical, and functional . . . characteristics that affect . . . energy efficiency”. AHAM requested DOE to expressly indicate in this rulemaking or in the definition of basic model that in determining whether a product has the same electrical or physical characteristics that affect energy efficiency, the battery charging phase is the relevant phase, not the usage phase. (AHAM, No. 249, p. 7) DOE believes it is sufficiently unambiguous that a basic model as defined in 10 CFR 430.2 applies solely to the covered product, regardless of whether or not that product is embedded in another end-use product. Since the energy conservation standards set forth in this final rule pertain only to battery chargers, it is the charging components that must meet the criteria of a basic model as defined in 10 CFR 430.2.

c. Wireless Power

Although DOE’s May 15, 2014 NODA (79 FR 27774) sought input on wireless charging stations that are specifically designed to operate in dry environments, DOE did not explicitly consider these products when first developing the battery charger test procedures. In the battery charger test procedure NOPR, DOE stated that it planned to address wireless chargers designed for dry environments in a separate rulemaking. See 80 FR 46855 (August 6, 2015). DOE received comments on the SNOPR from ITI and Power MergerCo requesting that DOE
promptly issue a determination for wireless charging systems such that, under section 6295(o)(3)(B), establishment of energy conservation standards for wireless charging systems designed to operate in dry environments will not result in significant conservation of energy or that the establishment of such a standard is not technologically feasible or economically justified at this time. (ITI, No. 248, p. 3, Power MergerCo, No. 247, p. 4) Similarly, DOE received comments from iRobot recommending that DOE expressly state that PCs 2 through 7 are specific to galvanic coupled battery chargers. (iRobot, No. 237, p. 1)

DOE reiterates that only battery chargers with inductive connections that are designed to operate in wet conditions are addressed by the standards laid out for PC 1 devices in this final rule. In making this determination, DOE considered the loss of utility and performance likely to result from the promulgation of a standard for a nascent technology such as wireless charging. This approach allows DOE to set standards for the mature technology found in electric toothbrushes while avoiding unintentional restrictions on the development of new inductively-charged products. In response to iRobot’s comment, DOE interprets ‘Non-galvanic coupled’ chargers to be wireless battery chargers. As such, wireless battery chargers that do not meet the scope of PC 1 will not be subject to any other standard adopted in this final rule.

d. USB-Charged Devices

DOE received comments on the SNOPR from ITI claiming there are a number of USB-charged devices peripheral to computers, televisions and other consumer products where the burden of testing and certifying the products exceeds any possible energy efficiency benefits. ITI argued these USB-charged devices are not dependent on AC mains input and will have significant margins when compared to battery chargers covered under the regulation with alternating current/direct current (“AC/DC”) power supplies. In its view, regulation of these products at either the federal or state supply levels would not be economically justified. (ITI, No. 248, p. 4)

The peripheral USB-charged devices mentioned by ITI fall both into Product Classes 2 and 8. While PC 8 covers products that require a DC input, these devices can also be operated using an EPS, which reclassifies these products as having an AC input and DC output and essentially also places them into PC 2. As described in the SNOPR, DOE has determined that there are no products falling into PC 8 that do not also fall into PC 2 and that the battery chargers previously analyzed in PC 8 do not technically or functionally differ from those found in PC 2. ITI’s claim that these USB-charged devices are not dependent on mains input is true but it does not refute DOE’s determination that these devices can be operated using an EPS. Furthermore, DOE’s battery charger test procedure requires that all battery chargers be tested using an external power supply, and provides sufficient instructions in section 3.4(c) of Appendix Y to Subpart B of Part 430 in the event the required external power supply is either not packaged with the battery charger or a suitable one is not recommended by the manufacturer. The test procedure indicates that in such an event, the battery charger shall be tested with either 5.0V DC for products drawing power from a computer USB port or the mid-point of the rated input voltage range for all other products. Hence, the peripheral devices in ITI’s comment will be tested using an EPS, which makes them comparable to all other battery chargers using an EPS, and subject to the standard adopted for PC 2. Furthermore, DOE’s engineering, manufacturer impact and national impact analyses show that the adopted standard for PC 2 is technologically feasible and economically justified.

e. Spare and Replacement Parts for Battery Chargers

ITI asked that DOE provide a 7-year exemption for spare and replacement parts for battery chargers once the final rule is issued. ITI argued that the requested exemption will allow manufacturer compliance with State parts retention laws and avoid premature disposal of functional equipment already in the marketplace. (ITI, No. 248, p. 4) Congress has not provided any exemptions for spare and replacement parts for battery chargers nor has Congress given DOE the authority to do so as it did with EPSs. See EPS Service Parts Act of 2014, Public Law 113–263 (December 18, 2014) (codified in relevant part at 42 U.S.C. 6295(ul)(5)). Furthermore, in the case of battery chargers embedded in end-use products, it is not clear which applications would be involved. Therefore, DOE is unable to provide any exemptions for spare and replacement parts for battery chargers.

f. Medical Products

In the SNOPR, DOE decided to refrain from setting standards for medical devices that require Federal Food and Drug Administration (“FDA”) listing and approval as a life-sustaining or life-supporting device in accordance with section 513 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360(c)). While setting standards for these devices may yield energy savings, DOE also wishes to avoid any action that could potentially impact their reliability and safety. In the absence of sufficient data and stakeholder comments on this issue, and consistent with DOE’s obligation to consider such adverse impacts when identifying and screening design options for improving the efficiency of a product, DOE is finalizing its decision of refraining from setting standards for medical device battery chargers that require FDA listing and approval as a life-sustaining or life-supporting device at this time.

2. Market Assessment

To characterize the market for battery chargers, DOE gathered information on the products that use them. DOE refers to these products as “end-use consumer products or battery charger ‘applications.’” This method was chosen for two reasons. First, battery chargers are nearly always bundled with, or otherwise intended to be used with, a given application; therefore, the demand for applications drives the demand for battery chargers. Second, because most battery chargers are not stand-alone products, their shipments, lifetimes, usage profiles, and power requirements are all determined by the associated application.

DOE analyzed the products offered by online and brick-and-mortar retail outlets to determine which applications use battery chargers and which battery charger technologies are most prevalent. The list of applications analyzed and a full explanation of the market assessment methodology can be found in chapter 3 of the accompanying final rule TSD.

While DOE identified the majority of battery charger applications, some may not have been included in the NOPR analysis. This is due in part because the battery chargers market is dynamic and constantly evolving. As a result, some applications that use a battery charger were not initially found because they either made up an insignificant market share or were introduced to the market after the NOPR analysis was conducted. The battery chargers for any other applications not explicitly analyzed in the market assessment would still be subject to the proposed standards as long as they fall into one of the battery charger classes outlined in Table I–1. That is, DOE’s omission of any particular battery charger application
from its analysis is not, by itself, an 
indication that the battery charger that 
powers that application is not subject to 
the battery chargers standards.

DOE relied on published market 
research to estimate base-year 
shipments for all applications. In the 
NOPR, DOE estimated that in 2009, a 
total of 437 million battery chargers 
were shipped for final sale in the United 
States. For the final rule, DOE 
conducted additional research and 
updated its shipments estimates to 
provide shipments data for 2011. Where 
more recent data were available, DOE 
updated the shipments data based on 
the more recent shipments data 
collected. Where more recent 
information could not be found, DOE 
derived the 2011 shipments value based 
on the 2009 estimates, and used its 
shipments model as described in section 
IV.G.1 to project the 2009 shipments to 
2011. In 2011, DOE estimated that a 
total of 506 million battery chargers 
units were shipped. The complete 
shipment analysis can be found in 
Chapter 9 of the final rule TSD.

3. Product Classes

When necessary, DOE divides covered 
products into classes by the type of 
energy used, the capacity of the product, 
and any other performance-related 
feature that could justify different 
standard levels, such as features 
affecting consumer utility. (42 U.S.C. 
6295(q)) DOE then conducts its analysis 
and considers establishing or amending 
standards to provide separate standard 
levels for each product class.

DOE created 11 product classes for 
battery chargers based on various 
electrical characteristics shared by 
particular groups of products. As these 
electrical characteristics change, so does the 
utility and efficiency of the devices.

a. Product Class 1

DOE has received stakeholder 
comments on the SNOPR from PTI, 
OPEI and iRobot expressing concerns 
regarding the range of PC 1. PTI, OPEI 
and iRobot noted that all the products 
evaluated for the establishment of an 
energy conservation standard for PC 1 
fell in the low range of battery energy 
(0.5Wh to 1.8Wh); yet, the proposed 
standard based upon the evaluation of 
these low battery energy products 
extends to 100Wh, which, in their view, 
rised questions regarding the proposed 
standard. These stakeholders expressed 
进一步 concern that the proposed 
standard for PC 1 can potentially 
undermine the development of new 
inductively-charged products with 
battery energies greater than those of 
electric toothbrushes. (PTI and OPEI, 
No. 244, p. 3, iRobot, No. 237, p. 2) 
PC 1 covers battery chargers with low 
battery energy and inductive charging 
capability, which is a utility-related 
characteristic designed to promote safe 
and clean operation of a battery charger 
in a wet environment. In a wet 
environment, these inductive battery 
chargers ensure that the user is isolated 
from AC mains by transferring power to 
the battery through induction rather 
than conduction. When developing the 
energy conservation standard for PC 1, 
DOE considered two applications— 
electric toothbrushes and water jets. 
DOE believes that the technology 
deployed in these two applications are 
sufficiently mature, such that 
establishing an energy conservation 
standard for them would not hinder 
their further technological development. 
DOE was not able to identify any other 
battery charger application specifically 
designed for wet environments. While 
DOE primarily found devices in these 
two applications with battery energies 
ranging from 0.5 to 1.8 Wh, the CEC 
database of compliant small battery 
chargers includes electric toothbrushes 
with battery energies up to 3.84 Wh. An 
overall analysis of the electric 
toothbrush marketplace and existing 
battery technology leads DOE to believe 
that the battery energy of electric 
toothbrushes will not exceed 5 Wh. 
Therefore, DOE agrees with the 
standards set by the CEC for PCs 10a 
and 10b, and in particular, a no-
protection condition for PCs 10a, 10b 
and 10c.

b. Product Classes 5 and 6

DOE received comments during the 
SNOPR public meeting held on 
September 15, 2015 as well as written 
comments from the People’s Republic 
of China seeking to clarify the boundary 
conditions for the proposed standards 
for PCs 5 and 6. Specifically, the SNOPR 
proposed boundary conditions at 19Wh and 
18Wh (so that a different unit 
energy consumption ("UEC") equation 
was used for battery chargers above and 
below the respected boundary 
condition) for PCs 5 and 6, respectively, 
while the product classes themselves 
only cover products having battery 
energies greater than 100Wh. (Philips 
Chloride, Pub. Mtg. Tr., No. 234, p. 12-
13; P. R. China, No. 254, p. 3) 
DOE generated boundary conditions 
for its conservation standards to fix the 
UEC requirement below a certain 
threshold of battery energy and 
recognized that below these thresholds 
the fixed components of the UEC 
equation, such as maintenance mode 
power, become an increasingly bigger 
percentage of the device’s overall power 
consumption that may not diminish 
with decreasing battery energy. 
Including these boundary conditions 
allows DOE to account for the fact that 
even if the battery energy approaches 
zero, the device will continue to 
consume a finite amount of non-zero 
power. Accordingly, these boundary 
conditions help create better fitting 
equations and enable DOE to 
pronounce standards that more 
accurately reflect the characteristics of a 
given product class.

For PCs 5 and 6, the derived boundary 
conditions begin at 19 Wh and 18 Wh 
respectively. However, in response to 
the comments received, DOE recognizes 
that PCs 5 and 6 cover battery chargers 
with battery energies ranging from 100– 
3000 Wh and that the boundary 
conditions of 19 Wh and 18 Wh 
for these two classes become unnecessary 
and will never be used. While the 
presence of these boundary conditions 
does not affect covered products in PC 
5 and 6, DOE realizes that it may lead 
to misinterpretation and ambiguity. 
Therefore, DOE is removing these 
boundary conditions from the final rule.

c. Product Classes 8, 9, 10a, and 10b

Compared to the NOPR, DOE reduced 
the number of product classes for which 
it is adopting energy conservation 
standards in this final rule. Specifically, 
DOE is not adopting standards for 
battery chargers falling into PCs 8, 9, 
10a, and 10b as initially proposed in its 
NOPR. DOE chose to reduce the number 
of affected classes in response to 
comments on the SNOPR from ITI, 
Schneider, NRDC, ASAP and NEEA 
opposing the exclusion of PCs 8, 9 and 
10 from the scope of this rulemaking. 
ITI expressed concern regarding DOE’s 
unknown future plans for regulating 
products in these classes and about the 
potential loss of energy savings resulting 
from the exclusion of PCs 8, 9 and 10. 
(ITI, No. 248, p. 1) Schneider requested that 
DOE adopt the energy conservation 
standards set by the CEC for PCs 10a 
and 10b, and in particular, a no-
protection condition (Schneider, No. 253, p. 1) Additionally, 
the CEC, NRDC, ASAP and NEEA
that direct current UPSs are not intentionally regulated under PC 7 if UPSs are excluded from the scope of this rulemaking. (Emerson, Pub. Mtg. Tr., No. 234, p. 24; ITI, No. 248, p. 4; NEMA, No. 246 p. 2; Schneider, No. 253, p. 1) Direct current ("DC") UPSs meet the definition of uninterruptible power supplies proposed in the battery charger test procedure NOPR, which proposed a specific test for UPSs. Under that proposal, the existing testing requirements for battery chargers would apply to battery chargers other than UPSs, and separate testing requirements would apply to UPSs. Issued April 29, 2016 UPS TP NOPR DOE will not establish standards for UPSs until a test procedure for these products has been prescribed.

4. Technology Assessment

In the technology assessment, DOE identifies technology options that appear to be feasible for improving product efficiency. This assessment provides the technical background and structure on which DOE bases its screening and engineering analyses. The following discussion provides an overview of the technology assessment for battery chargers. Chapter 3 of the final rule TSD provides additional detail and descriptions of the basic construction and operation of battery chargers, followed by a discussion of technology options to improve their efficiency and power consumption in various modes.

a. Battery Charger Modes of Operation and Performance Parameters

DOE found that there are five modes of operation in which a battery charger can operate at any given time—active (or charge) mode, maintenance mode, no-battery (or standby) mode, off mode, and unplugged mode. During active mode, a battery charger is charging a depleted battery, equalizing its cells, or performing functions necessary for bringing the battery to the fully charged state. In maintenance mode, the battery is plugged into the charger, has reached full charge, and the charger is performing functions intended to keep the battery fully charged while protecting it from overcharge. No-battery mode involves a battery charger plugged into AC mains but without a battery connected to the charger. Off mode is similar to no-battery mode but with all manual on-off switches turned off. Finally, during unplugged mode, the battery charger is disconnected from mains and not consuming any electrical power.\(^\text{17}\)

For each battery charger mode of operation, DOE’s battery charger test procedures have a corresponding test that is performed that outputs a metric for energy consumption in that mode. The tests to obtain these metrics are described in greater detail in DOE’s battery charger test procedures. When performing a test in accordance with these procedures, certain items play a key role in evaluating the efficiency performance of a given battery charger—24-hour energy, maintenance mode power, no-battery mode power, and off-mode power. (10 CFR part 430 Appendix Y to Subpart B)

First, there is the measured 24-hour energy of a given charger. This quantity is defined as the power consumption integrated with respect to the time of a fully metered charge test that starts with a fully depleted battery. In other words, this is the energy consumed to fully charge and maintain at full charge a depleted battery over a period that lasts 24 hours or the length of time needed to charge the tested battery plus 5 hours, whichever is longer in duration. Next, is maintenance mode power, which is a measurement of the average power consumed while a battery charger is in maintenance mode. No-battery (or standby) mode power is the average power consumed while a battery charger is in no-battery or standby mode (only if applicable).\(^\text{18}\) Off-mode power is the average power consumed while an on-off switch-equipped battery charger is in off mode (i.e. with the on-off switch set to the “off” position). Finally, unplugged mode power consists of the average power consumed while the battery charger is not physically connected to a power source. (This quantity is always 0.)

Additional discussion on how these parameters are derived and subsequently combined with assumptions about usage in each mode of operation to obtain a value for the UEC is discussed below in section IV.C.2.

\(^{17}\) Active mode, maintenance mode, standby mode, and off mode are all explicitly defined by DOE in Appendix Y to Subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption of Battery chargers.

\(^{18}\) If the product contains integrated power conversion and charging circuitry, but is powered through a non-detachable AC power cord or plug blades, then no part of the system will remain connected to mains, and standby mode measurement is not applicable. (Section 5.11.d Standby Mode Energy Consumption Measurement, 10 CFR part 430 Appendix Y to Subpart B).
b. Battery Charger Technology Options

Since most consumer battery chargers contain an AC to DC power conversion stage, similar to that found in an EPS, DOE examined many of the same technology options for battery chargers as it did for EPSs in the EPS final rule. See 79 FR 7845 (Feb. 10, 2014). The technology options used to decrease EPS no-load power can decrease battery charger energy consumption in no-battery and maintenance modes (and off mode, if applicable), while those options used to increase EPS conversion efficiency can decrease battery charger energy consumption in active and maintenance modes.

DOE considered many technology options for improving the active-mode charging efficiency as well as the no-battery and maintenance modes of battery chargers. The following list, organized by charger type, describes technology options that DOE evaluated during the NOPR, the SNOPR and again in this final rule. Although many of these technology options could be used in both fast and slow chargers, doing so may be impractical due to the cost and benefits of each option for the two types of chargers.19 Therefore, in the list below, the options are grouped with the charger type where they would be most practical.

Slow charger technology options include:

- **Improved Cores:** The efficiency of line-frequency transformers, which are a component of the power conversion circuitry of many slow chargers, can be improved by replacing their cores with ones made of lower-loss steel.
- **Termination:** Substantially decreasing the charge current to the battery after it has reached full charge, either by using a timer or sensor, can significantly decrease maintenance-mode power consumption.
- **Elimination/Limitation of Maintenance Current:** Constant maintenance current is not required to keep a battery fully charged. Instead, the battery charger can provide current pulses to “top off” the battery as needed.
- **Elimination of No-Battery Current:** A mechanical AC line switch inside the battery charger “cup” automatically disconnects the battery charger from the mains supply when the battery is removed from the charger.

Fast charger technology options include:

- **Switched-Mode Power Supply:** To increase efficiency, line-frequency (or linear) power supplies can be replaced with switched-mode EPSs, which greatly reduce the biggest sources of loss in a line-frequency EPS—the transformer.

Fast charger technology options include:

- **Low-Power Integrated Circuits:** The efficiency of the battery charger’s switched-mode power supply can be further improved by substituting low-power integrated circuit (“IC”) controllers for traditional IC controllers.
- **Elimination/Limitation of Maintenance Current:** See above.
- **Schottky Diodes and Synchronous Rectification:** Both line-frequency and switched-mode EPSs use diodes to rectify output voltage. Schottky diodes and synchronous rectification can replace standard diodes to reduce rectification losses, which are increasingly significant at low voltage.
- **Elimination of No-Battery Current:** See above.
- **Phase Control to Limit Input Power:** Even when a typical battery charger is not delivering its maximum output current to the battery, its power conversion circuitry continues to draw significant power. A phase control circuit, like the one present in most common light dimmers, can be added to the primary side of the battery charger power supply circuitry to limit input current in lower-power modes.

An in-depth discussion of these technology options can be found in Chapter 3 of the accompanying final rule TSD.

C. Engineering Analysis

In the engineering analysis (detailed in Chapter 5 of the final rule TSD), DOE establishes the relationship between the manufacturer selling price (“MSP”) and increases in battery charger efficiency. The efficiency values range from that of an inefficient battery charger sold today (i.e., the no-standards case) to the maximum technologically feasible efficiency level. For each efficiency level examined, DOE determines the MSP; this relationship is referred to as a cost-efficiency curve.

DOE structured its engineering analysis around two methodologies: (1) A “test and teardown” approach, which involves testing products for efficiency and determining cost from a detailed bill of materials (“BOM”) derived from tear-downs and (2) the efficiency-level approach, where the cost of achieving increases in energy efficiency at discrete levels of efficiency are estimated using information gathered in manufacturer interviews that was supplemented and verified through technology reviews and subject matter experts (“SMEs”). When analyzing the cost of each EL—whether based on existing or theoretical designs—DOE differentiates the cost of the battery charger from the cost of the associated end-use product.

When developing the engineering analysis for battery chargers, DOE selected representative units for each product class. For each representative unit, DOE tested a number of different products. After examining the test...
results, DOE selected ELs that set discrete levels of improved battery charger performance in terms of energy consumption. Subsequently, for each EL, DOE used either teardown data or information gained from manufacturer interviews to generate costs corresponding to each EL for each representative unit. Finally, for each product class, DOE developed scaling relationships using additional test results and generated UEC equations based on battery energy.

The following sections discuss the engineering analysis in detail.

Submitted comments regarding the various aspects of the analysis are noted in each section.

1. Representative Units

For each product class, DOE selected a representative unit on which it conducted its engineering analysis and developed a cost-efficiency curve. The representative unit is meant to be an idealized battery charger typical of those used with high-volume applications in its product class. Because results from the analysis of these representative units would later be extended, or applied to other units in each respective product class, DOE selected high-volume and/or high-energy-consumption applications that use batteries that are typically found across battery chargers in the given product class. The analysis of these battery chargers is pertinent to all the applications in the product class under the assumption that all battery chargers with the same battery voltage and energy provide similar utility to the user, regardless of the actual end-use product with which they work. Table IV–1 shows the representative units for each product class that DOE analyzed.

### Table IV–1—Battery Charger Representative Units for Each Product Class

<table>
<thead>
<tr>
<th>Product class #</th>
<th>Input/output type</th>
<th>Battery energy (Wh)</th>
<th>Special characteristic or battery voltage</th>
<th>Rep. unit battery voltage (V)</th>
<th>Rep. unit energy (Wh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC In, DC Out</td>
<td>≤10</td>
<td>Inductive Connection</td>
<td>3.6</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>&lt;100</td>
<td>4–10 V</td>
<td>2.4</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>&gt;10 V</td>
<td>20</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>≤4 V</td>
<td>100–900</td>
<td>12</td>
<td>800</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>&gt;100</td>
<td>12</td>
<td>24</td>
<td>400</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>&gt;200</td>
<td></td>
<td>48</td>
<td>3,750</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>&gt;3000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

During the public meeting for the SNOPR, Dell inquired whether DOE looked at multi-voltage, multi-capacity battery chargers when selecting representative units. (Dell, Pub. Mtg. Tr., No. 234, p. 50–51) DOE confirms that in the course of the engineering analysis, several lithium and nickel multi-voltage, multi-capacity battery chargers were tested, torn down and compared against similar single-voltage units. The recently amended battery charger test procedure prescribes that a multi-voltage charger be tested at its highest output power, which is also its most efficient operating point. Issued May 6, 2016. At this level, DOE could not find any appreciable difference in efficiency between the multi-voltage, multi-capacity units versus single-voltage devices operating at similar output powers and employing similar power conversion and charge termination technology. Additional details on the battery charger representative units can be found in Chapter 5 of the accompanying final rule TSD.

2. Battery Charger Efficiency Metric

In the NOPR and SNOPR regarding energy conservation standards for battery chargers, DOE introduced and used the UEC metric to represent the efficiency of battery chargers. AHAM supported the use of UEC as a single metric to represent the energy consumption of battery chargers, (AHAM, No. 249, p. 4–5), but Ingersoll Rand opposed it. In particular, Ingersoll Rand argued that the usage of battery chargers is highly dependent on the target market for a given product and varies across segments, which makes the determination of product efficiency levels, and possibly even class definitions, unnecessarily difficult. Ingersoll Rand recommended that DOE adopt the metrics used by the CEC, as manufacturers are already familiar with the CEC metrics and it would, in its view, be easier to implement and enforce standards based on those metrics. (Ingersoll Rand, No. 240, p. 2–3)

EPCA requires DOE to regulate standby and off modes in a single metric unless it is technically infeasible to do so. See 42 U.S.C. 6295[gg](3). Standby mode, as defined by 42 U.S.C. 6295[gg](3), occurs when the energy-consuming product is connected to the mains and offers user-oriented or protective functions such as facilitating the activation or deactivation of other functions (including active mode) by a remote switch (including remote control), internal sensor, or timer. See 42 U.S.C. 6295[gg](1)(A)(iiiiiiiiiiiii).

Maintenance mode, as used in this final rule, meets the statutory definition of standby mode and DOE must incorporate maintenance and off mode into a single metric. The CEC standards for small battery charger systems use two standards for regulation. The first standard collectively regulates the maximum 24-hour charge and maintenance energy and the second standard collectively regulates the maximum maintenance mode and standby mode power. Hence, adopting the CEC approach would be inconsistent with the single metric approach laid out by Congress, as the CEC uses two standards that both separately incorporate maintenance mode.

Further, DOE notes that aggregating the performance parameters of battery chargers into one metric and applying a usage profile will allow manufacturers more flexibility in terms of improving performance during the modes of operation that will be the most beneficial to their consumers rather than being required to improve the performance in each mode of operation, some of which may not provide any appreciable benefit. For example, in certain cases, a power tool battery charger may be in standby mode, also referred to as the no-battery mode in this final rule, for longer periods of time during the day than a battery charger used for a cordless house phone, which is likely to spend a significant portion of every day in maintenance mode. Consequently, in light of these differences, consumers would see greater energy savings if power tool battery charger manufacturers improved standby mode efficiency and home phone battery charger manufacturers improved maintenance mode efficiency. Because the UEC metric is indifferent to...
how a manufacturer implements changes to improve efficiency, a
manufacturer can tailor its battery chargers to better fit the individual
conditions that its particular charger is likely to face. For these reasons, DOE is
adopting the UEC metric in this final rule to help ensure that manufacturers
have sufficient flexibility in improving the energy efficiency performance of
their battery chargers.

3. Calculation of Unit Energy Consumption

UEC is based on a calculation designed to give the total annual
amount of energy lost by a battery charger from the time spent in each
mode of operation. The UEC of a battery charger basic model is calculated using
one of the following equations:

Primary Equation

\[ UEC = 365 \left( n \left( E_{24} - 5P_m - E_{batt} \right) \right) \frac{24}{t_{cd}} + \left( P_n (t_{a&m} - (t_{cd} - 5)n) \right) + (P_{sb} t_{sb}) + (P_{off} t_{off}) \]

Secondary Equation

For some battery chargers, the equation described above is not
appropriate and an alternative calculation is necessary. Specifically, in
cases where the charge test duration (as
determined according to section 5.2 of Appendix Y to Subpart B of Part 430)
minus 5 hours multiplied by the number of charges per day (n) is greater
than the time assumed in active and maintenance mode (t_{a&m}), an
inconsistency is seen between the
measurements for the test product and
DOE's usage profile assumptions. To
avoid this inconsistency, DOE requires
that the following secondary equation
be used to calculate UEC for such
devices at the threshold:

\[ UEC = 365 \left( n \left( E_{24} - 5P_m - E_{batt} \right) \right) \frac{24}{(t_{cd} - 5)} + (P_{sb} t_{sb}) + (P_{off} t_{off}) \]

The threshold criteria to determine when to use the secondary equation
itself can be summarized as follows:

\[ t_{cd} - 5 > \frac{t_{a&m}}{n} \]

In the battery charger NOPR from 2012, DOE calculated and published the
threshold Charge Time (t_{a&m}/n) for each product class. These values were
brought forward unchanged from the NOPR to the September 2015 SNOPR.

DOE has since revisited these published numbers and discovered calculation and
rounding errors in computing the threshold value (t_{a&m}/n). While the final
presented values for Threshold Charge Time (t_{a&m}/n) were calculated using
unrounded numbers, the values for t_{a&m} and n were shown in rounded form.
This left the reader unable to replicate the final values themselves using the
above equation. Therefore, DOE has updated the table to present final values
that are properly calculated according to
the threshold equation without any
rounding errors. For PC 2, there was a
typographical error which has also been
corrected. The difference between the
previously published values and what
the values should have been is shown in
Table IV–2 below. It is important to
note that neither the criteria used nor
the values for t_{a&m} or n has changed.
DOE has corrected the tables in this
final rule.

<table>
<thead>
<tr>
<th>TABLE IV–2—THRESHOLD CHARGE TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

In the battery charger energy
conservation standards SNOPR, DOE
proposed to add the above mentioned
UEC equations and the associated
battery charger usage profiles in 10 CFR
430.32(z). See 80 FR 52932. However, as
explained in the recent battery charger
test procedure final rulemaking, DOE is
instead including the above mentioned
UEC equations and the associated
viability of potential energy efficiency
standards. As described in the
technology assessment and screening
analysis, there are numerous design
options available for improving
efficiency and each incremental
technology improvement increases the
battery charger efficiency along a
continuum. The engineering analysis
In analyzing potential efficiency levels, DOE examined, among other things, the California standards for small battery chargers, which are based on two metrics—one for 24-hour energy use and one for the combined maintenance mode and standby mode power usage. Using the usage profiles it developed to translate these standards into a UEC value, DOE compared its ELs with the California levels and found that, in most cases, the California standards generally corresponded closely with one of DOE’s ELs for each product class when the standards were converted into a UEC value (using DOE’s usage profile assumptions). However, once compliance with the CEC standards was required, DOE again analyzed the technology and found new technology options that have been widely adopted by battery charger manufacturers to meet the CEC standards. DOE accounted for these results and the changes in technology within the marketplace when developing ELs for each product class. This methodology is outlined in more detail in Chapter 5 of the accompanying TSD.

Table IV–3 below shows which EL aligns most closely with the California standards for each product class.

<table>
<thead>
<tr>
<th>Product class</th>
<th>EL approximate to CEC standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Low-Energy, Inductive)</td>
<td>EL 0</td>
</tr>
<tr>
<td>2 (Low-Energy, Low-Voltage)</td>
<td>EL 1</td>
</tr>
<tr>
<td>3 (Low-Energy, Medium-Voltage)</td>
<td>EL 1</td>
</tr>
<tr>
<td>4 (Low-Energy, High-Voltage)</td>
<td>EL 1</td>
</tr>
<tr>
<td>5 (Medium-Energy, Low-Voltage)</td>
<td>EL 2</td>
</tr>
<tr>
<td>6 (Medium-Energy, High-Voltage)</td>
<td>EL 2</td>
</tr>
<tr>
<td>7 (High-Energy)</td>
<td>EL 1</td>
</tr>
</tbody>
</table>

With the exception of the max tech level, the ELs presented in the March 2012 NOPR for all product classes were based on commercially-available products and the costs to reach these levels were independently verified by manufacturers and subject matter experts. For the SNOPR and this final rule, DOE attempted to align at least one EL in each product class subject to this final rule as closely as possible to the CEC standards to address comments to the NOPR suggesting that DOE create a new EL that more closely aligns with the CEC levels.

DOE has also received stakeholder comments from PTI and OPEI expressing concern that multi-port battery chargers are not treated any differently than single-port battery chargers under the proposed standard levels, which according to these commenters, creates disincentive for more efficient multi-port battery chargers. PTI and OPEI recommended that DOE provide an allowance of 0.25W per additional port in standby power for multi-port battery chargers. PTI and OPEI further noted that the above requested allowance in standby power for multi-port battery chargers equates to 0.08 kWh/yr increase in the proposed standard levels for PC 4. (PTI and OPEI, No. 244, p. 3) In DOE’s engineering analysis, DOE evaluated, tested and performed tear downs on numerous multi-port battery chargers but did not find sufficient reason to treat multi-port battery chargers differently from single-port battery chargers. The adopted standards for these products already accommodate multi-port battery chargers because they scale with the battery energy of the additional batteries that may be charged with multi-port battery chargers. Further, the increase in UEC resulting from the recommended allowance in standby power is minute and will not have a significant impact on the represented value of UEC for multi-port battery chargers. As such, DOE is not adopting the additional allowance suggested by PTI and OPEI.

5. Manufacturer Interviews

The engineering analysis also relies in part on information obtained through interviews with several battery charger manufacturers. These manufacturers consisted of companies that manufacture battery chargers and original equipment manufacturers (“OEMs”) of battery-operated products who package (and sometimes design, manufacture, and package) battery chargers with their end-use products. DOE followed this interview approach to obtain data on the possible efficiencies and resultant costs of consumer battery chargers. Aggregated information from these interviews is provided in Chapter 5 of the final rule TSD. The interviews also provided manufacturer inputs and comments in preparing the manufacturer impact analysis, which is discussed in detail in section IV.J.

DOE attempted to obtain teardown results for all of its product classes, but encountered difficulties in obtaining...
useful and accurate teardown results for one of its products classes—namely, PC 1 (e.g., electric toothbrushes). For this product class, DOE relied heavily on information obtained from manufacturer interviews. DOE found that when it attempted to teardown PC 1 devices, most contained potting (i.e., material used to waterproof internal electronics). Removal of the potting also removed the identifying markings that IHS Technology (formerly i-Suppli)—DOE’s technical consultant—needed to estimate a cost for the components. As a result, manufacturer interview data helped furnish the necessary information to assist DOE in estimating these costs.

6. Design Options
Design options are technology options that remain viable for use in the engineering analysis after applying the screening criteria as discussed above in section IV.B. DOE notes that all technology options that are not eliminated in the screening analysis (see section IV.B) become design options that are considered in the engineering analysis. Most ELs, except for those related to max-tech units and chargers falling into product classes for which DOE did not tear down units (i.e., PC 1 and PC 6), are based on actual teardowns of units manufactured and sold in today’s battery charger market. Consequently, DOE did not control which design options were used at each EL. No technology options were preemptively eliminated from use with a particular product class. Similarly, if products are being manufactured and sold using these technology options, that fact indicates that the use of these options is unlikely to cause any significant loss in utility, such as an extremely limited operating temperature range or shortened cycle-life. Accordingly, the available facts indicate that all ELs can be met with technologies that are technologically feasible and that fit the intended application. Details on the technology associated with each EL can be found in Chapter 5 of the accompanying final rule TSD.

For the max-tech designs, which are not commercially-available, DOE developed these levels in part with a focus on maintaining product utility as projected energy efficiency improved. Although some features, such as decreased charge time, were considered as added utilities, DOE did not assign any monetary value to such features. Additionally, DOE did not assume that such features were undesirable, particularly if the incremental improvement in performance causes a significant savings in energy costs. Finally, to the extent possible, DOE considered durability, reliability, and other performance and utility-related features that affect consumer behavior. See final rule TSD, Chapter 5 for additional details.

7. Cost Model
This final rule continues to apply the same approach used in the SNOPR, NOPR and preliminary analysis to generate the MSPs for the engineering analysis. For those product classes other than PC 1, DOE’s MSPs rely on the teardown results obtained from IHS Technology. The bills of materials provided by IHS Technology were multiplied by a markup based on product class. For those product classes for which DOE could not estimate MSPs using the IHS Technology teardowns—i.e., PC 1—DOE relied on aggregate manufacturer interview data. Additional details regarding the cost model and the markups assumed for each product class are presented in Chapter 5 of the final rule TSD. DOE’s cost estimates reflect real world costs and have been updated where necessary for the final rule. The Department did not receive any further stakeholder comments on this aspect of its analysis.

8. Battery Charger Engineering Results
The results of the engineering analysis are reported as cost-efficiency data (or “curves”) in the form of MSP (in dollars) versus unit energy consumption (in kWh/yr). These data form the basis for this final rule’s analyses and this section illustrates the results that DOE obtained for all seven product classes in its engineering analysis. The Department did not receive any stakeholder comments on this aspect of its analysis.

a. Product Class 1
No changes were made to the engineering results for PC 1 since the publication of the SNOPR. These results are shown below in Table IV–5. More details on these engineering analysis results can be found in Chapter 5 of the final rule TSD.

<table>
<thead>
<tr>
<th>EL Description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>26.7</td>
<td>19.3</td>
<td>10.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>1.2</td>
<td>0.8</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>0.5</td>
<td>0.4</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>8.73</td>
<td>6.10</td>
<td>3.04</td>
<td>1.29</td>
</tr>
<tr>
<td>MSP [$]</td>
<td>$2.05</td>
<td>$2.30</td>
<td>$2.80</td>
<td>$6.80</td>
</tr>
</tbody>
</table>

b. Product Class 2
No changes were made to the engineering results for PC 2 since the publication of the SNOPR. These results are shown below in Table IV–5. More details on these engineering analysis results can be found in Chapter 5 of the final rule TSD.

<table>
<thead>
<tr>
<th>EL Description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
<th>EL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>25.79</td>
<td>13.6</td>
<td>8.33</td>
<td>8.94</td>
<td>6.90</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>1.1</td>
<td>0.5</td>
<td>0.13</td>
<td>0.1</td>
<td>0.04</td>
</tr>
</tbody>
</table>
### Table IV–5—Product Class 2 (Low-Energy, Low-Voltage) Engineering Analysis Results—Continued

<table>
<thead>
<tr>
<th>EL description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
<th>EL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Intermediate</td>
<td>2nd intermediate</td>
<td>Best in market</td>
<td>Max tech</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.03</td>
<td>0.02</td>
<td>0.10</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>5.33</td>
<td>3.09</td>
<td>1.69</td>
<td>1.58</td>
<td>1.11</td>
</tr>
<tr>
<td>MSP [$]</td>
<td>$1.16</td>
<td>$1.20</td>
<td>$1.49</td>
<td>$2.43</td>
<td>$4.31</td>
</tr>
</tbody>
</table>

### c. Product Class 3

No changes were made to the engineering results for PC 3 since the publication of the SNOPR. These results are shown below in Table IV–6. More details on these engineering analysis results can be found in Chapter 5 of the final rule TSD.

### Table IV–6—Product Class 3 (Low-Energy, Medium-Voltage) Engineering Analysis Results

<table>
<thead>
<tr>
<th>EL description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Intermediate</td>
<td>Best in market</td>
<td>Max tech</td>
</tr>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>42.60</td>
<td>28.00</td>
<td>17.0</td>
<td>15.9</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>1.70</td>
<td>0.50</td>
<td>0.26</td>
<td>0.26</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>0.30</td>
<td>0.30</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>3.65</td>
<td>1.42</td>
<td>0.74</td>
<td>0.70</td>
</tr>
<tr>
<td>MSP [$]</td>
<td>$1.12</td>
<td>$1.20</td>
<td>$4.11</td>
<td>$5.51</td>
</tr>
</tbody>
</table>

### d. Product Class 4

No changes were made to the engineering results for PC 4 since the publication of the SNOPR. These results are shown below in Table IV–7. More details on these engineering analysis results can be found in Chapter 5 of the final rule TSD.

### Table IV–7—Product Class 4 (Low-Energy, High-Voltage) Engineering Analysis Results

<table>
<thead>
<tr>
<th>EL description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Intermediate</td>
<td>Best in market</td>
<td>Max tech</td>
</tr>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>60.75</td>
<td>44.00</td>
<td>29.30</td>
<td>27.2</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>2.40</td>
<td>0.50</td>
<td>0.50</td>
<td>0.4</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>0.30</td>
<td>0.30</td>
<td>0.50</td>
<td>0.3</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>12.23</td>
<td>5.38</td>
<td>3.63</td>
<td>3.05</td>
</tr>
<tr>
<td>MSP [$]</td>
<td>$1.79</td>
<td>$2.60</td>
<td>$5.72</td>
<td>$18.34</td>
</tr>
</tbody>
</table>

### e. Product Class 5

No changes were made to the engineering results for PC 5 since the publication of the SNOPR. These results are shown below in Table IV–8. More details on these engineering analysis results can be found in Chapter 5 of the final rule TSD.

### Table IV–8—Product Class 5 (Low-Energy, Medium-Voltage) Engineering Analysis Results

<table>
<thead>
<tr>
<th>EL description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Intermediate</td>
<td>Best in market</td>
<td>Max tech</td>
</tr>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>2036.9</td>
<td>1647.3</td>
<td>1292.00</td>
<td>1025.64</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>21.2</td>
<td>11.9</td>
<td>0.50</td>
<td>0.0</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>20.1</td>
<td>11.6</td>
<td>0.30</td>
<td>0.0</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>84.60</td>
<td>56.09</td>
<td>21.39</td>
<td>9.11</td>
</tr>
<tr>
<td>Incremental MSP [$]</td>
<td>$18.48</td>
<td>$21.71</td>
<td>$26.81</td>
<td>$127.00</td>
</tr>
</tbody>
</table>

### f. Product Class 6

No changes were made to the engineering results for PC 6 since the publication of the SNOPR. These results are shown below in Table IV–9. More details on these engineering analysis results can be found in Chapter 5 of the final rule TSD.

### Table IV–9—Product Class 6 (Low-Energy, Medium-Voltage) Engineering Analysis Results

<table>
<thead>
<tr>
<th>EL description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Intermediate</td>
<td>Best in market</td>
<td>Max tech</td>
</tr>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>2036.9</td>
<td>1647.3</td>
<td>1292.00</td>
<td>1025.64</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>21.2</td>
<td>11.9</td>
<td>0.50</td>
<td>0.0</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>20.1</td>
<td>11.6</td>
<td>0.30</td>
<td>0.0</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>84.60</td>
<td>56.09</td>
<td>21.39</td>
<td>9.11</td>
</tr>
<tr>
<td>Incremental MSP [$]</td>
<td>$18.48</td>
<td>$21.71</td>
<td>$26.81</td>
<td>$127.00</td>
</tr>
</tbody>
</table>
### Table IV–9—Product Class 6 (Medium-Energy, High-Voltage) Engineering Analysis Results

<table>
<thead>
<tr>
<th>EL Description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>891.6</td>
<td>786.1</td>
<td>652.00</td>
<td>466.20</td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>10.6</td>
<td>6.0</td>
<td>0.50</td>
<td>0.0</td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>10.0</td>
<td>5.8</td>
<td>0.30</td>
<td>0.0</td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>120.60</td>
<td>81.72</td>
<td>33.53</td>
<td>8.15</td>
</tr>
<tr>
<td>Incremental MSP [$]</td>
<td>$18.48</td>
<td>$21.71</td>
<td>$26.81</td>
<td>$127.00</td>
</tr>
</tbody>
</table>

For Product Class 7

For PC 7, DOE’s SNOPR contained a typographical error that presented the proposed standard for PC 7 as "0.0502 * E\textsubscript{Batt} + 4.53" rather than "0.0502 * E\textsubscript{Batt} + 4.53". The SNOPR TSD, along with the earlier NOPR and SNOPR public meeting presentations, all contained the correct standard. DOE’s analyses were all based on the correct standard. DOE acknowledges this typographical error and reiterates that the adopted standard for PC 7 is "0.0502 * E\textsubscript{Batt} + 4.53". The engineering results for PC 7 are shown below in Table IV–10.

### Table IV–10—Product Class 7 (High-Energy) Engineering Analysis Results

<table>
<thead>
<tr>
<th>EL Description</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-Hour Energy (Wh)</td>
<td>5884.2</td>
<td>5311.1</td>
<td>4860.0</td>
<td></td>
</tr>
<tr>
<td>Maintenance Mode Power (W)</td>
<td>10.0</td>
<td>3.3</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>No-Battery Mode Power (W)</td>
<td>0.0</td>
<td>1.5</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Off-Mode Power (W)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Unit Energy Consumption (kWh/yr)</td>
<td>255.05</td>
<td>191.74</td>
<td>131.44</td>
<td></td>
</tr>
<tr>
<td>Incremental MSP [$]</td>
<td>$88.07</td>
<td>$60.86</td>
<td>$164.14</td>
<td></td>
</tr>
</tbody>
</table>

9. Scaling of Battery Charger Efficiency Levels

In preparing its standards for products within a product class (which would address all battery energies and voltages falling within that class), DOE used a UEC-based scaling approach. After developing the engineering analysis results for the representative units, DOE had to determine a methodology for extending the UEC at each EL to all other ratings not directly analyzed for a given product class. In the NOPR, DOE proposed making UEC a function of battery energy. DOE also indicated that it based this proposed UEC function on the test data that had been obtained up through the NOPR. See 77 FR 16478.

For PCs 2–7, DOE created equations for UEC that scale with battery energy. Specifically, as explained in the recent battery charger test procedure final rulemaking, the maximum allowed UEC for PCs 2–7 scales with the rated battery discharge energy, as determined by the statistical requirements outlined in 10 CFR 429.39(a). See Issued May 6, 2016. In contrast, for PC 1, each EL was represented by one flat, nominal standard. For this product class, DOE found in testing that the UEC did not vary with battery energy or voltage. As a result, while DOE opted to maintain its approach from the NOPR to adopt a constant standard across all battery energies for PC 1, the analysis limited the scope of the product class to battery energies of less than or equal to 5 Wh.

DOE generated boundary conditions for its efficiency levels to make the UEC requirement constant below a certain threshold of battery energy. Including these boundary conditions allows DOE to account for the fact that even if the battery energy approaches zero, the battery charger will continue to consume a finite amount of non-zero power. As explained in section IV.A.3.b, DOE notes that PCs 5 and 6 cover battery chargers with battery energies ranging from 100–3000 Wh and that the boundary conditions at 19 Wh and 18 Wh for these two PCs become unnecessary and will never be used. While the presence of these boundary conditions does not affect covered products in PCs 5 and 6, DOE realizes that it may lead to misinterpretation and ambiguity. Therefore, DOE is removing these boundary conditions from the final rule.

For additional details and the exact EL equations developed for each product class, please see Chapter 5 in the accompanying final rule TSD.

D. Markups Analysis

The markups analysis develops appropriate markups in the distribution chain to convert the MSP estimates derived in the engineering analysis to consumer prices. At each step in the distribution channel, companies mark up the price of the product to cover business costs and profit margin. Given the variety of products that use battery chargers, distribution varies depending on the product class and application. As such, similar to the approach used in the NOPR, DOE assumed that the dominant path to market establishes the retail price and, thus, the markup for a given application. The markups applied to end-use products that use battery chargers are approximations of the battery charger markups.

In the case of battery chargers, the dominant path to market typically involves an end-use product manufacturer (i.e., an OEM) and retailer. DOE developed OEM and retailer markups by examining annual financial filings, such as Securities and Exchange Commission ("SEC") 10–K reports, from more than 80 publicly-traded OEMs, retailers, and distributors engaged in the manufacturing and/or sales of consumer applications that use battery chargers.

DOE calculated two markups for each product in the markups analysis. A markup applied to the baseline component of a product’s cost (referred to as a baseline markup) and a markup applied to the incremental cost increase that would result from energy conservation standards (referred to as an incremental markup). The incremental markup relates the change in the MSP...
of higher-efficiency models (the incremental cost increase) to the change in the retailer’s selling price.

In response to the SNOPR, AHAM objected to DOE’s use of incremental markups in its analysis. (AHAM, No. 249, p. 6) DOE recognizes that retailers may seek to preserve margins. However, DOE’s approach assumes that appliance retail markets are reasonably competitive, so that an increase in the manufacturing cost of appliances is not likely to contribute to a proportionate rise in retail profits, as would be expected if markups remained constant. DOE’s methodology for estimating markups is based on a mix of economic theory, consultation with industry experts, and data from appliance retailers.22 In conducting research, DOE has found that empirical evidence is lacking with respect to appliance retailer markup practices when a product increases in cost (due to increased efficiency or other factors). DOE understands that real-world retailer markup practices vary depending on market conditions and on the magnitude of the change in the cost of goods sold associated with an increase in appliance efficiency. DOE acknowledges that detailed information on actual retail practices would be helpful in evaluating changes in markups on products after appliance standards take effect. For this rulemaking, DOE requested data from stakeholders in support of alternative approaches to markups, as well as any data that shed light on actual practices by retailers; however, no such data were provided. Thus, DOE’s analysis continues using an approach that is consistent with the conventionally-accepted economic theory of firm behavior in competitive markets.

Chapter 6 of the final rule TSD provides details on DOE’s development of markups for battery chargers.

E. Energy Use Analysis

The energy use analysis estimates the range of energy use of battery chargers in the field, i.e., as they are actually used by consumers. The energy use analysis provides the basis for the other analyses DOE uses when assessing the costs and benefits of setting standards for a given product. Particularly dependent on the energy analysis are assessments of the energy savings and the savings in consumer operating costs that could result from the adoption of new standards.

Battery chargers are power conversion devices that transform input voltage to a suitable voltage for the battery they are powering. A portion of the energy that flows into a battery charger flows out to a battery and, thus, cannot be considered to be consumed by the battery charger. However, to provide the necessary output power, other factors contribute to the battery charger energy consumption, e.g., internal losses and overhead circuitry.23 Therefore, the traditional method for calculating energy consumption—by measuring the energy a product draws from mains while performing its intended function(s)—is not appropriate for a battery charger because that method would not factor in the energy delivered by the battery charger to the battery, and would overstate the battery charger’s energy consumption. Instead, DOE considered energy consumption to be the energy dissipated by the battery chargers (losses) and not delivered to the battery as a more accurate means to determine the energy consumption of these products. Once the energy and power requirements of those batteries were determined, DOE considered them fixed, and DOE focused its analysis on how standards would affect the energy consumption of the battery chargers themselves.

Applying a single usage profile to each application, DOE calculated the unit energy consumption for battery chargers. In addition, as a sensitivity analysis, DOE examined the usage profiles of multiple user types for applications where usage varies widely (for example, a light user and a heavy user).

In response to the SNOPR, AHAM noted that as efficiency levels increase, infrequently used products such as shavers, trimmers, and toothbrushes may only be charged once per month or less. (AHAM, No. 249, p. 5) DOE has based its estimate of usage profiles and efficiency distributions on responses from the manufacturer interviews, as well as on best available data, for each application and product class. Based on this information, the usage profiles used in the analysis provide a reasonable average usage approximation of the products falling within each product class and application. As a result, DOE did not change these usage profiles for the final rule.

Chapter 7 of the final rule TSD provides details on DOE’s energy use analysis for battery chargers.

F. Life-Cycle Cost and Payback Period Analysis

DOE conducted LCC and PBP analyses to evaluate the economic impacts on individual consumers of potential battery charger energy conservation standards. The effect of new or amended energy conservation standards on individual consumers usually involves a reduction in operating cost and an increase in purchase cost. DOE used the following two metrics to measure consumer impacts:

- The LCC (life-cycle cost) is the total consumer expense of an appliance or product over the life of that product, consisting of total installed cost (manufacturer selling price, distribution chain markups, sales tax, and installation costs) plus operating costs (expenses for energy use, maintenance, and repair). To compute the operating costs, DOE discounts future operating costs to the time of purchase and sums them over the lifetime of the product.

- The PBP (payback period) is the estimated amount of time (in years) it takes consumers to recover the increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost at higher efficiency levels by the change in annual operating cost for the year that amended or new standards are assumed to take effect.

For any given efficiency level, DOE measures the change in LCC relative to the LCC in the no-standards case, which reflects the estimated efficiency distribution of battery chargers in the absence of new or amended energy conservation standards. In contrast, the PBP for a given efficiency level is measured relative to the baseline product.

For each considered efficiency level in each product class, DOE calculated the LCC and PBP for a nationally representative set of consumers. For each sampled consumer, DOE determined the energy consumption for the battery charger and the appropriate electricity price. By developing a representative sample of consumers, the analysis captured the variability in energy consumption and energy prices associated with the use of battery chargers.


23 Internal losses are energy losses that occur during the power conversion process. Overhead circuitry refers to circuits and other components of the battery charger, such as monitoring circuits, logic circuits, and LED indicator lights, that consume power but do not directly contribute power to the end-use application.
Inputs to the calculation of total installed cost include the cost of the product—which includes MSPs, manufacturer markups, retailer and distributor markups, and sales taxes—and installation costs. Inputs to the calculation of operating expenses include annual energy consumption, energy prices and price projections, repair and maintenance costs, product lifetimes, and discount rates. DOE created distributions of values for product lifetime, discount rates, and sales taxes, with probabilities attached to each value, to account for their uncertainty and variability.

The computer model DOE uses to calculate the LCC and PBP, which incorporates Crystal Ball® (a commercially-available software program), relies on a Monte Carlo simulation to incorporate uncertainty and variability into the analysis. The Monte Carlo simulations randomly sample input values from the probability distributions and battery charger user samples. The model calculated the LCC and PBP for products at each efficiency level for 10,000 consumers per simulation run. DOE calculated the LCC and PBP for all consumers as if each were to purchase a new product in the expected year of compliance with new standards. Any national standards would apply to battery chargers manufactured two years after the publication of the final standard. Therefore, for purposes of its analysis, DOE used 2018 as the first year of compliance with new standards.

Table IV–11 summarizes the approach and data DOE used to derive inputs to the LCC and PBP calculations. The subsections that follow provide further discussion. Details of the spreadsheet model and the inputs made to the LCC and PBP analyses are contained in chapter 8 of the final rule TSD and its appendices.

The following sections discuss the LCC and PBP analyses in detail. Submitted comments regarding the various aspects of the analyses are noted in each section.

1. Product Cost
   a. Manufacturer Selling Price

   In the preliminary analysis, DOE used a combination of test and teardown results and manufacturer interview results to develop MSPs. DOE conducted tests and teardowns on a large number of additional units and applications for the NOPR, and incorporated these findings into the MSP. For the SNOPR, DOE adjusted component breakdowns and prices based on updated cost data from IHS Technology and SME feedback for Product Classes 2, 3, 4, 5 and 6. DOE adjusted its MSPs based on these changes. DOE retained the SNOPR prices in the final rule. Further detail on the MSPs can be found in chapter 5 of the final rule TSD.

   Examination of historical price data for a number of appliances that have been subject to energy conservation standards indicates that an assumption of constant real prices and costs may overestimate long-term trends in appliance prices. Economic literature and historical data suggest that the real costs of these products may in fact trend downward over time according to “learning” or “experience” curves. On February 22, 2011, DOE published a NODA stating that DOE may consider refining its analysis by addressing equipment price trends. (76 FR 9696) It also raised the possibility that once sufficient long-term data are available on the cost or price trends for a given product subject to energy conservation standards (such as battery chargers), DOE would consider these data to forecast future trends.

   To forecast a price trend for the NOPR, DOE considered the experience curve approach, in which an experience rate parameter is derived using two historical data series on price and cumulative production. But in the absence of historical shipments of battery chargers and sufficient historical Producer Price Index (“PPI”) data for small electrical appliance manufacturing from the U.S. Department of Labor’s Bureau of Labor Statistics (“BLS”),24 DOE could not use this approach. This situation is partially due to the nature of battery charger designs. Battery chargers are made up of many electrical components whose size,
cost, and performance rapidly change, which leads to relatively short design lifetimes. DOE also considered performing an exponential fit on the deflated AEO’s Projected Price Indices that most narrowly include battery chargers. However, DOE believes that these indices are too broad to accurately capture the trend for battery chargers. Furthermore, battery chargers are not typical consumer products; they more closely resemble commodities that OEMs purchase.

Given the uncertainty involved with these products, DOE did not incorporate product price changes into either the NOPR or SNOPR analyses and is not including them in the final rule. For the NIA, DOE also analyzed the sensitivity of results to two alternative battery charger price forecasts. Appendix 10–B of the final rule TSD describes the derivation of alternative price forecasts.

In response to the SNOPR, DOE supported DOE’s use of a constant price index to project future battery charger prices. (AHAM, No. 249, p. 6) No other comments were received.

b. Markups

DOE applies a series of markups to the MSP to account for the various distribution chain markups applied to the analyzed product. These markups are evaluated for each application individually, depending on its path to market. Additionally, DOE splits its markups into “baseline” and “incremental” markups. The baseline markup is applied to the entire MSP of the baseline product. The incremental markups are then applied to the marginal increase in MSP over the baseline’s MSP. Further detail on the markups can be found in chapter 6 of the final rule TSD.

c. Sales Tax

As in the NOPR, DOE obtained State and local sales tax data from the Sales Tax Clearinghouse. The data represented weighted averages that include county and city rates. DOE used the data to compute population-weighted average tax values for each Census division and four large States (New York, Florida, Texas, and California) treated separately. The derivation of prices was based on the then-latest available EIA data (2012). For the final rule analysis, DOE used updated data from EIA’s Annual Energy Outlook (AEO) 2015 to project electricity prices to the end of the product lifetime,27 which contained reference, high- and low-economic-growth scenarios.

d. Product Price Forecast

As noted in section IV.F.1, to derive its central estimates DOE assumed no change in battery charger prices over the 2018–2047 period. In addition, DOE conducted a sensitivity analysis using two alternative price trends based on AEO price indices. These price trends, and the NPV results from the associated sensitivity cases, are described in appendix 10–B of the final rule TSD.

2. Installation Cost

As detailed in the SNOPR, DOE considered installation costs to be zero for battery chargers because installation would typically entail a consumer simply unpacking the battery charger from the box in which it was sold and connecting the device to mains power and its associated battery. See 80 FR at 52885. Because the cost of this “installation” (which may be considered temporary, as intermittently used devices might be unplugged for storage) is not quantifiable in dollar terms, DOE considered the installation cost to be zero.

3. Annual Energy Consumption

The final rule analysis uses the same approach for determining UECs as the approach used in the SNOPR. The UEC was determined for each application based on battery characteristics and usage profiles. Further detail on the UEC calculations can be found in section IV.E of this final rule and in chapter 7 of the final rule TSD.

4. Energy Prices

DOE determined energy prices by deriving regional average prices for 13 geographic areas consisting of the nine U.S. Census divisions, with four large States (New York, Florida, Texas, and California) treated separately. The derivation of prices was based on the then-latest available EIA data (2012). For the final rule analysis, DOE used updated data from EIA’s Annual Energy Outlook (AEO) 2015 to project electricity prices to the end of the product lifetime,27 which contained reference, high- and low-economic-growth scenarios.

5. Maintenance and Repair Costs

Repair costs are associated with repairing or replacing product components that have failed in an appliance while maintenance costs are associated with maintaining the operation of the product. Typically, small incremental increases in product efficiency produce no, or only minor, changes in repair and maintenance costs compared to baseline efficiency products. In the final rule analysis, DOE did not include repair or maintenance costs for battery chargers. DOE recognized that in some cases the service life of a stand-alone battery charger typically exceeds that of the consumer product it powers.

Furthermore, DOE noted that the cost to repair the battery charger might exceed the initial purchase cost, as these products are relatively low-cost items. Thus, DOE estimated that it would be extremely unlikely that a consumer would incur repair or maintenance costs for a battery charger—the charger would more likely be discarded and a new one purchased to replace it. Further discussion on repair and maintenance costs can be found in chapter 8 of the final rule TSD.

6. Product Lifetime

For the final rule analysis, DOE considered the lifetime of a battery charger to start from the moment it is purchased for end-use up until the time when it is permanently retired from service. Because the typical battery charger is purchased for use with a single associated application, DOE assumed that it would remain in service for as long as the application does. Even though many of the technology options to improve battery charger efficiencies may result in an increased useful life for the battery charger, the lifetime of the battery charger is still directly tied to the lifetime of its associated application. The typical consumer will not continue to use a battery charger once its application has been discarded. For this reason, DOE used the same lifetime estimate for the baseline and standard level designs of each application for the LCC and PBP analyses. Further detail on product lifetimes and how they relate to applications can be found in chapter 3 of the final rule TSD.

7. Discount Rates

The final rule analysis derived residential discount rates by identifying all possible debt or asset classes that might be used to purchase and operate products, including household assets that might be affected indirectly. DOE estimated the average shares of the various debt and equity classes in the average U.S. household equity and debt portfolios using data from the Survey of Consumer Finances from 1989 to

2010. DOE used the mean share of each class across the seven sample years as a basis for estimating the effective financing rate for products. DOE estimated interest or return rates associated with each type of equity using data from the U.S. Federal Reserve and Damodaran. The analysis calculates the risk-free rate using a 40-year average return on 10-year U.S. Treasury notes, as reported by the U.S. Federal Reserve, and the equity risk premium using the geometric average return on the S&P 500 over a 40-year time period. The mean real effective rate across the classes of household debt and equity, weighted by the shares of each class, was 5.2 percent.

For the commercial sector, DOE derived the discount rate from the cost of capital of publicly-traded firms that manufacture products that involve the purchase of battery chargers. To obtain an average discount rate value for the commercial sector, DOE used the share of each industry category in total paid employees provided by BLS, as well as employment data from both the U.S. Office of Personnel Management and the U.S. Census Bureau. By multiplying the discount rate for each industry category by its share of paid employees, DOE derived a commercial discount rate of 5.1 percent.

For further details on discount rates, see chapter 8 and appendix 8D of the final rule TSD.

8. Sectors Analyzed

The final rule analysis included an examination of a weighted average of the residential and commercial sectors as the reference case scenario. Additionally, all application inputs were specified as either residential or commercial sector data. Using these inputs, DOE then sampled each application based on its shipment weighting and used the appropriate residential or commercial inputs based on the sector of the sampled application. This approach provided specificity as to the appropriate input values for each sector, and permitted an examination of the LCC results for a given product class in total. For further details on sectors analyzed, see chapter 8 of the final rule TSD.

9. Efficiency Distribution in the No-Standards Case

For purposes of conducting the LCC analysis, DOE analyzed ELs relative to a no-standards case (i.e., a case without Federal energy conservation standards). This analysis required an estimate of the distribution of product efficiencies in the no-standards case (i.e., what consumers would have purchased in 2018 in the absence of Federal standards). Rather than analyzing the impacts of a particular standard level assuming that all consumers will purchase products at the baseline efficiency level, DOE conducted the analysis by taking into account the breadth of product efficacies that consumers are expected to purchase under the no-standards case.

DOE derived base case market efficiency distributions that were specific to each application where it had sufficient data to do so. This approach helped to ensure that the market distribution for applications with fewer shipments was not disproportionately skewed by the market distribution of the applications with the majority of shipments. DOE factored into its efficiency distributions the current efficiency regulations in California. See section IV.G.3. See chapter 8 of the final rule TSD for further information on the derivation of the efficiency distributions.

10. Compliance Date

The compliance date is the date when a new standard becomes operative, i.e., the date by which battery charger manufacturers must manufacture products that comply with the standard. There are no requirements for the compliance date for battery charger standards, but DOE has chosen to provide a two-year lead-time period for manufacturers to comply with these standards for two reasons. First, manufacturers are already complying with the current CEC standards, which serve as the basis for a majority of the standards being adopted in this rule. As a result, because affected manufacturers are already meeting these levels, that fact suggests that a two-year time frame would be reasonable. Second, this time frame is consistent with one that DOE initially proposed to apply for external power supplies, which were previously bundled together with battery chargers as part of DOE’s initial efforts to regulate both of these products. DOE calculated the LCCs for all consumers as if each would purchase a new product in the year that manufacturers would be required to meet the new standard (2018). However, DOE bases the cost of the equipment on the most recently available data, with all dollar values expressed in 2013.

As discussed in Section III.C, DOE received one comment from AHAM regarding the proposed compliance date. AHAM supported a compliance date of two (2) years after the publication of any final rule establishing energy conservation standards for battery chargers provided that the adopted levels do not exceed EL 1 for PC 1, and EL 2 for PCs 2, 3, and 4. As discussed in Section III.C, DOE’s analysis shows that the battery charger industry is characterized by rapid product development lifecycles. These rapid development lifecycles have led DOE to conclude that a two-year lead-time is sufficient to enable manufacturers of battery chargers that do not currently comply with the standards that DOE is adopting in this rule to satisfy these new standards by the time the 2018 compliance date is reached.

11. Payback Period Analysis

The payback period is the amount of time it takes the consumer to recover the additional installed cost of more-efficient products, compared to baseline products, through energy cost savings. Payback periods are expressed in years. Payback periods that exceed the life of the product mean that the increased total installed cost is not recovered from reduced operating expenses.

The inputs to the PBP calculation for each efficiency level are the change in total installed cost of the product and the change in the first-year annual operating expenditures relative to the baseline. The PBP calculation uses the same inputs as the LCC analysis, except that energy price trends and discount rates are not needed; only energy prices for the year the standard becomes required for compliance (2018 in this case) are needed.

As noted above, EPCA establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii))
For each considered efficiency level, DOE determined the value of the first year’s energy savings by calculating the energy savings in accordance with the applicable DOE test procedure, and multiplying those savings by the average energy price forecast for the year in which compliance with the new standards would be required.

G. Shipments Analysis

Projections of product shipments are needed to convert the impacts that standards are likely to have on the Nation. DOE develops shipment projections based on an analysis of key market drivers for each considered product. In DOE’s shipments model, shipments of products were calculated based on current shipments of product applications powered by battery chargers. The inventory model takes an accounting approach, tracking remaining shipments and the vintage of units in the existing stock for each year of the analysis period.

Based on comments received on the Preliminary Analysis, DOE conducted a sensitivity analysis to examine how increases in end-use product prices resulting from standards might affect shipment volumes. To DOE’s knowledge, elasticity estimates are not readily available in existing literature for battery chargers, or the end-use consumer products that DOE is analyzing in this rulemaking. Because some applications using battery chargers could be considered more discretionary than major home appliances, which have an estimated relative price elasticity of −0.34,33 DOE believed a higher elasticity of demand was possible. In its sensitivity analysis, DOE assumed a price elasticity of demand of −1, meaning a given percentage increase in the final product price would be accompanied by that same percentage decrease in shipments.

Even under this relatively high assumption for price elasticity of demand, DOE’s battery charger standards are unlikely to have a significant effect on the shipment volumes of those battery charger applications mentioned by stakeholders, with forecasted effects ranging from a decrease of 0.004 percent for electric shavers to a decrease of 0.1 percent for do-it-yourself (“DIY”) power tools with detachable batteries. Results for all battery charger applications are contained in appendix 9A to the final rule TSD. The corresponding impacts on national energy savings (“NES”) and NPV are included in appendix 10A. The following sections discuss the shipments analysis in detail. Submitted comments regarding the various aspects of the analysis are noted in each section.

1. Shipment Growth Rate

As in the SNOPR, DOE based its shipments projections such that the per-capita consumption of battery chargers will remain constant over time, and that the overall number of individual units that use battery chargers will grow at the same rate as the U.S. population.

The final rule analysis estimated future market size while assuming no change in the per-capita battery charger purchase rate by using the projected population growth rate as the compound annual market growth rate. Population growth rate values were obtained from the U.S. Census Bureau 2012 National Projections. DOE took the average annual population growth rate, 0.62 percent, and applied this rate to all battery charger product classes. In its shipment forecasts, DOE projects that by 2018, shipments of battery chargers will be 4.4 percent greater than they were in 2011. For more information on shipment projections, see chapter 9 of the final rule TSD.

In response to the SNOPR, NRDC, ASAP, and NEEA commented that DOE’s shipments projections based on population growth are unrealistically low, and that DOE should reconsider its approach and assumptions. (NRDC, ASAP, NEEA, No. 252, p. 6–7) DOE disagrees that its shipment projections are unrealistic. While some applications that use battery chargers are experiencing higher than average growth, the product classes are very broad and include many applications that are not experiencing the same level of growth or are declining. To avoid overstating the benefits of standards on battery chargers, DOE retained the more measured approach used in the SNOPR for the final rule.

2. Product Class Lifetime

For the final rule, DOE calculated product class lifetime profiles using the percentage of shipments of applications within a given product class, and the lifetimes of those applications. These values were combined to estimate the percentage of units of a given vintage remaining in use in each year following the initial year in which those units were shipped and placed in service.

For more information on the calculation of product class lifetime profiles, see chapter 10 of the final rule TSD.

3. Forecasted Efficiency in the No-Standards Case and Standards Cases

A key component of the NIA is the trend in energy efficiency forecasted for the no-standards case (without new standards) and each of the standards cases. To project the trend in efficiency over the entire forecast period, DOE considered recent standards, voluntary programs such as ENERGY STAR, and other trends.

For battery charger efficiency trends, DOE considered three key factors: European standards, the EPA’s ENERGY STAR program, and the battery charger standards that took effect on February 1, 2013, in California.

The EU included battery chargers in a preparatory study on eco-design requirements that it published in January 2007.34 However, it has still not yet announced plans to regulate battery chargers. Thus, DOE did not adjust the efficiency distributions that it calculated for battery chargers between the present-day and the compliance date in 2018 to account for European standards.

DOE examined the ENERGY STAR voluntary program for battery charging systems and found that as of October 19, 2012, less than 350 battery charging systems had been qualified as ENERGY STAR-rated products.35 DOE recognizes that unforeseen new or revised energy efficiency specifications are a possibility and that these factors would impact the distribution of efficiency in the market. It is also possible that DOE’s battery charger standards could cause other organizations to tighten their efficiency specifications as well. However, EPA’s ENERGY STAR program for battery chargers ended on December 31, 2014, and the ENERGY STAR label is no longer available for this product category.36 Thus, DOE did not adjust its battery charger efficiency distributions to account for any potential market effects of a future ENERGY STAR program.

DOE estimated the no-standards case efficiency distributions for the base year 2013 in the original battery charger March 2012 NOPR and updated the distributions based on new market conditions for the base year 2013 in the September 2015 SNOPR. The SNOPR

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The CEC battery charger standards that took effect in 2013, affect most, if not all, of the battery chargers within the scope of DOE’s rulemaking. In the SNOPR analysis, DOE assumed that the CEC standards, effective since February 1, 2013, had moved the market not just in California, but nationally as well. To reach this conclusion, DOE solicited stakeholder comments through a Request for Information published on March 26, 2013, conducted additional manufacturer interviews, and performed its own examination of the efficiency of products sold nationally. See 78 FR 18253. In response to the RFI, many commenters indicated that there was evidence that the market had accepted the CEC standards and that technology improvements were already being incorporated to meet the CEC standards. DOE found products available for sale in physical locations outside of California and available for sale online that met CEC standards, each of which also displayed the accompanying CEC mark. Finally, additional manufacturer interviews supported the view that the majority of products sold in California (and thus meeting CEC standards) were sold nationally as well.

Therefore, DOE re-developed its efficiency distribution analysis, and based it on the CEC database of certified small battery chargers (downloaded in November 2014 and containing 12652 unique models). Each model was assigned an appropriate product class and application based on its battery characteristics. Application-specific efficiency distributions were then developed using the reported energy performance for each model in that application. If an application had less than 20 identified models, it was assigned the efficiency distribution of the overall product class. Due to slight variations between the CEC and DOE metrics, products were conservatively assigned to the higher efficiency level (EL) (in order to not overstate savings) when their UECs were within 5% of the next highest EL compliance line compared to the distance between the compliance lines of the higher and lower ELs.

DOE’s analysis acknowledges, however, that units not complying with CEC standards can still be sold outside of California, but assumes the percentage of such units is small. For this analysis, DOE conservatively assumed 5% of units sold nationally do not meet CEC standards. Without this assumption, DOE’s analysis would likely significantly overestimate the energy savings resulting from the adoption of energy conservation standards for battery chargers by not sufficiently accounting for the fraction of the market that is already utilizing more efficient technology. This assumption is further motivated by manufacturers’ input that the majority of products sold in California are sold nationally as well. To implement this assumption, each application’s efficiency distribution, derived from CEC data, was multiplied by 95%, and then 5% was added to the EL below the CEC approximate EL. These became the no-standards case efficiency distributions shown in the table below.

DOE did not find or receive any data showing consistent long-term efficiency improvement trends for battery chargers, in the absence of regulatory actions. As a result, no further changes in the base-case efficiency distributions were assumed to occur after the first year of the analysis. For reference, Table IV–12 below also lists the tested UECs defining each EL from the final rule engineering analysis and the estimated shipments in 2018 from the final rule shipments analysis.

### TABLE IV–12—NO-STANDARDS CASE FINAL RULE EFFICIENCY DISTRIBUTIONS IN 2018

<table>
<thead>
<tr>
<th>Product class</th>
<th>EL 0</th>
<th>EL 1</th>
<th>EL 2</th>
<th>EL 3</th>
<th>EL 4</th>
<th>Estimated shipments in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>7%</td>
<td>56%</td>
<td>33%</td>
<td>4%</td>
<td>N/A</td>
</tr>
<tr>
<td>1</td>
<td>UEC</td>
<td>8.73</td>
<td>6.1</td>
<td>3.04</td>
<td>1.29</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>9%</td>
<td>42%</td>
<td>9%</td>
<td>15%</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>UEC</td>
<td>5.33</td>
<td>3.09</td>
<td>1.69</td>
<td>1.58</td>
<td>1.11</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>6%</td>
<td>35%</td>
<td>2%</td>
<td>58%</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>UEC</td>
<td>3.65</td>
<td>1.42</td>
<td>0.74</td>
<td>0.7</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>6%</td>
<td>8%</td>
<td>12%</td>
<td>74%</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>UEC</td>
<td>12.23</td>
<td>5.38</td>
<td>3.63</td>
<td>3.05</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>0%</td>
<td>5%</td>
<td>95%</td>
<td>0%</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>UEC</td>
<td>88.1</td>
<td>58.3</td>
<td>21.39</td>
<td>9.45</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>0%</td>
<td>5%</td>
<td>95%</td>
<td>0%</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>UEC</td>
<td>120.7</td>
<td>81.82</td>
<td>33.53</td>
<td>16.8</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>0%</td>
<td>5%</td>
<td>95%</td>
<td>0%</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>UEC</td>
<td>255.05</td>
<td>191.74</td>
<td>131.44</td>
<td>0%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Efficiency Distribution</td>
<td>No standards adopted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>UEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>UEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>UEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To support the assumption that 95% of the national market meets the CEC standard levels, DOE examined the top-selling products for various battery charger applications at several national online and brick & mortar retailers (with an online portal). These data represent products sold not just in California, but available nationally. DOE focused its search on the top-selling 20 products (separately for each retailer) in applications with the highest efficiency distribution.
shipments. DOE also looked at products in a variety of product classes. The applications examined cover over 50% of all battery charger shipments. If the battery charger model number was found in the CEC’s database of certified products, or if the product was available for sale or pick-up in a physical store in California, then the product was assumed to meet CEC standard levels. Over 90% of products in each application examined met CEC standard levels (these results are lower bounds since battery charger model numbers were not always available). These results are therefore consistent with DOE’s assumption that 95% of the national market for battery chargers meets the CEC standards. Table IV–13 below summarizes the results of DOE’s market examination.

<table>
<thead>
<tr>
<th>Application</th>
<th>Product class</th>
<th>Percentage of total BC shipments in application</th>
<th>Retailers examined</th>
<th>Percentage of models examined in CEC database or sold in California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphones</td>
<td>2</td>
<td>21</td>
<td>Amazon, Best Buy, Sears</td>
<td>100</td>
</tr>
<tr>
<td>Media Tablets</td>
<td>2</td>
<td>8</td>
<td>Amazon, Best Buy, Sears</td>
<td>93</td>
</tr>
<tr>
<td>MP3 Players</td>
<td>2</td>
<td>8</td>
<td>Amazon, Best Buy, Sears</td>
<td>93</td>
</tr>
<tr>
<td>Notebook Computers</td>
<td>4</td>
<td>8</td>
<td>Amazon, Best Buy, Sears</td>
<td>97</td>
</tr>
<tr>
<td>Digital Cameras</td>
<td>2</td>
<td>6</td>
<td>Amazon, Home Depot, Sears</td>
<td>90</td>
</tr>
<tr>
<td>Power Tools (includes DIY and professional)</td>
<td>2, 3, 4</td>
<td>2</td>
<td>Walmart, Toys R Us</td>
<td>93</td>
</tr>
<tr>
<td>Toy Ride-On Vehicles</td>
<td>3, 5</td>
<td>1</td>
<td></td>
<td>93</td>
</tr>
</tbody>
</table>

See chapter 9 of the final rule TSD for more details on the development of no-standards case efficiency distributions.

To estimate efficiency trends in the standards cases, DOE has used “roll-up” and/or “shift” scenarios in its standards rulemakings. Under the “roll-up” scenario, DOE assumes: (1) Product efficiencies in the base case that do not meet the standard level under consideration would “roll-up” to meet the new standard level; and (2) product efficiencies above the standard level under consideration would not be affected. Under the “shift” scenario, DOE reorients the distribution above the new minimum energy conservation standard. For this rule, DOE used the “roll-up” scenario.

For further details about the forecasted efficiency distributions, see chapter 9 of the final rule TSD.

H. National Impact Analysis

The NIA assesses the national energy savings (NES) and the national net present value (NPV) from a national perspective of total consumer costs and savings that would be expected to result from new standards at specific efficiency levels. (*“Consumer” in this context refers to consumers of the product being regulated.*) DOE calculates the NES and NPV for the potential standard levels considered based on projections of annual product shipments, along with the annual energy consumption and total installed cost data from the energy use and LCC analyses. For the present analysis, DOE forecasted the energy savings, operating cost savings, product costs, and NPV of consumer benefits over the lifetime of battery chargers sold from 2018 through 2047.

DOE evaluates the impacts of new standards by comparing a case without such standards with standards-case projections. The no-standards case characterizes energy use and consumer costs for each product class in the absence of new energy conservation standards. For this projection, DOE considers historical trends in efficiency and various forces that are likely to affect the mix of efficiencies over time. DOE compares the no-standards case with projections characterizing the market for each product class if DOE adopted new standards at specific energy efficiency levels (i.e., the TSLs or standards cases) for that class. For the standards cases, DOE considers how a given standard would likely affect the market shares of products with efficiencies greater than the standard.

DOE uses a spreadsheet model to calculate the energy savings and the national consumer costs and savings from each TSL. Interested parties can review DOE’s analyses by changing various input quantities within the spreadsheet. The NIA spreadsheet model uses typical values (as opposed to probability distributions) as inputs.

Table IV–14 summarizes the inputs and methods DOE used for the NIA analysis for the final rule. Discussion of these inputs and methods follows the table. See chapter 10 of the final rule TSD for further details.

The following sections discuss the national impacts analysis in detail. Submitted comments regarding the various aspects of the analysis are noted in each section.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipments</td>
<td>Annual shipments from shipments model. Shipment growth rate is 0.62 percent annually using population growth projections from U.S. Census.</td>
</tr>
<tr>
<td>Compliance Date of Standard</td>
<td>2018.</td>
</tr>
<tr>
<td>Efficiency Trends</td>
<td>No-Standards case: Efficiency distributions remain unchanged throughout the forecast period. Standard cases: “Roll-up” scenario.</td>
</tr>
<tr>
<td>Annual Energy Consumption per Unit</td>
<td>Annual shipment weighted-average marginal energy consumption values for each product class.</td>
</tr>
<tr>
<td>Total Installed Cost per Unit</td>
<td>Annual weighted-average values are a function of cost at each TSL.</td>
</tr>
</tbody>
</table>

*The NIA accounts for impacts in the 50 states and U.S. territories.*
1. Product Price Trends

As noted in section IV.F.1, DOE assumed no change in battery charger pricing over the 2018–2047 period in the reference case. DOE acknowledges that it is difficult to predict the consumer electronics market far in advance. To derive a price trend for battery chargers, DOE did not have any historical shipments data or sufficient historical Producer Price Index (PPI) data for the small electrical appliance manufacturing industry from BLS. Therefore, DOE examined a projection based on the price indices that were projected for AEO 2015. DOE performed an exponential fit on two deflated projected price indices that may include the products of which battery chargers are components: Information equipment (Chained price index—investment in non-residential equipment and software—information equipment), and consumer durables (Chained price index—other durable goods). However, DOE believes that these indices are too broad to accurately capture the trend for battery chargers. Furthermore, most battery chargers are unlike typical consumer products in that they are typically not purchased independently by consumers. Instead, they are similar to other commodities and typically bundled with end-use products.

Given the above considerations, DOE decided to use a constant price assumption as the default price factor index to project future battery charger prices in 2018 and out to 2047. While a more conservative method, following this approach helped ensure that DOE did not underestimate the incremental impact of standards on the consumer purchase price. Thus, DOE’s product prices forecast for the LCC, PBP, and NIA analyses for the final rule were held constant for each efficiency level in each product class. DOE also conducted a sensitivity analysis using alternative price trends based on AEO indices. These price trends, and the NPV results from the associated sensitivity cases, are described in Appendix 10B of the final rule TSD.

2. Unit Energy Consumption and Savings

DOE uses the efficiency distributions for the no-standards case along with the unit annual energy consumption values to estimate shipment-weighted average unit energy consumption under the no-standards and standards cases, which are then compared against one another to yield unit energy savings values for each considered efficiency level.

As discussed in section IV.G.3, DOE assumed that energy efficiency will not improve after 2018 in the base case. Therefore, the projected UEC values in the analysis, as well as the unit energy savings values, do not vary over time. Consistent with the roll-up scenario, the analysis assumes that manufacturers would respond to a standard by improving the efficiency of underperforming products but not those that already meet or exceed the standard.

For further details on the calculation of unit energy savings for the NIA, see chapter 10 of the final rule TSD.

3. Unit Costs

DOE uses the efficiency distributions for the no-standards case along with the unit cost values to estimate shipment-weighted average unit costs under the no-standards and standards cases, which are then compared against one another to give incremental unit cost values for each TSL. For further details on the calculation of unit costs for the NIA, see chapter 10 of the final rule TSD.

4. Repair and Maintenance Cost per Unit

DOE assumed repair and maintenance costs to be zero. For further discussion of this issue, see section IV.F.5 above.

5. Energy Prices

While the focus of this rulemaking is on consumer products found in the residential sector, DOE is aware that many products that consume battery chargers are located within commercial buildings. Given this fact, the final rule analysis relied on calculated energy cost savings from such products using commercial sector electricity rates, which are lower in value than residential sector rates. DOE used this approach to avoid overstating energy cost savings in calculating the NPV.

In order to determine the energy usage split between the residential and commercial sectors, DOE first separated products into residential-use and commercial-use categories. Then, for each product class, using shipment values for 2018, average lifetimes, and base-case unit energy consumption values, DOE calculated the approximate annual energy use split between the two sectors. DOE applied the resulting ratio to the electricity pricing to obtain a sector-weighted energy price for each product class. This ratio was held constant throughout the period of analysis.

To estimate energy prices in future years, DOE multiplied the average regional energy prices by the forecast of annual national-average residential energy price changes in the Reference case from AEO, which has an end year of 2040. To estimate price trends after 2040, DOE used the average annual rate of change in prices from 2020 to 2040. As part of the NIA, DOE also analyzed scenarios that used inputs from the AEO Low Economic Growth and High Economic Growth cases. Those cases have higher and lower energy price trends compared to the Reference case. NIA results based on these cases are presented in appendix 10A of the final rule TSD.

For further details on the determination of energy prices for the NIA, see chapter 10 of the final rule TSD.


The national energy savings analysis involves a comparison of national energy consumption of the considered products in each potential standards case (TSL) with consumption in the case with no new energy conservation standards. DOE calculated the national energy consumption by multiplying the number of units (stock) of each product with the annual energy consumption of the considered product.
operating cost savings are energy cost savings, which are calculated using the estimated energy savings in each year and the projected price of the appropriate form of energy.

In calculating the NPV, DOE multiplies the net savings in future years by a discount factor to determine their present value. For this final rule, DOE estimated the NPV of consumer benefits using both a 3-percent and a 7-percent real discount rate. DOE uses these discount rates in accordance with guidance provided by the Office of Management and Budget ("OMB") to Federal agencies on the development of regulatory analysis.\(^4\) The discount rates for the determination of NPV are in contrast to the discount rates used in the LCC analysis, which are designed to reflect a consumer's perspective. The 7-percent real value is an estimate of the average before-tax rate of return to private capital in the U.S. economy. The 3-percent real value represents the "social rate of time preference," which is the rate at which society discounts future consumption flows to their present value.

For further details about the calculation of net present value, see chapter 10 of the final rule TSD.

**I. Consumer Subgroup Analysis**

In analyzing the potential impact of new or amended energy conservation standards on consumers, DOE evaluates the impact on identifiable subgroups of consumers that may be disproportionately affected by a new national standard. DOE evaluates impacts on particular subgroups of consumers by analyzing the LCC impacts and PBP for those particular consumers from alternative standard levels. For this final rule, DOE analyzed the impacts of the considered standard levels on the following consumer subgroups of interest—low-income consumers, small businesses, top tier electricity price consumers, peak time-of-use electricity price consumers, and consumers of specific applications within a product class. For each subgroup, DOE considered variations on the standard inputs to the general LCC model.

For further details on the consumer subgroup analysis, see chapter 11 of the final rule TSD.

**J. Manufacturer Impact Analysis**

DOE conducted an MIA on battery charger applications to estimate the financial impact of new energy conservation standards on this industry. The MIA is both a quantitative and qualitative analysis. As noted earlier, the quantitative part of the MIA relies on the GRIM, an industry cash flow model customized for battery charger applications covered in this rulemaking. The key MIA output is industry net present value, or INPV. DOE used the GRIM to calculate cash flows using standard accounting principles and to compare the difference in INPV between the no-standards case and various TSLs (the standards cases). The difference in INPV between the no-standards and standards cases represents the financial impact of the new standards on battery charger application manufacturers.

Different sets of assumptions (scenarios) produce different results. DOE calculated the MIA impacts of new energy conservation standards by creating a GRIM for battery charger application manufacturers. In the GRIM, DOE grouped similarly impacted products to better analyze the effects that the new standards will have on the industry. DOE presented the battery charger application impacts by the major product class groupings for which TSLs were selected (PC 1; PCs 2, 3, and 4; PCs 5 and 6; and PC 7). When appropriate, DOE also presented the results for differentially-impacted industries within and across those groupings. This is necessary because a given industry, depending upon how narrowly it is defined, may span several product classes. By segmenting the results into these similar industries, DOE can discuss how subgroups of battery charger application manufacturers will be impacted by new energy conservation standards.

DOE outlined its complete methodology for the MIA in the SNOPR. 80 FR at 52893–96 DOE did not receive any comments on the MIA methodology from the SNOPR and did not change the methodology used in the SNOPR in this final rule. The complete MIA is also presented in chapter 12 of the final rule TSD.

The following sections discuss the manufacturer impacts analysis in detail. Submitted comments regarding the various aspects of the analysis are noted in each section.

**1. Manufacturer Production Costs**

The engineering analysis analyzes how changes in battery charger efficiency impact the manufacturer production cost ("MPC") of a battery charger application. DOE used two critical inputs to calculate the impacts of battery charger standards on battery charger application manufacturers. The first input is the price a battery charger

application manufacturer charges to sell its application to its first customer. This is called the MSP of the battery charger application and is used to calculate battery charger application manufacturers’ revenue. The second input is the cost battery charger application manufacturers incur for the range of analyzed battery chargers used in their applications. This input impacts the MPC of the battery charger application.

For the first input, the battery charger application MSP, DOE determined representative retail prices for each application by surveying popular online retailer Web sites to sample a number of price points of the most commonly sold products for each application. The price of each application can vary greatly depending on many factors (such as the features of each individual product). For each application, DOE used the average application price found in the product survey. DOE then discounted this representative retail price back to the application MSP using the retail markups derived from annual SEC 10-K reports in the Markups Analysis, as discussed in section I.D.

DOE calculated the second input, the price of the battery charger itself at each EL, in the engineering analysis. In this analysis, DOE calculated a separate cost efficiency curve for each of the seven battery charger product classes. Based on product testing data, tear-down data, and manufacturer feedback, DOE created a BOM at the original device manufacturer-level to which markups were applied to calculate the MSP of the battery charger at each EL. DOE then allocated the battery charger MSPs of each product class to all the applications within each product class. In this way, DOE arrived at the cost to the application OEM of the battery charger for each application.

DOE used the same MPCs in this final rule analysis that were used in the SNOPR analysis.

2. Shipment Projections

DOE estimated total domestic shipments of each analyzed application for 2015 that is sold with a battery charger. DOE then distributed the associated shipments among the seven product classes. See chapter 12 of the final rule TSD for a complete list of the applications DOE included in each of the seven product classes. In the GRIM, DOE used the battery charger shipment projections from 2015 to 2047 that were generated by the shipment analysis. See chapter IV.G for a complete description of the shipment analysis.

DOE used the same shipment projections in this final rule analysis that were used in the SNOPR analysis.

3. Markup Scenarios

The revenue DOE calculates for the battery charger GRIM is the revenue generated from the sale of the application that incorporates the covered battery charger. It is the revenue earned by the OEM on the sale of the product to the OEM’s first customer (e.g., usually the retailer). After calculating the average retail price from the product price survey as discussed in section IV.J.1, DOE discounted the price by the appropriate retailer markup (calculated in the market and technology assessment) to calculate the per-unit revenue the OEM generates for each application. To calculate the potential impacts on manufacturer profitability in the standards case, DOE analyzed how the incremental costs of more efficient battery chargers would impact this revenue stream on an application-by-application basis.

DOE acknowledges that new standards have the potential to increase product prices and disrupt manufacturer profitability, particularly as the market transitions to meet new energy conservation standards. This change could force manufacturers to alter their markups on products as a result of new energy conservation standards. To account for this uncertainty, DOE analyzes three profitability, or manufacturer markup, scenarios in the GRIM: The flat markup scenario, the pass-through markup scenario, and the constant price markup scenario.

DOE used the same markup scenarios in this final rule analysis that were used in the SNOPR analysis.

4. Capital and Product Conversion Costs

New energy conservation standards will cause manufacturers to incur one-time conversion costs to bring their production facilities and product designs into compliance with the new standards. For the MIA, DOE classified these conversion costs into two major groups: (1) Capital conversion costs and (2) product conversion costs. Capital conversion costs are investments in property, plant, and equipment necessary to adapt or change existing production facilities so that new product designs can be fabricated and assembled. Product conversion costs are one-time investments in research, development, testing, marketing, and other non-capitalized costs focused on making product designs comply with the new energy conservation standards.

DOE used the same product and capital conversion costs in this final rule analysis that were used in the SNOPR analysis.

5. Comments From Interested Parties

Several stakeholders commented on DOE’s SNOPR MIA. These comments were made either in writing during the comment period following the publication of the battery charger SNOPR in the Federal Registry or during the SNOPR public meeting for battery chargers.

a. Manufacturer Interviews

AHAM noted that DOE did not conduct manufacturer interviews in the three-year period between the NOPR and SNOPR. It suggested interviews during this period would have allowed DOE to seek further information on new efficiency levels. (AHAM, No. 249 at p. 3) DOE notes that even though no new manufacturer interviews were conducted during the period between the NOPR and SNOPR, the stakeholder feedback DOE received in response to the NOPR led DOE to conduct further analyses on new and upcoming battery charger technologies. The results of those efforts are reflected in the modified product class list and the change in TSL to EL mappings for PCs 2, 3, and 4 between the NOPR and the SNOPR.

b. TSL to EL Mapping

Some manufacturers expressed strong support for the proposed TSL to EL mapping and standard of EL 1 for PCs 2, 3, and 4 in the SNOPR. In their view, performing an MIA along these mappings accurately reflects the nature of the products covered. (PTI, No. 244 at p. 2) (ITI, No. 248 at p. 5) (AHAM, No. 249 p. 2, 3) AHAM raised concerns about DOE remapping the TSL to EL for PCs 2, 3, and 4. AHAM pointed out remapping would necessitate further manufacturer interviews and require DOE to redo its analysis, which would cause further delays in the regulatory process. It suggested DOE retain the TSL to EL mapping proposed in the SNOPR. (AHAM, No. 249 at p. 3) AHAM pointed out that setting standards higher than the proposed EL 1 for PC 2 in the SNOPR would disadvantage manufacturers of shavers and other applications much greater than manufacturers of products such as smartphones. (AHAM, No. 249 at p. 3)

Other interested parties suggested modifying the TSL to EL mapping and increasing the stringency of the standard proposed in the SNOPR from EL 1 to EL 2 for PC 2. These interested parties suggested that a higher standard for PC...
2 will be economically justified and increase energy savings. (CA IOUs, No. 251 at pp. 2–4) (CEC, No. 241 at pp. 2–3) (NRDC, ASAP, NEEA, No. 252 at p. 4–6) DOE is retaining the TSL to EL mapping for PCs 2, 3, and 4 proposed in the SNOPR as they use generally similar technology options and cover the exact same range of battery energies, as discussed in section V.A.

K. Emissions Analysis

The emissions analysis consists of two components. The first component estimates the effect of potential energy conservation standards on power sector and site (where applicable) combustion emissions of CO₂, NOₓ, SO₂, and Hg. The second component estimates the impacts of potential standards on emissions of two additional greenhouse gases, CH₄ and N₂O, as well as the reductions to emissions of all species due to “upstream” activities in the fuel production chain. These upstream activities comprise extraction, processing, and transporting fuels to the site of combustion. The associated emissions are referred to as upstream emissions.

The analysis of power sector uses marginal emissions factors that were derived from data in AEO 2015. The methodology is described in chapter 13 and 15 of the final rule TSD.

Combustion emissions of CH₄ and N₂O are estimated using emissions intensity factors published by the EPA, GHG Emissions Factors Hub. The FFC upstream emissions are estimated based on the methodology described in chapter 15 of the final rule TSD. The upstream emissions include both emissions from fuel combustion during extraction, processing, and transportation of fuel, and “fugitive” emissions (direct leakage to the atmosphere) of CH₄ and CO₂.

The emissions intensity factors are expressed in terms of physical units per MWh or MMBtu of site energy savings. Total emissions reductions are estimated using the energy savings calculated in the national impact analysis.

For CH₄ and N₂O, DOE calculated emissions reduction in tons and also in terms of units of carbon dioxide equivalent (CO₂-eq). Gases are converted to CO₂-eq by multiplying each ton of gas by the gas’ global warming potential (GWP) over a 100-year time horizon. Based on the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, DOE used GWP values of 28 for CH₄ and 265 for N₂O.

The AEO incorporates the projected impacts of existing air quality regulations on emissions. AEO 2015 generally represents current legislation and environmental regulations, including recent government actions, for which implementing regulations were available as of October 31, 2014. DOE’s estimation of impacts accounts for the presence of the emissions control programs discussed in the following paragraphs.

SO₂ emissions from affected electric generating units (EGUs) are subject to nationwide and regional emissions cap-and-trade programs. Title IV of the Clean Air Act sets an annual emissions cap on SO₂ for affected EGUs in the 48 contiguous States and the District of Columbia (DC). (42 U.S.C. 7651 et seq.) SO₂ emissions from 28 eastern States and DC were also limited under the Clean Air Interstate Rule (CAIR). 70 FR 25162 (May 12, 2005). CAIR created an allowance-based trading program that operates along with the Title IV program. In 2008, CAIR was remanded to EPA by the U.S. Court of Appeals for the District of Columbia Circuit, but it remained in effect. In 2011, EPA issued a replacement for CAIR, the Cross-State Air Pollution Rule (CSAPR). 76 FR 48208 (August 8, 2011). On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR, and the court ordered EPA to continue administering CAIR. On April 29, 2014, the U.S. Supreme Court reversed the judgment of the D.C. Circuit and remanded the case for further proceedings consistent with the Supreme Court’s opinion. On October 23, 2014, the D.C. Circuit lifted the stay of CSAPR. Pursuant to this action, CSAPR went into effect (and CAIR ceased to be in effect) as of January 1, 2015.

EIA was not able to incorporate CSAPR into AEO 2015, so it assumes implementation of CAIR. Although DOE’s analysis used emissions factors that assume that CAIR, not CSAPR, is the regulation in force, the difference between CAIR and CSAPR is not significant for the purpose of DOE’s analysis of emissions impacts from energy conservation standards.

The attainment of emissions caps is typically flexible among EGUs and is enforced through the use of emissions allowances and tradable permits. Under existing EPA regulations, any excess SO₂ emissions allowances resulting from the lower electricity demand caused by the adoption of an efficiency standard could be used to permit offsetting increases in SO₂ emissions by any regulated EGU. In past rulemakings, DOE recognized that there was uncertainty about the effects of efficiency standards on SO₂ emissions covered by the existing cap-and-trade system, but it concluded that negligible reductions in power sector SO₂ emissions would occur as a result of standards.

Beginning in 2016, however, SO₂ emissions will fall as a result of the Mercury and Air Toxics Standards (MATS) for power plants. 77 FR 9304 (Feb. 16, 2012). In the MATS rule, EPA established a standard for hydrogen chloride as a surrogate for acid gas hazardous air pollutants (HAP), and also established a standard for SO₂ (a non-HAP acid gas) as an alternative equivalent surrogate standard for acid gas HAP. The same controls are used to reduce HAP and non-HAP acid gas; thus, SO₂ emissions will be reduced as a result of the control technologies installed on coal-fired power plants to comply with the MATS requirements for acid gas. AEO 2015 assumes that, in order to continue operating, coal plants must have either flue gas desulfurization or dry sorbent injection systems installed by 2016. Both technologies, which are used to reduce acid gas emissions, also reduce SO₂ emissions. Under the MATS, emissions will be far below the cap established by CAIR, so it is unlikely that excess SO₂ emissions allowances resulting from the lower electricity demand would be needed or used to permit offsetting increases in SO₂ emissions by any regulated EGU. Therefore, DOE

49 See EPA v. EME Homer City Generation, 134 S.Ct. 1584, 1610 (U.S. 2014). The Supreme Court held in part that EPA’s methodology for quantifying emissions that must be eliminated in certain States due to their impacts in other downwind States was based on a permissible, defensible, and equitable interpretation of the Clean Air Act provision that provides statutory authority for CSAPR.
50 See Georgia v. EPA, Order (D.C. Cir. filed October 23, 2014) (No. 11–1302).
believes that energy conservation standards will generally reduce SO₂ emissions in 2016 and beyond.

CAIR established a cap on NOₓ emissions in 28 eastern States and the District of Columbia.³⁹ Energy conservation standards are expected to have little effect on NOₓ emissions in those States covered by CAIR because excess NOₓ emissions allowances resulting from the lower electricity demand could be used to permit offsetting increases in NOₓ emissions from other facilities. However, standards would be expected to reduce NOₓ emissions in the States not affected by the caps, so DOE estimated NOₓ emissions reductions from the standards considered in this final rule for these States.

The MATS limit mercury emissions from power plants, but they do not include emissions caps and, as such, DOE’s energy conservation standards would likely reduce Hg emissions. DOE estimated mercury emissions reduction using emissions factors based on AEO 2015, which incorporates the MATS.

L. Monetizing Carbon Dioxide and Other Emissions Impacts

As part of the development of this rule, DOE considered the estimated monetary benefits from the reduced emissions of CO₂ and NOₓ that are expected to result from each of the TSLs considered. In order to make this calculation analogous to the calculation of the NPV of consumer benefit, DOE considered the reduced emissions expected to result over the lifetime of products shipped in the forecast period for each TSL. This section summarizes the basis for the monetary values used for each of these emissions and presents the values considered in this final rule.

For this final rule, DOE relied on a set of values for the social cost of carbon (SCC) that was developed by a Federal interagency process. The basis for these values is summarized in the next section, and a more detailed description of the methodologies used is provided as an appendix to chapter 14 of the final rule TSD.

1. Social Cost of Carbon

The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) climate-change-related changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Estimates of the SCC are provided in dollars per metric ton of CO₂. A domestic SCC value is meant to reflect the value of damages in the United States resulting from a unit change in CO₂ emissions, while a global SCC value is meant to reflect the value of damages worldwide.

Under section 1(b) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), agencies must, to the extent permitted by law, “assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.” The purpose of the SCC estimates presented here is to allow agencies to incorporate the monetized social benefits of reducing CO₂ emissions into cost-benefit analyses of regulatory actions. The estimates are presented with an acknowledgement of the many uncertainties involved and with a clear understanding that they should be updated over time to reflect increasing knowledge of the science and economics of climate impacts.

As part of the interagency process that developed these SCC estimates, technical experts from numerous agencies met on a regular basis to consider public comments, explore the technical literature in relevant fields, and discuss key model inputs and assumptions. The main objective of this process was to develop a range of SCC values using a defensible set of input assumptions grounded in the existing scientific and economic literatures. In this way, key uncertainties and model differences transparently and consistently inform the range of SCC estimates used in the rulemaking process.

b. Development of Social Cost of Carbon Values

In 2009, an interagency process was initiated to offer a preliminary assessment of how best to quantify the benefits from reducing carbon dioxide emissions. To ensure consistency in how benefits are evaluated across Federal agencies, the Administration sought to develop a transparent and defensible method, specifically designed for the rulemaking process, to quantify avoided climate change damages from reduced CO₂ emissions. The interagency group did not undertake any original analysis. Instead, it combined SCC estimates from the existing literature to use as interim values until a more comprehensive analysis could be conducted. The outcome of the preliminary assessment by the interagency group was a set of five interim values: Global SCC estimates for 2007 (in 2006$) of $55,

³⁹CSAPR also applies to NOₓ and it would supersede the regulation of NOₓ under CAIR. As stated previously, the current analysis assumes that CAIR, not CSAPR, is the regulation in force. The difference between CAIR and CSAPR with regard to DOE’s analysis of NOₓ emissions is slight.

$33, $19, $10, and $5 per metric ton of CO2. These interim values represented the first sustained interagency effort within the U.S. government to develop an SCC for use in regulatory analysis. The results of this preliminary effort were presented in several proposed and final rules.

c. Current Approach and Key Assumptions

After the release of the interim values, the interagency group reconvened on a regular basis to generate improved SCC estimates. Specially, the group considered public comments and further explored the technical literature in relevant fields. The interagency group relied on three integrated assessment models commonly used to estimate the SCC: The FUND, DICE, and PAGE models. These models are frequently cited in the peer-reviewed literature and were used in the last assessment of the Intergovernmental Panel on Climate Change (IPCC). Each model was given equal weight in the SCC values that were developed.

Each model takes a slightly different approach to model how changes in emissions result in changes in economic damages. A key objective of the interagency process was to enable a consistent exploration of the three models, while respecting the different approaches to quantifying damages taken by the key modelers in the field. An extensive review of the literature was conducted to select three sets of input parameters for these models: climate sensitivity, socio-economic and emissions trajectories, and discount rates. A probability distribution for climate sensitivity was specified as an input into all three models. In addition, the interagency group used a range of scenarios for the socio-economic parameters and a range of values for the discount rate. All other model features were left unchanged, relying on the model developers’ best estimates and judgments.

In 2010, the interagency group selected four sets of SCC values for use in regulatory analyses. Three sets of values are based on the average SCC from the three integrated assessment models, at discount rates of 2.5, 3, and 5 percent. The fourth set, which represents the 95th percentile SCC estimate across all three models at a 3-percent discount rate, was included to represent higher-than-expected impacts from climate change further out in the tails of the SCC distribution. The values grow in real terms over time. Additionally, the interagency group determined that a range of values from 7 percent to 23 percent should be used to adjust the global SCC to calculate domestic effects, although preference is given to consideration of the global benefits of reducing CO2 emissions. Table IV–15 presents the values in the 2010 interagency group report, which is reproduced in appendix 14A of the final rule TSD.

### TABLE IV–15—ANNUAL SCC VALUES FROM 2010 INTERAGENCY REPORT, 2010–2050

<table>
<thead>
<tr>
<th>Year</th>
<th>5% Average</th>
<th>3% Average</th>
<th>2.5% Average</th>
<th>3% 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4.7</td>
<td>21.4</td>
<td>35.1</td>
<td>64.9</td>
</tr>
<tr>
<td>2015</td>
<td>5.7</td>
<td>23.8</td>
<td>38.4</td>
<td>72.8</td>
</tr>
<tr>
<td>2020</td>
<td>6.8</td>
<td>26.3</td>
<td>41.7</td>
<td>80.7</td>
</tr>
<tr>
<td>2025</td>
<td>8.2</td>
<td>29.6</td>
<td>45.9</td>
<td>90.4</td>
</tr>
<tr>
<td>2030</td>
<td>9.7</td>
<td>32.8</td>
<td>50.0</td>
<td>100.0</td>
</tr>
<tr>
<td>2035</td>
<td>11.2</td>
<td>36.0</td>
<td>54.2</td>
<td>109.7</td>
</tr>
<tr>
<td>2040</td>
<td>12.7</td>
<td>39.2</td>
<td>58.4</td>
<td>119.3</td>
</tr>
<tr>
<td>2045</td>
<td>14.2</td>
<td>42.1</td>
<td>61.7</td>
<td>127.8</td>
</tr>
<tr>
<td>2050</td>
<td>15.7</td>
<td>44.9</td>
<td>65.0</td>
<td>136.2</td>
</tr>
</tbody>
</table>

The SCC values used for this final rule were generated using the most recent versions of the three integrated assessment models that have been published in the peer-reviewed literature, as described in the 2013 update from the interagency working group (revised July 2015).53

Table IV–16 shows the sets of SCC estimates from the latest interagency update in 5-year increments from 2010 to 2050. The full set of annual SCC estimates between 2010 and 2050 is reported in appendix 14B of the final rule TSD. The central value that emerges is the average SCC across models at the 3-percent discount rate. However, for purposes of capturing the uncertainties involved in regulatory impact analysis, the interagency group emphasizes the importance of including all four sets of SCC values.

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53 It is recognized that this calculation for domestic values is approximate, provisional, and highly speculative. There is no a priori reason why domestic benefits should be a constant fraction of net global damages over time.


TABLE IV–16—ANNUAL SCC VALUES FROM 2013 INTERAGENCY UPDATE (REVISED JULY 2015), 2010–2050
[2007$ per metric ton CO₂]

<table>
<thead>
<tr>
<th>Year</th>
<th>5% Average</th>
<th>3% Average</th>
<th>2.5% Average</th>
<th>3% 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>10</td>
<td>31</td>
<td>50</td>
<td>86</td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>36</td>
<td>56</td>
<td>105</td>
</tr>
<tr>
<td>2020</td>
<td>12</td>
<td>42</td>
<td>62</td>
<td>123</td>
</tr>
<tr>
<td>2025</td>
<td>14</td>
<td>46</td>
<td>68</td>
<td>138</td>
</tr>
<tr>
<td>2030</td>
<td>16</td>
<td>50</td>
<td>83</td>
<td>152</td>
</tr>
<tr>
<td>2035</td>
<td>18</td>
<td>55</td>
<td>79</td>
<td>168</td>
</tr>
<tr>
<td>2040</td>
<td>21</td>
<td>60</td>
<td>84</td>
<td>183</td>
</tr>
<tr>
<td>2045</td>
<td>23</td>
<td>64</td>
<td>89</td>
<td>197</td>
</tr>
<tr>
<td>2050</td>
<td>26</td>
<td>69</td>
<td>95</td>
<td>212</td>
</tr>
</tbody>
</table>

It is important to recognize that a number of key uncertainties remain, and that current SCC estimates should be treated as provisional and revisable because they will evolve with improved scientific and economic understanding. The interagency group also recognizes that the existing models are imperfect and incomplete. The National Research Council report mentioned previously points out that there is tension between the goal of producing quantified estimates of the economic damages from an incremental ton of carbon and the limits of existing efforts to model these effects. There are a number of analytical challenges that are being addressed by the research community, including research programs housed in many of the Federal agencies participating in the interagency process to estimate the SCC. The interagency group intends to periodically review and reconsider those estimates to reflect increasing knowledge of the science and economics of climate impacts, as well as improvements in modeling.54

In summary, in considering the potential global benefits resulting from reduced CO₂ emissions, DOE used the values from the 2013 interagency report (revised July 2015), adjusted to 2013$ using the implicit price deflator for gross domestic product (GDP) from the Bureau of Economic Analysis. For each of the four sets of SCC cases specified, the values for emissions in 2015 were $12.2, $40.0, $62.3, and $117 per metric ton avoided (values expressed in 2013$). DOE derived values after 2050 based on the trend in 2010–2050 in each of the four cases.

DOE multiplied the CO₂ emissions reduction estimated for each year by the SCC value for that year in each of the four cases. To calculate a present value of the stream of monetary values, DOE discounted the values in each of the four cases using the specific discount rate that had been used to obtain the SCC values in each case.

In response to the SNOPR, the U.S. Chamber of Commerce objected to the use of the SCC until more rigorous review is available. (U.S. Chamber of Commerce, No. 242, p. 4) AHAM commented that 2010 values of SCC should be used until a complete review of the 2013 values is completed. (AHAM, No. 249, p. 6) In contrast, EDF and UCS supported DOE’s use of the Interagency Working Group estimates of SCC. (EDF, UCS, No. 239, p. 21–22)

In response, in conducting the interagency process that developed the SCC values, technical experts from numerous agencies met on a regular basis to consider public comments, explore the technical literature in relevant fields, and discuss key model inputs and assumptions. Key uncertainties and model differences transparently and consistently inform the range of SCC estimates. These uncertainties and model differences are discussed in the interagency working group’s reports, which are reproduced in appendix 14A and 14B of the final rule TSD, as are the major assumptions. Specifically, uncertainties in the assumptions regarding climate sensitivity, as well as other model inputs such as economic growth and emissions trajectories, are discussed and the reasons for the specific input assumptions chosen are explained. However, the three integrated assessment models used to estimate the SCC are frequently cited in the peer-reviewed literature and were used in the last assessment of the IPCC. In addition, new versions of the models that were used in 2013 to estimate revised SCC values were published in the peer-reviewed literature (see appendix 14B of the final rule TSD for discussion).

Although uncertainties remain, the revised estimates that were issued in November 2013 are based on the best available scientific information on the impacts of climate change. The current estimates of the SCC have been developed over many years, using the best science available, and with input from the public. In November 2013, OMB announced a new opportunity for public comment on the interagency technical support document underlying the revised SCC estimates. 78 FR 70586. In July 2015, OMB published a detailed summary and formal response to the many comments that were received.55 DOE stands ready to work with OMB and the other members of the interagency working group on further review and revision of the SCC estimates as appropriate.

2. Social Cost of Other Air Pollutants

As noted previously, DOE has estimated how the considered energy conservation standards would decrease power sector NOₓ emissions in those 22 States not affected by the CAIR.

DOE estimated the monetized value of NOₓ emissions reductions from electricity generation using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality,

54 In November 2013, OMB announced a new opportunity for public comment on the interagency technical support document underlying the revised SCC estimates. 78 FR 70586. In July 2015 OMB published a detailed summary and formal response to the many comments that were received. https://www.whitehouse.gov/blog/2015/07/02/estimating-benefits-carbon-dioxide-emissions-reductions. It also stated its intention to seek independent expert advice on opportunities to improve the estimates, including many of the approaches suggested by commenters.

55 https://www.whitehouse.gov/blog/2015/07/02/estimating-benefits-carbon-dioxide-emissions-reductions. OMB also stated its intention to seek independent expert advice on opportunities to improve the estimates, including many of the approaches suggested by commenters.
Planning and Standards.56 The report includes high and low values for NOX (as PM2.5) for 2020, 2025, and 2030 discounted at 3 percent and 7 percent; these values are presented in chapter 14 of the final rule TSD. DOE primarily relied upon the low estimates to be conservative.57 DOE assigned values for 2021–2024 and 2026–2029 using, respectively, the values for 2020 and 2025. DOE assigned values after 2030 using the value for 2030. DOE developed values specific to the end-use category for battery chargers using a method described in Appendix 14C.

DOE multiplied the emissions reduction (in tons) in each year by the associated $/ton values, and then discounted each series using discount rates of 3-percent and 7-percent as appropriate. DOE will continue to evaluate the monetization of avoided NOX emissions and will make any appropriate updates in energy conservation standards rulemakings. DOE is evaluating appropriate monetized SO2 and Hg emissions in energy conservation standards rulemakings. DOE has not included monetization of those emissions in the current analysis.

M. Utility Impact Analysis

The utility impact analysis estimates several effects on the electric power industry that would result from the adoption of new or amended energy conservation standards. The utility impact analysis estimates the changes in installed electrical capacity and generation that would result for each TSL. The analysis is based on published output from the NEMS associated with AEO 2015. NEMS produces the AEO Reference case, as well as a number of side cases that estimate the economy-wide impacts of changes to energy supply and demand. DOE uses published side cases to estimate the marginal impacts of reduced energy demand on the utility sector. These marginal factors are estimated based on the changes to electricity sector generation, installed capacity, fuel consumption and emissions in the AEO Reference case and various side cases. Details of the methodology are provided in the appendices to chapter 15 of the final rule TSD.

The output of this analysis is a set of time-dependent coefficients that capture the change in electricity generation, primary fuel consumption, installed capacity and power sector emissions due to a unit reduction in demand for a given end-use. These coefficients are multiplied by the stream of electricity savings calculated in the NIA to provide estimates of selected utility impacts of new energy conservation standards.

N. Employment Impact Analysis

DOE considers employment impacts in the domestic economy as one factor in selecting a standard. Employment impacts from new or amended energy conservation standards include both direct and indirect impacts. Direct employment impacts are any changes in the number of employees of manufacturers of the products subject to standards, their suppliers, and related service firms. The MIA addresses those impacts. Indirect employment impacts are changes in national employment that occur due to the shift in expenditures and capital investment caused by the purchase and operation of more-efficient appliances. Indirect employment impacts from standards consist of the net jobs created or eliminated in the national economy, other than in the manufacturing sector being regulated, caused by: (1) Reduced spending by end-users on energy; (2) reduced spending on new energy supplies by the utility industry; (3) increased consumer spending on new products to which the new standards apply; and (4) the effects of those three factors throughout the economy.

One method for assessing the possible effects on the demand for labor of such shifts in economic activity is to compare sector employment statistics developed by BLS.58 BLS regularly publishes its estimates of the number of jobs per million dollars of economic activity in different sectors of the economy, as well as the jobs created elsewhere in the economy by this same economic activity. Data from BLS indicate that expenditures in the utility sector generally create fewer jobs (both directly and indirectly) than expenditures in other sectors of the economy.59 There are many reasons for these differences, including wage differences and the fact that the utility sector is more capital-intensive and less labor-intensive than other sectors. Energy conservation standards have the effect of reducing consumer utility bills. Because reduced consumer expenditures for energy likely lead to increased expenditures in other sectors of the economy, the general effect of efficiency standards is to shift economic activity from a less labor-intensive sector (i.e., the utility sector) to more labor-intensive sectors (e.g., the retail and service sectors). Thus, BLS data suggest that net national employment may increase due to shifts in economic activity resulting from energy conservation standards.

DOE estimated indirect national employment impacts for the standard levels considered in this final rule using an input/output model of the U.S. economy called Impact of Sector Energy Technologies, Version 3.1.1 (“ImSET”).60 ImSET is a special-purpose version of the “U.S. Benchmark National Input-Output” (“I-O”) model, which was designed to estimate the national employment and income effects of energy-saving technologies. The ImSET software includes a computer-based I-O model having structural coefficients that characterize economic flows among 187 sectors most relevant to industrial, commercial, and residential building energy use.

DOE notes that ImSET is not a general equilibrium forecasting model, and understands the uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Because ImSET does not incorporate price changes, the employment effects predicted by ImSET may over-estimate actual job impacts over the long run for this rule. Therefore, DOE generated results for near-term timeframes, where these uncertainties are reduced. For more details on the employment impact analysis, see chapter 16 of the final rule TSD.

56 Available at www.epa.gov/clean-power-plan/clean-power-plan-final-rule-regulatory-impact-analysis. See Tables 4A–3, 4A–4, and 4A–5 in the report. The U.S. Supreme Court has stayed the rule implementing the Clean Power Plan until the current litigation against it concludes. Chamber of Commerce, et al. v. EPA, et al., Order in Pending Case, 136 S.Ct. 999 (2016). However, the benefit-per-ton estimates established in the Regulatory Impact Analysis for the Clean Power Plan are based on scientific studies that remain valid irrespective of the legal status of the Clean Power Plan.

57 For the monetized NOX benefits associated with PM2.5, the related benefits are primarily based on an estimate of premature mortality derived from the ACS study (Krewski et al. 2009), which is lower than the EPA’s 

58 For the monetized NOX benefits associated with PM2.5, the related benefits are primarily based on an estimate of premature mortality derived from the ACS study (Krewski et al. 2009), which is lower than the EPA’s 

59 Data on industry employment, hours, labor compensation, value of production, and the implicit price deflator for output for these industries are available upon request by calling the Division of Industry Productivity Studies (202–691–5618) or by sending a request by email to dipsweb@bls.gov. 

O. Marking Requirements

In the SNOPR regarding energy conservation standards for battery chargers, DOE declined to propose marking requirements for battery chargers. DOE received comments from AHAM supporting its decision to refrain from setting marking requirements for battery chargers. (AHAM, No. 249, p. 5) However, DOE also received comments from CEC, NRDC, ASAP, NEEA and Delta Q requesting that marking requirements be established for battery chargers. The CEC argued that a required mark will make it easier to gauge compliance with DOE’s energy conservation standards for battery chargers and make alignment with international standards possible. (CEC, No. 241, p. 3–4) NRDC, ASAP and NEEA asserted that a required marking would facilitate standards enforcement, help identify non-compliant products, and drive accountability from the retailer throughout the supply-chain. (NRDC, ASAP, NEEA, No. 252, p. 6) Delta Q advised DOE to either adopt the CEC’s “BC” product mark or pre-empt it with an alternate mark to avoid a scenario where two marks are required. (Delta Q, No. 238, p. 2)

As discussed in the SNOPR’s response to stakeholder comments received on the NOPR, mandating a marking requirement for battery chargers does not offer significant benefits in terms of gauging compliance with, or facilitating enforcement of, DOE’s energy conservation standards for battery chargers. Manufacturers of battery chargers must certify compliance with applicable DOE’s energy conservation standards using the Compliance Certification Management System (“CCMS”) as a condition of sale in the United States, which effectively holds manufacturers accountable for ensuring compliance of their covered products. As a result, battery charger compliance with DOE’s standards can be as easily verified using DOE’s compliance certification database, rendering a compliance mark on the product redundant and an unnecessary burden to manufacturers. Therefore, DOE is not mandating any marking requirements for battery chargers in this final rule.

V. Analytical Results and Conclusions

The following section addresses the results from DOE’s analyses with respect to the considered energy conservation standards for battery chargers. It addresses the TSLs examined by DOE, the projected impacts of each of these levels if adopted as energy conservation standards for battery chargers, and the standards levels that DOE is adopting in this final rule. Additional details regarding DOE’s analyses are contained in the final rule TSD supporting this final rule.

A. Trial Standard Levels

DOE analyzed the benefits and burdens of four TSLs for battery chargers. These TSLs were developed by combining specific efficiency levels for each of the product classes analyzed by DOE. DOE presents the results for the TSLs in this document, while the results for all efficiency levels that DOE analyzed are in the final rule TSD. Table V–1 presents the TSLs and the corresponding efficiency levels for battery chargers. TSL 4 represents the maximum technologically feasible (“max-tech”) improvements in energy efficiency for all product classes. While DOE examined most product classes individually, there were two groups of product classes that use generally similar technology options and cover the exact same range of battery energies. Because of this situation, DOE grouped all three low-energy, non-inductive, product classes (i.e., 2, 3, and 4) together and examined the results. Similarly, DOE grouped the two medium energy product classes, PCs 5 and 6, together when it examined those results.

<table>
<thead>
<tr>
<th>TABLE V–1—TRIAL STANDARD LEVELS FOR BATTERY CHARGERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product class</td>
</tr>
<tr>
<td>PC 1—Low E, Inductive</td>
</tr>
<tr>
<td>PC 2—Low E, Low Voltage</td>
</tr>
<tr>
<td>PC 3—Low E, Medium Voltage</td>
</tr>
<tr>
<td>PC 4—Low E, High Voltage</td>
</tr>
<tr>
<td>PC 5—Medium E, Low Voltage</td>
</tr>
<tr>
<td>PC 6—Medium E, High Voltage</td>
</tr>
<tr>
<td>PC 7—High E</td>
</tr>
</tbody>
</table>

For battery charger PC 1 (low-energy, inductive), DOE examined trial standard levels corresponding to each of three ELs developed in the engineering analysis. TSL 1 is an intermediate level of performance above the baseline. TSLs 2 and 3 are equivalent to the best-in-market and corresponds to the maximum consumer NPV. TSL 4 is the max-tech level and corresponds to the greatest NES.

For its second set of TSLs, which covers PCs 2 (low-energy, low-voltage), 3 (low-energy, medium-voltage), and 4 (low-energy, high-voltage), DOE examined four TSLs of different combinations of the various efficiency levels found for each product class in the engineering analysis. In this grouping, TSLs 1 and 2 are intermediate efficiency levels above the baseline for each product class and corresponds to the maximum consumer NPV. TSL 3 corresponds to an incremental efficiency level below best-in-market for PC 2, and the best-in-market efficiency level for PCs 3 and 4. Finally, TSL 4 corresponds to the max-tech efficiency level for all product classes and therefore, the maximum NES. Note that for PC 2 only, EL 3 (corresponding to a best-in-market efficiency level) was not analyzed in a given TSL due to the negative LCC savings results for this product class at EL 3 and the fact that only four TSLs were analyzed.

DOE’s third set of TSLs corresponds to the grouping of PCs 5 (medium-energy, low-voltage) and 6 (medium-energy, high-voltage). For both product classes, TSL 1 is an intermediate efficiency level above the baseline. TSL 2 corresponds to the best-in-market efficiency level for both product classes and is the level with the highest consumer NPV. Finally, TSLs 3 and 4 correspond to the max-tech efficiency level.
level for both product classes and the maximum NES. For PC 7 (high-energy), DOE examined only two ELs because of the paucity of products available on the market. TSLs 1 and 2 correspond to an efficiency level equivalent to the best-in-market and maximizes consumer NPV. TSLs 3 and 4 comprise the max-tech level corresponding to the level with the maximum NES.

**B. Economic Justification and Energy Savings**

1. Economic Impacts on Individual Consumers

DOE analyzed the economic impacts on battery charger consumers by looking at the effects potential standards at each TSL would have on the LCC and PBP. DOE also examined the impacts of potential standards on consumer subgroups. These analyses are discussed below.

a. Life-Cycle Cost and Payback Period

In general, higher-efficiency products affect consumers in two ways: (1) Purchase price increases, and (2) annual operating costs decrease. Inputs used for calculating the LCC and PBP include total installed costs (i.e., product price plus installation costs), and operating costs (i.e., annual energy use, energy prices, energy price trends, repair costs, and maintenance costs). The LCC calculation also uses product lifetime and a discount rate. Chapter 8 of the final rule TSD provides detailed information on the LCC and PBP analyses.

Table V–2 through Table V–15 show the LCC and PBP results for the TSL efficiency levels considered for each product class. In the first of each pair of tables, the simple payback is measured relative to the baseline (EL 0) product. In the second table, the impacts are measured relative to the efficiency distribution in the in the no-standards case in the compliance year (see section IV.F.10 of this final rule).

### Table V–2—Average LCC and PBP Results by TSL for Product Class 1

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Installed cost</th>
<th>First year's operating cost</th>
<th>Lifetime operating cost</th>
<th>LCC</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>4.39</td>
<td>1.08</td>
<td>4.71</td>
<td>9.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>4.72</td>
<td>0.76</td>
<td>3.29</td>
<td>8.01</td>
<td></td>
<td>1.1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>5.37</td>
<td>0.38</td>
<td>1.64</td>
<td>7.01</td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>5.37</td>
<td>0.38</td>
<td>1.64</td>
<td>7.01</td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>10.62</td>
<td>0.16</td>
<td>0.69</td>
<td>11.32</td>
<td></td>
<td>7.4</td>
</tr>
</tbody>
</table>

**Note:** The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline (EL 0) product.

### Table V–3—Average LCC Savings Relative to the Base-Case Efficiency Distribution for Product Class 1

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings* (2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.08</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0.0</td>
<td>96.3</td>
<td>–3.44</td>
</tr>
</tbody>
</table>

* The calculation includes households with zero LCC savings (no impact).

### Table V–4—Average LCC and PBP Results by TSL for Product Class 2

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Installed cost</th>
<th>First year's operating cost</th>
<th>Lifetime operating cost</th>
<th>LCC</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>2.62</td>
<td>0.43</td>
<td>1.43</td>
<td>4.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2.68</td>
<td>0.27</td>
<td>0.86</td>
<td>3.54</td>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2.68</td>
<td>0.27</td>
<td>0.86</td>
<td>3.54</td>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>3.11</td>
<td>0.16</td>
<td>0.45</td>
<td>3.57</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>7.31</td>
<td>0.11</td>
<td>0.31</td>
<td>7.62</td>
<td></td>
<td>19.5</td>
</tr>
</tbody>
</table>

### Table V–5—Average LCC Savings Relative to the Base-Case Efficiency Distribution for Product Class 2

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.2</td>
</tr>
</tbody>
</table>
### TABLE V–5—Average LCC Savings Relative to the Base-Case Efficiency Distribution for Product Class 2—Continued

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings <em>(2013$)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>33.1</td>
<td>0.06</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>73.8</td>
<td>−2.79</td>
</tr>
</tbody>
</table>

### TABLE V–6—Average LCC and PBP Results by TSL for Product Class 3

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2013$)</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year’s operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>2.59</td>
<td>0.52</td>
<td>2.30</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2.70</td>
<td>0.18</td>
<td>0.82</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2.70</td>
<td>0.10</td>
<td>0.82</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6.84</td>
<td>0.10</td>
<td>0.43</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>8.83</td>
<td>0.09</td>
<td>0.41</td>
</tr>
</tbody>
</table>

### TABLE V–7—Average LCC Savings Relative to the Base-Case Efficiency Distribution for Product Class 3

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings <em>(2013$)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0.6</td>
<td>0.08</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0.6</td>
<td>0.08</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>39.0</td>
<td>−1.36</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>40.8</td>
<td>−2.17</td>
</tr>
</tbody>
</table>

### TABLE V–8—Average LCC and PBP Results by TSL for Product Class 4

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2013$)</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year’s operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>3.75</td>
<td>1.61</td>
<td>5.62</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>4.89</td>
<td>0.67</td>
<td>2.28</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>4.89</td>
<td>0.67</td>
<td>2.28</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>9.29</td>
<td>0.45</td>
<td>1.55</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>27.06</td>
<td>0.38</td>
<td>1.30</td>
</tr>
</tbody>
</table>

### TABLE V–9—Average LCC Savings Relative to the Base-Case Efficiency Distribution for Product Class 4

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings <em>(2013$)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1.3</td>
<td>0.11</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.3</td>
<td>0.11</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>12.6</td>
<td>−0.38</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>25.8</td>
<td>−4.91</td>
</tr>
</tbody>
</table>
### TABLE V–10—AVERAGE LCC AND PBP RESULTS BY TSL FOR PRODUCT CLASS 5

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Installed cost</th>
<th>First year's operating cost</th>
<th>Lifetime operating cost</th>
<th>LCC</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>46.58</td>
<td>11.68</td>
<td>68.85</td>
<td>115.43</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>51.27</td>
<td>7.74</td>
<td>45.38</td>
<td>96.75</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>58.94</td>
<td>2.87</td>
<td>16.36</td>
<td>75.30</td>
<td>2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>207.68</td>
<td>1.26</td>
<td>7.10</td>
<td>214.77</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>207.68</td>
<td>1.26</td>
<td>7.10</td>
<td>214.77</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE V–11—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR PRODUCT CLASS 5

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings * (2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.6</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>99.7</td>
<td>138.63</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>99.7</td>
<td>138.63</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE V–12—AVERAGE LCC AND PBP RESULTS BY TSL FOR PRODUCT CLASS 6

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Installed cost</th>
<th>First year's operating cost</th>
<th>Lifetime operating cost</th>
<th>LCC</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>45.39</td>
<td>15.93</td>
<td>113.08</td>
<td>158.47</td>
<td>9.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>50.14</td>
<td>10.81</td>
<td>77.60</td>
<td>127.74</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>57.64</td>
<td>4.45</td>
<td>33.33</td>
<td>90.98</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>205.07</td>
<td>2.24</td>
<td>16.94</td>
<td>222.01</td>
<td>12.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>205.07</td>
<td>2.24</td>
<td>16.94</td>
<td>222.01</td>
<td>12.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE V–13—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR PRODUCT CLASS 6

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings * (2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.0</td>
<td>1.89</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>129.15</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>100</td>
<td>129.15</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE V–14—AVERAGE LCC AND PBP RESULTS BY TSL FOR PRODUCT CLASS 7

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Installed cost</th>
<th>First year's operating cost</th>
<th>Lifetime operating cost</th>
<th>LCC</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>221.94</td>
<td>29.42</td>
<td>95.03</td>
<td>316.97</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>181.55</td>
<td>22.09</td>
<td>70.81</td>
<td>252.36</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>181.55</td>
<td>22.09</td>
<td>70.81</td>
<td>252.36</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>334.87</td>
<td>15.14</td>
<td>48.60</td>
<td>383.47</td>
<td>8.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>334.87</td>
<td>15.14</td>
<td>48.60</td>
<td>383.47</td>
<td>8.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE V–15—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR PRODUCT CLASS 7

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>% of Consumers that experience net cost</th>
<th>Average savings *(2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0.0</td>
<td>51.06</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0.0</td>
<td>51.06</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>100.0</td>
<td>−80.05</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>100.0</td>
<td>−80.05</td>
</tr>
</tbody>
</table>

The LCC results for battery chargers depend on the product class being considered. See Table V–2 through Table V–15. LCC savings results for PC 1 are positive through TSL 3. For the low-energy product classes (PCs 2, 3, and 4), LCC results are positive through TSL 2 and become negative at TSL 3, with PC 2 becoming negative at TSL 4. The medium-energy product classes (PCs 5 and 6) are positive through TSL 2 but become negative at TSL 3. The high-energy product class (PC 7) has positive LCC savings through TSL 2, and then becomes negative at TSL 3.

b. Consumer Subgroup Analysis

In the consumer subgroup analysis, DOE estimated the impact of the considered TSLs for low-income consumers, small businesses, residential top tier electricity price consumers, time-of-use peak electricity price consumers, and consumers of specific applications. LCC and PBP results for consumer subgroups are presented in Table V–16 through Table V–22. The abbreviations are described after Table V–22. The ensuing discussion presents the most significant results from the LCC subgroup analysis.

### Table V–16—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 1

<table>
<thead>
<tr>
<th>TSL</th>
<th>Average life-cycle cost savings (2013$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LI SB TT P–TOU ALL</td>
<td>LI SB TT P–TOU ALL</td>
</tr>
<tr>
<td>1</td>
<td>0.08 0.00 0.26 0.39 0.08</td>
<td>1.1 0.0 0.3 0.2 1.1</td>
</tr>
<tr>
<td>2</td>
<td>0.71 0.00 2.88 4.31 0.71</td>
<td>1.5 0.0 0.5 0.3 1.5</td>
</tr>
<tr>
<td>3</td>
<td>0.71 0.00 2.88 4.31 0.71</td>
<td>1.5 0.0 0.5 0.3 1.5</td>
</tr>
<tr>
<td>4</td>
<td>(3.46) 0.00 0.44 3.00 (3.44)</td>
<td>7.4 0.0 2.3 1.6 7.4</td>
</tr>
</tbody>
</table>

### Table V–17—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 2

<table>
<thead>
<tr>
<th>TSL</th>
<th>Average life-cycle cost savings (2013$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LI SB TT P–TOU ALL</td>
<td>LI SB TT P–TOU ALL</td>
</tr>
<tr>
<td>1</td>
<td>0.06 0.08 0.17 0.29 0.07</td>
<td>0.5 0.6 0.2 0.1 0.6</td>
</tr>
<tr>
<td>2</td>
<td>0.06 0.08 0.17 0.29 0.07</td>
<td>0.5 0.6 0.2 0.1 0.6</td>
</tr>
<tr>
<td>3</td>
<td>0.05 (0.01) 0.58 0.96 0.06</td>
<td>2.4 3.8 0.9 0.6 2.5</td>
</tr>
<tr>
<td>4</td>
<td>(2.76) (3.29) (2.05) (1.56) (2.79)</td>
<td>18.6 25.2 6.9 4.8 19.5</td>
</tr>
</tbody>
</table>

### Table V–18—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 3

<table>
<thead>
<tr>
<th>TSL</th>
<th>Average life-cycle cost savings (2013$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LI SB TT P–TOU ALL</td>
<td>LI SB TT P–TOU ALL</td>
</tr>
<tr>
<td>1</td>
<td>0.07 0.14 0.23 0.36 0.08</td>
<td>0.8 0.2 0.2 0.2 0.8</td>
</tr>
<tr>
<td>2</td>
<td>0.07 0.14 0.23 0.36 0.08</td>
<td>0.8 0.2 0.2 0.2 0.8</td>
</tr>
<tr>
<td>3</td>
<td>(1.38) (1.10) (0.86) (0.43) (1.36)</td>
<td>22.0 4.8 6.9 4.8 21.6</td>
</tr>
<tr>
<td>4</td>
<td>(2.19) (1.85) (1.65) (1.20) (2.17)</td>
<td>31.3 6.6 10.0 7.0 31.2</td>
</tr>
</tbody>
</table>
### Table V–19—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 4

<table>
<thead>
<tr>
<th>TSL</th>
<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
<th>ALL</th>
<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.15</td>
<td>0.06</td>
<td>0.57</td>
<td>0.68</td>
<td>0.11</td>
<td>0.9</td>
<td>1.5</td>
<td>0.3</td>
<td>0.3</td>
<td>1.4</td>
</tr>
<tr>
<td>2</td>
<td>0.15</td>
<td>0.06</td>
<td>0.57</td>
<td>0.68</td>
<td>0.11</td>
<td>0.9</td>
<td>1.5</td>
<td>0.3</td>
<td>0.3</td>
<td>1.4</td>
</tr>
<tr>
<td>3</td>
<td>(0.49)</td>
<td>(0.27)</td>
<td>0.07</td>
<td>0.53</td>
<td>(0.38)</td>
<td>4.0</td>
<td>5.5</td>
<td>1.2</td>
<td>1.1</td>
<td>5.2</td>
</tr>
<tr>
<td>4</td>
<td>(5.80)</td>
<td>(3.83)</td>
<td>(5.07)</td>
<td>(3.79)</td>
<td>(4.91)</td>
<td>15.6</td>
<td>21.7</td>
<td>4.7</td>
<td>4.3</td>
<td>20.7</td>
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</table>

### Table V–20—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 5

<table>
<thead>
<tr>
<th>TSL</th>
<th>LI</th>
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<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
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<tr>
<td>1</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.3</td>
<td>0.0</td>
<td>0.8</td>
<td>0.5</td>
<td>2.3</td>
</tr>
<tr>
<td>2</td>
<td>0.84</td>
<td>0.00</td>
<td>3.14</td>
<td>4.64</td>
<td>0.84</td>
<td>2.7</td>
<td>0.0</td>
<td>0.9</td>
<td>0.6</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>(138.81)</td>
<td>0.00</td>
<td>(118.82)</td>
<td>(105.75)</td>
<td>(138.63)</td>
<td>29.1</td>
<td>0.0</td>
<td>9.8</td>
<td>6.8</td>
<td>29.1</td>
</tr>
<tr>
<td>4</td>
<td>(138.81)</td>
<td>0.00</td>
<td>(118.82)</td>
<td>(105.75)</td>
<td>(138.63)</td>
<td>29.1</td>
<td>0.0</td>
<td>9.8</td>
<td>6.8</td>
<td>29.1</td>
</tr>
</tbody>
</table>

### Table V–21—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 6

<table>
<thead>
<tr>
<th>TSL</th>
<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
<th>ALL</th>
<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
<th>ALL</th>
</tr>
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<tr>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.0</td>
<td>0.0</td>
<td>0.3</td>
<td>0.2</td>
<td>1.0</td>
</tr>
<tr>
<td>2</td>
<td>1.87</td>
<td>0.00</td>
<td>6.24</td>
<td>9.10</td>
<td>1.89</td>
<td>1.1</td>
<td>0.0</td>
<td>0.4</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>(129.38)</td>
<td>0.00</td>
<td>(93.98)</td>
<td>(70.73)</td>
<td>(129.15)</td>
<td>12.6</td>
<td>0.0</td>
<td>4.0</td>
<td>2.8</td>
<td>12.5</td>
</tr>
<tr>
<td>4</td>
<td>(129.38)</td>
<td>0.00</td>
<td>(93.98)</td>
<td>(70.73)</td>
<td>(129.15)</td>
<td>12.6</td>
<td>0.0</td>
<td>4.0</td>
<td>2.8</td>
<td>12.5</td>
</tr>
</tbody>
</table>

### Table V–22—Comparison of LCC Savings and PBP for Consumer Subgroups and All Households for Product Class 7

<table>
<thead>
<tr>
<th>TSL</th>
<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
<th>ALL</th>
<th>LI</th>
<th>SB</th>
<th>TT</th>
<th>P–TOU</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>51.88</td>
<td>49.36</td>
<td>89.56</td>
<td>116.93</td>
<td>51.06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>51.88</td>
<td>49.36</td>
<td>89.56</td>
<td>116.93</td>
<td>51.06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>(93.28)</td>
<td>(82.08)</td>
<td>(39.75)</td>
<td>62.98</td>
<td>(80.05)</td>
<td>20.1</td>
<td>8.0</td>
<td>6.4</td>
<td>1.6</td>
<td>8.1</td>
</tr>
<tr>
<td>4</td>
<td>(93.28)</td>
<td>(82.08)</td>
<td>(39.75)</td>
<td>62.98</td>
<td>(80.05)</td>
<td>20.1</td>
<td>8.0</td>
<td>6.4</td>
<td>1.6</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Where:
- LI = Low-income consumers
- SB = Small businesses
- TT = Top tier electricity price consumers
- P–TOU = Peak time-of-use electricity price consumers
- All = Entire population

### Low-Income Consumers

For low-income consumers, the LCC impacts and PBPs are different from the general population. As part of this subgroup analysis, DOE considers only the residential sector, and uses an adjusted population distribution from the reference case scenario. Using 2009 RECS data, DOE determined that low-income consumers have a different population distribution than the general population. To account for this difference, DOE adjusted population distributions for each region analyzed according to the shift between general and low-income populations.

The LCC savings and PBPs of low-income consumers are similar to that of the total population of consumers. In general, low-income consumers experience slightly reduced LCC savings, with the exceptions of TSL 4 of Product Class 2 and TSLs 1 and 2 of PCs 4 and 7. None of the changes in LCC savings move a TSL from positive to negative LCC savings, or vice versa.

### Small Businesses

For small business customers, the LCC impacts and PBPs are different from the general population. This subgroup analysis considers only the commercial sector, and uses an adjusted discount rate from the reference case scenario. DOE found that small businesses typically have a cost of capital that is 4.16 percent higher than the industry average, which was applied to the discount rate for the small business consumer subgroup analysis.

The small business consumer subgroup LCC results are not directly comparable to the reference case LCC results because this subgroup only...
consumers who purchase electricity at peak rates, depending on either the time of day or season), the LCC impacts and PBPs are different from the general population. Time-of-use pricing is available for both residential and commercial electricity rates, so both sectors were considered. DOE researched upper tier inclined marginal block rates for electricity, resulting in adjusted electricity prices of $0.514 per kWh for residential and $0.494 for commercial consumers.

This subgroup analysis increased the LCC savings of most of the representative units significantly. This subgroup analysis changed the following negative LCC results to positive savings: PC 1 at TSL 4, PC 4 at TSL 3, and PC 7 at TSLs 3 and 4. Some product classes would still have negative LCC savings, which indicates that these classes have increasing installed costs (purchase price plus installation costs, the latter of which are assumed to be zero) at higher TSLs that cannot be overcome through operating cost savings using peak time-of-use electricity prices.

Consumers of Specific Applications

DOE performed an LCC and PBP analysis on every application within each product class. This subgroup analysis used each application’s specific inputs for lifetime costs, markups, base case market efficiency distribution, and UEC. Many applications in each product class experienced LCC impacts and PBPs that were different from the average results across the product class. Because of the large number of applications considered in the analysis, some of which span multiple product classes, DOE did not present application-specific LCC results here. Detailed results on each application are available in chapter 11 of the final rule TSD.

DOE noted a few trends highlighted by the application-specific subgroup. For PC 2, the top two application LCC savings representing 46 percent of shipments are negative beyond TSL 1, but frequently-used applications within that class—e.g., answering machines, cordless phones, and home security systems—experience positive LCC savings. Because these applications have significantly positive LCC savings, they balance out the negative savings from the top two applications. Some PC 4 applications at TSLs 1 through 3 featured results that were positive where the shipment-weighted results were negative, or vice versa. However, shipments and magnitude of the LCC savings were not enough to change the overall direction (positive or negative) of the weighted average. In the other battery charger product classes, the individual application results reflected the same trend as the overall results for the product class. See chapter 11 of the final rule TSD for further detail.

c. Rebuttable Presumption Payback

As discussed in section III.F, EPCA establishes a rebuttable presumption that an energy conservation standard is economically justified if the increased purchase cost for a product that meets the standard is less than three times the value of the first-year energy savings resulting from the standard. In calculating a rebuttable presumption payback period for each of the considered TSLs, DOE used discrete values, and, as required by EPCA, based the energy use calculation on the DOE test procedures for battery chargers. In contrast, the PBPs presented in section V.B.1.a were calculated using distributions that reflect the range of energy use in the field.

Table V–23 presents the rebuttable-presumption payback periods for the considered TSLs. While DOE examined the rebuttable-presumption criterion, it considered whether the standard levels considered for this rule are economically justified through a more detailed analysis of the economic impacts of those levels, pursuant to 42 U.S.C. 6295(o)(2)(B)(i), that considers the full range of impacts to the consumer, manufacturer, Nation, and environment. The results of that analysis serve as the basis for DOE to definitively evaluate the economic justification for a potential standard level, thereby supporting or rebutting the results of any preliminary determination of economic justification. Table V–23 shows considered TSLs for the battery charger product classes where the rebuttable presumption PBPs show they are economically justified.
2. Economic Impacts on Manufacturers

DOE performed an MIA to estimate the impact of new energy conservation standards on manufacturers of battery charger applications. The section below describes the expected impacts on manufacturers at each TSL. Chapter 12 of the final rule TSD explains the analysis in further detail.

a. Industry Cash Flow Analysis Results

The INPV results refer to the difference in industry value between the no-standards case and the standards cases, which DOE calculated by summing the discounted industry cash flows from the reference year (2015) through the end of the analysis period. The discussion also notes the difference in the annual cash flow between the no-standards case and the standards cases in the year before the compliance date of new energy conservation standards. This figure provides a proxy for the magnitude of the required conversion costs, relative to the cash flow generated by the industry in the no-standards case.

DOE reports INPV impacts at each TSL for the four product class groupings. When appropriate, DOE also discusses the results for groups of related applications that would experience impacts significantly different from the overall product class group to which they belong.

In general, two major factors drive the INPV results: (1) The relative difference between a given application’s MSP and the incremental cost of improving its battery charger; and (2) the dominant no-standards case battery charger technology that a given application uses, which is approximated by the application’s efficiency distribution.

With respect to the first factor, the higher the MSP of the application relative to the battery charger cost, the lower the impacts of battery charger standards on OEMs of the application. For example, an industry that sells an application for $500 would be less affected by a $2 increase in battery charger costs than one that sells its application for $10. On the second factor regarding the no-standards case efficiency distribution, some industries, such as producers of laptop computers, already incorporate highly efficient battery chargers. Therefore, a higher standard would be unlikely to impact the laptop industry as it would other applications using baseline technology in the same product class.

DOE analyzed three markup scenarios—constant price, pass-through, and flat markup. The constant price scenario analyzes the situation in which application manufacturers are unable to pass on any incremental costs of more efficient battery chargers to their customers. This scenario generally results in the most significant negative impacts because no incremental costs are added to the application—whether driven by higher battery charger component costs or depreciation of required capital investments—can be recouped.

In the pass-through scenario, DOE assumes that manufacturers are able to pass the incremental costs of more efficient battery chargers through to their customers, but not with any markup to cover overhead and profit. Therefore, though less severe than the constant price scenario in which manufacturers absorb all incremental costs, this scenario results in negative cash flow impacts due to margin compression and greater working capital requirements.

Finally, DOE considers a flat markup scenario to analyze the upper bound (least severe) of profitability impacts. In this scenario, manufacturers are able to maintain their no-standards case gross margin, as a percentage of revenue, at higher ELs, despite the higher product costs associated with more efficient battery chargers. In other words, manufacturers can fully pass on—and markup—the higher incremental product costs associated with producing more efficient battery chargers.

Product Class 1

Table V–24 through Table V–27 summarize information related to the analysis performed to project the potential impacts on Product Class 1 battery charger application manufacturers.

**TABLE V–23—TRIAL STANDARD LEVELS WITH RE Butturable Payback Period Less Than Three Years**

<table>
<thead>
<tr>
<th>Product class</th>
<th>Description</th>
<th>Trial standard level</th>
<th>Candidate standard level</th>
<th>Rebuttable presumption PBP years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low-Energy, Inductive</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>2</td>
<td>Low-Energy, Low-Voltage</td>
<td>2</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>3</td>
<td>Low-Energy, Medium-Voltage</td>
<td>1</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>4</td>
<td>Low-Energy, High-Voltage</td>
<td>2</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>5</td>
<td>Medium-Energy, Low-Voltage</td>
<td>3</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>Medium-Energy, High-Voltage</td>
<td>1</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>7</td>
<td>High-Energy</td>
<td>2</td>
<td>2</td>
<td>0.8</td>
</tr>
</tbody>
</table>

**TABLE V–24—APPLICATIONS IN PRODUCT CLASS 1**

<table>
<thead>
<tr>
<th>Product class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rechargeable Toothbrushes</td>
</tr>
<tr>
<td></td>
<td>Rechargeable Water Jets</td>
</tr>
</tbody>
</table>
PC 1 has only two applications: Rechargeable toothbrushes and water jets. Rechargeable toothbrushes represent over 99 percent of the PC 1 shipments. DOE found the majority of these models include Ni-Cd battery chemistries, although products with NIMH and Li-ion chemistries exist in the market. During interviews, manufacturers indicated that energy efficiency was not a primary selling point in this market. As a consequence, manufacturers expect that stringent standards would likely impact the lower end of the market, where price competition is most fierce and retail selling prices are lowest.

TSL 1 sets the efficiency level at EL 1 for PC 1. At TSL 1, DOE estimates impacts on the change in INPV to range from $18 million to less than one million dollars, or a change in INPV of −3.7 percent to less than 0.1 percent. At TSL 1, industry free cash flow (operating cash flow minus capital expenditures) is estimated to decrease by less than one million dollars, which corresponds to less than one percent in 2017, the year leading up to new energy conservation standards.

Percentage impacts on INPV are slightly negative at TSL 1. DOE does not anticipate that PC 1 battery charger application manufacturers would lose a significant portion of their INPV at this TSL. DOE projects that in the expected year of compliance, 2018, 93 percent of all PC 1 battery charger applications would meet or exceed the efficiency levels required at TSL 1. Consequently, DOE expects conversion costs to be small at TSL 1, since so many applications already meet or exceed this requirement.

TSL 2 and TSL 3 set the efficiency level at EL 2 and TSL 3. DOE estimates impacts on the change in INPV to range from $84 million to $16.9 million, or a change in INPV of −16.9 percent to −0.1 percent. At TSL 2 and TSL 3, industry free cash flow is estimated to decrease to $38 million, or a decrease of 4 percent, compared to the no-standards case value of $39 million in 2017.

Percentage impacts on INPV range from slightly negative to moderately negative at these TSLs. DOE does not anticipate that PC 1 battery charger application manufacturers would lose a significant portion of their INPV at these TSLs. DOE projects that in the expected year of compliance, 2018, 37 percent of all PC 1 battery charger applications would meet or exceed the efficiency levels required at TSL 2 and TSL 3. DOE expects conversion costs to increase from $0.1 million at TSL 1 to $3.2 million at TSL 2 and TSL 3. This is still a relatively modest amount compared to the no-standards case INPV of $497 million and annual cash flow of $39 million for PC 1 battery charger applications.

TSL 4 sets the efficiency level at EL 3 for PC 1. This represents max-tech for PC 1. At TSL 4, DOE estimates impacts on the change in INPV to range from $375 million to $22 million, or a change in INPV of −75.5 percent to...
battery charger applications would meet the efficiency levels required at TSL 4. DOE expects conversion costs to increase from $3.2 million at TSL 2 and TSL 3 to $7.4 million at TSL 4. This is still relatively a modest amount compared to the no-standards case INPV of $497 million and annual cash flow of $39 million for PC 1 battery charger applications. At TSL 4, the battery charger MPC increases to $6.80 compared to the baseline MPC value of $2.05. This represents a moderate increase in the application price when compared to the shipment-weighted average application MPC of $40.06.

Product Classes 2, 3, and 4

The following tables (Table V–28 through Table V–34) summarize information related to the analysis performed to project the potential impacts on manufacturers of devices falling into PCs 2, 3, and 4.

### TABLE V–28—APPLICATIONS IN PRODUCT CLASSES 2, 3, AND 4

<table>
<thead>
<tr>
<th>Product class 2</th>
<th>Product class 3</th>
<th>Product class 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering Machines</td>
<td>Air Mattress Pumps</td>
<td>DIY Power Tools (External).</td>
</tr>
<tr>
<td>Baby Monitors</td>
<td>Blenders</td>
<td>Flashlights/Lanterns.</td>
</tr>
<tr>
<td>Beard and Moustache Trimmers</td>
<td>Camcorders</td>
<td>Handheld Vacuums.</td>
</tr>
<tr>
<td>Bluetooth Headsets</td>
<td>DIY Power Tools (External)</td>
<td>Netbooks.</td>
</tr>
<tr>
<td>Can Openers</td>
<td>DIY Power Tools (Integral)</td>
<td>Notebooks.</td>
</tr>
<tr>
<td>Consumer Two-Way Radios</td>
<td>Handheld Vacuums</td>
<td>Portable Printers.</td>
</tr>
<tr>
<td>Cordless Phones</td>
<td>LAN Equipment</td>
<td>Professional Power Tools.</td>
</tr>
<tr>
<td>Digital Cameras</td>
<td>Mixers</td>
<td>Rechargeable Garden Care Products.</td>
</tr>
<tr>
<td>DIY Power Tools (Integral)</td>
<td>Portable DVD Players</td>
<td>Robotic Vacuums.</td>
</tr>
<tr>
<td>E-Books</td>
<td>Portable Printers</td>
<td>Stick Vacuums.</td>
</tr>
<tr>
<td>Hair Clippers</td>
<td>RC Toys</td>
<td>Universal Battery Chargers.</td>
</tr>
<tr>
<td>Handheld GPS</td>
<td>Stick Vacuums</td>
<td>Wireless Speakers.</td>
</tr>
<tr>
<td>Home Security Systems</td>
<td>Toy Ride-On Vehicles</td>
<td></td>
</tr>
<tr>
<td>In-Vehicle GPS</td>
<td>Universal Battery Chargers</td>
<td></td>
</tr>
<tr>
<td>Media Tablets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Internet Hotspots</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Phones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP3 Players</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP3 Speaker Docks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Digital Assistants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable Video Game Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shavers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smartphone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universal Battery Chargers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Game Consoles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wireless Headphones</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE V–29—MANUFACTURER IMPACT ANALYSIS FOR PRODUCT CLASS 2, 3, AND 4 BATTERY CHARGER APPLICATIONS—FLAT MARKUP SCENARIO

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013$ millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>76,791</td>
<td>76,782</td>
</tr>
<tr>
<td>Change in INPV (%)</td>
<td>(0.0)</td>
<td>(0.0)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>13.4</td>
<td>13.4</td>
</tr>
</tbody>
</table>

### TABLE V–30—MANUFACTURER IMPACT ANALYSIS FOR PRODUCT CLASS 2, 3, AND 4 BATTERY CHARGER APPLICATIONS—PASS-THROUGH MARKUP SCENARIO

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013$ millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>76,791</td>
<td>76,740</td>
</tr>
<tr>
<td>Change in INPV (%)</td>
<td>(0.1)</td>
<td>(0.1)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>13.4</td>
<td>13.4</td>
</tr>
</tbody>
</table>
Taken together, PCs 2, 3, and 4 include the greatest number of applications and account for approximately 96 percent of all battery charger application shipments in 2018, the anticipated compliance year for new energy conservation standards.

TSL 1 and TSL 2 set the efficiency level at EL 1 for all product classes in this grouping. At TSL 1 and TSL 2, DOE estimates impacts on the change in INPV to range from $141 million to $10 million, or a change in INPV of 0.2 percent to less than 0.1 percent. At TSL 1 and TSL 2, industry free cash flow is estimated to decrease to $6.018 million, or a decrease of under one percent, compared to the no-standards case value of $6.024 million in 2017.

Percentage impacts on INPV are slightly negative at TSL 1 and TSL 2. DOE does not anticipate that most PC 2, 3, and 4 battery charger application manufacturers would lose a significant portion of their INPV at TSL 1 or TSL 2. DOE projects that in the expected year of compliance, 2018, 49 percent of all PC 2 battery charger applications, 60 percent of all PC 3 battery charger applications, and 86 percent of all PC 4 battery charger applications would meet or exceed the efficiency levels required at TSL 3. DOE expects conversion costs to increase from $13.4 million at TSL 1 and TSL 2 to $115.7 million at TSL 3.

These efficiency levels represent maximum levels of stringent efficiency for PCs 3 and 4 and EL 4 for PC 2. These efficiency levels are expected to increase from moderately negative to slightly negative at TSL 4. At TSL 4, industry free cash flow is estimated to decrease to $5.87 million, or a decrease of 3 percent, compared to the no-standards case value of $6.024 million in 2017.

Percentage impacts on INPV range from moderately negative to slightly positive at TSL 4. DOE anticipates that some PC 2, 3, and 4 battery charger application manufacturers could lose a significant portion of their INPV at TSL 4. DOE projects that in the expected year of compliance, 2018, 25 percent of all PC 2 battery charger applications, 58 percent of all PC 3 battery charger applications, and 74 percent of all PC 4 battery charger applications would meet or exceed the efficiency levels required at TSL 4.

DOE expects conversion costs to significantly increase from $115.7 million at TSL 3 to $347.8 million at TSL 4. At TSL 4, the PC 2 battery charger MPC increases to $18.34 compared to the baseline battery charger MPC of $1.79. While DOE recognizes that this projected increase of $16.55 in the battery charger MPC from the baseline to the max-tech may seem significant, its impact is modest when compared to the shipment-weighted average PC 4 battery charger application MPC of $192.40—in essence, it represents an 8.6 percent increase in the average battery charger application MPC.

These product classes also include a wide variety of applications characterized by differing shipment volumes, no-standards case efficiency distributions, and MSPs. Because of this variety, this product class grouping, more than any other, requires a greater level of disaggregation to evaluate specific industry impacts. Presented only on a product class basis, industry impacts are effectively shipment-weighted and mask impacts on certain industry applications that vary substantially from the aggregate results. Therefore, in addition to the overall product class group results, DOE also presents results by industry subgroups—consumer electronics, power tools, and small appliances—in the pass-through scenario, which approximates the mid-point of the potential range of INPV impacts. These results highlight impacts at various TSLs.

As discussed in the previous section, these aggregated results can mask differentially-impacted industries and manufacturer subgroups. Nearly 90 percent of shipments in PCs 2, 3 and 4 fall under the broader consumer electronics category, with the remaining share split between small appliances and power tools. Consumer electronics applications have a much higher shipment-weighted average MPC.

### Table V–31—Manufacturer Impact Analysis for Product Class 2, 3, and 4 Battery Charger Applications—Constant Markup Scenario

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV</td>
<td>2013$ millions</td>
<td>76,791</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2013$ millions</td>
<td>(141)</td>
</tr>
<tr>
<td>(%)</td>
<td></td>
<td>(0.2)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>11.5</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>1.8</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Manufacturers would lose a significant portion of their INPV at this TSL. DOE projects that in the expected year of compliance, 2018, 49 percent of all PC 2 battery charger applications, 60 percent of all PC 3 battery charger applications, and 86 percent of all PC 4 battery charger applications would meet or exceed the efficiency levels required at TSL 3. DOE expects conversion costs to increase from $13.4 million at TSL 1 and TSL 2 to $115.7 million at TSL 3. This represents a relatively modest amount compared to the no-standards case INPV of $76.8 billion and annual cash flow of $6.02 billion for PC 2, 3, and 4 battery charger applications.

TSL 4 sets the efficiency level at EL 3 for PCs 3 and 4 and EL 4 for PC 2. These efficiency levels represent maximum levels of stringent efficiency for PCs 3 and 4 and EL 4 for PC 2. These efficiency levels are expected to increase from moderately negative to slightly negative at TSL 4. At TSL 4, industry free cash flow is estimated to decrease to $5.87 million, or a decrease of 3 percent, compared to the no-standards case value of $6.024 million in 2017.

Percentage impacts on INPV range from moderately negative to slightly positive at TSL 4. DOE anticipates that some PC 2, 3, and 4 battery charger application manufacturers could lose a significant portion of their INPV at TSL 4. DOE projects that in the expected year of compliance, 2018, 25 percent of all PC 2 battery charger applications, 58 percent of all PC 3 battery charger applications, and 74 percent of all PC 4 battery charger applications would meet or exceed the efficiency levels required at TSL 4.

DOE expects conversion costs to significantly increase from $115.7 million at TSL 3 to $347.8 million at TSL 4. At TSL 4, the PC 2 battery charger MPC increases to $18.34 compared to the baseline battery charger MPC of $1.79. While DOE recognizes that this projected increase of $16.55 in the battery charger MPC from the baseline to the max-tech may seem significant, its impact is modest when compared to the shipment-weighted average PC 4 battery charger application MPC of $192.40—in essence, it represents an 8.6 percent increase in the average battery charger application MPC.

These product classes also include a wide variety of applications characterized by differing shipment volumes, no-standards case efficiency distributions, and MSPs. Because of this variety, this product class grouping, more than any other, requires a greater level of disaggregation to evaluate specific industry impacts. Presented only on a product class basis, industry impacts are effectively shipment-weighted and mask impacts on certain industry applications that vary substantially from the aggregate results. Therefore, in addition to the overall product class group results, DOE also presents results by industry subgroups—consumer electronics, power tools, and small appliances—in the pass-through scenario, which approximates the mid-point of the potential range of INPV impacts. These results highlight impacts at various TSLs.

As discussed in the previous section, these aggregated results can mask differentially-impacted industries and manufacturer subgroups. Nearly 90 percent of shipments in PCs 2, 3 and 4 fall under the broader consumer electronics category, with the remaining share split between small appliances and power tools. Consumer electronics applications have a much higher shipment-weighted average MPC.
($147.29) than the other product categories ($58.32 for power tools and $43.63 for small appliances). Consequently, consumer electronics manufacturers are better able to absorb higher battery charger costs than small appliance and power tool manufacturers. Further, consumer electronics typically incorporate higher efficiency battery chargers already, while small appliances and power tool applications tend to cluster around baseline and EL 1 efficiencies. These factors lead to proportionally greater impacts on small appliance and power tool manufacturers in the event they are not able to pass on and markup higher battery charger costs.

Table V–32 through Table V–34 present INPV impacts in the pass-through markup scenario for consumer electronic, power tool, and small appliance applications, respectively. The results indicate manufacturers of power tools and small appliances would face disproportionately adverse impacts, especially at the higher TSLs, as compared to consumer electronics manufacturers and the overall product group’s results (shown in Table V–29 through Table V–31), if they are not able to mark up the incremental product costs.

Table V–32—Manufacturer Impact Analysis for Product Class 2, 3, and 4 Battery Charger Applications—Pass-Through Markup Scenario—Consumer Electronics

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013$ millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>........................</td>
<td>73,840</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>........................</td>
<td>(36)</td>
</tr>
<tr>
<td>(% )</td>
<td>........................</td>
<td>(0.0)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>10.2</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>1.7</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Table V–33—Manufacturer Impact Analysis for Product Class 2, 3, and 4 Battery Charger Applications—Pass-Through Markup Scenario—Power Tools

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013$ millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>........................</td>
<td>2,190</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>........................</td>
<td>(11)</td>
</tr>
<tr>
<td>(% )</td>
<td>........................</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>0.9</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table V–34—Manufacturer Impact Analysis for Product Class 2, 3, and 4 Battery Charger Applications—Pass-Through Markup Scenario—Small Appliances

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013$ millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>........................</td>
<td>761</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>........................</td>
<td>(5)</td>
</tr>
<tr>
<td>(% )</td>
<td>........................</td>
<td>(0.6)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>0.4</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>0.1</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Product Classes 5 and 6

The following tables (Table V–35 through Table V–38) summarize information related to the analysis performed to project the potential impacts on manufacturers of devices falling into PCs 5 and 6.

Table V–35—Applications in Product Classes 5 and 6

<table>
<thead>
<tr>
<th>Product Class 5</th>
<th>Product Class 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine/Automotive/RV Chargers.</td>
<td>Electric Scooters.</td>
</tr>
<tr>
<td>Mobility Scooters ......</td>
<td>Lawn Mowers.</td>
</tr>
</tbody>
</table>

Table V–35—Applications in Product Classes 5 and 6—Continued

<table>
<thead>
<tr>
<th>Product Class 5</th>
<th>Product Class 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toy Ride-On Vehicles</td>
<td>Motorized Bicycles.</td>
</tr>
<tr>
<td>Wheelchairs ..........</td>
<td>Wheelchairs.</td>
</tr>
</tbody>
</table>
Product Classes 5 and 6 together comprise seven unique applications. Toy ride-on vehicles represent over 70 percent of the Product Class 5 and 6 shipments. DOE found that all PC 5 and 6 shipments are at either EL 1 or EL 2. The battery charger cost associated with each EL is the same for PC 5 and 6 applications, but the energy usage profiles are different.

TSL 1 sets the efficiency level at EL 1 for Product Classes 5 and 6. At TSL 1, DOE estimates impacts on the change in INPV to range from −$7 million to no change at all, or a change in INPV of −0.5 percent to no change at all. At TSL 1, industry free cash flow is estimated to remain at $117 million in 2017.

Percentage impacts on INPV range from slightly negative to unchanged at TSL 1. DOE does not anticipate that PC 5 and 6 battery charger application manufacturers would lose a significant portion of their INPV at TSL 1. DOE projects that in the expected year of compliance, 2018, all PC 5 and 6 battery charger applications would meet or exceed the efficiency levels required at TSL 1. Consequently, DOE does not expect there to be any conversion costs at TSL 1.

TSL 2 sets the efficiency level at EL 2 for PCs 5 and 6. At TSL 2, DOE estimates impacts on the change in INPV to range from −$348 million to less than one million dollars, or a change in INPV of −23.3 percent to less than 0.1 percent. At TSL 2, industry free cash flow is estimated to decrease to $117 million, or a decrease of less than one percent, compared to the no-standards case value of $117 million in 2017.

Percentage impacts on INPV range from moderately negative to slightly positive at TSL 2. DOE projects that in the expected year of compliance, 2018, 95 percent of all PC 5 battery charger applications and 95 percent of all PC 6 battery charger applications would meet or exceed the efficiency levels required at TSL 2. DOE expects conversion costs to slightly increase to $1.3 million at TSL 2.

TSL 3 and TSL 4 set the efficiency level at EL 3 for PCs 5 and 6. This efficiency level represents max-tech for PCs 5 and 6. At TSL 3 and TSL 4, DOE estimates impacts on the change in INPV to range from −$907 million to $572 million, or a change in INPV of −60.8 percent to 38.3 percent. At TSL 3 and TSL 4, industry free cash flow is estimated to decrease to $100 million, or a decrease of 15 percent, compared to the no-standards case value of $117 million in 2017.

Percentage impacts on INPV range from significantly negative to significantly positive at TSL 3 and TSL 4. This large INPV range is related to the significant increase in battery charger MPC required at TSL 3 and TSL 4. DOE believes that as MPC significantly increases manufacturers will have greater difficulty in marking up prices to

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**TABLE V–36—MANUFACTURER IMPACT ANALYSIS FOR PRODUCT CLASS 5 AND 6 BATTERY CHARGER APPLICATIONS—FLAT MARKUP SCENARIO**

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV</td>
<td>2013$ millions</td>
<td>1,493</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2013$ millions</td>
<td>0</td>
</tr>
<tr>
<td>(%)</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
</tbody>
</table>

---

**TABLE V–37—MANUFACTURER IMPACT ANALYSIS FOR PRODUCT CLASS 5 AND 6 BATTERY CHARGER APPLICATIONS—PASS-THROUGH Markup Scenario**

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV</td>
<td>2013$ millions</td>
<td>1,493</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2013$ millions</td>
<td>(2)</td>
</tr>
<tr>
<td>(%)</td>
<td></td>
<td>(0.2)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
</tbody>
</table>

---

**TABLE V–38—MANUFACTURER IMPACT ANALYSIS FOR PRODUCT CLASS 5 AND 6 BATTERY CHARGER APPLICATIONS—CONSTANT Markup Scenario**

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV</td>
<td>2013$ millions</td>
<td>1,493</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2013$ millions</td>
<td>(7)</td>
</tr>
<tr>
<td>(%)</td>
<td></td>
<td>(0.5)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Investment Required</td>
<td>2013$ millions</td>
<td>0.0</td>
</tr>
</tbody>
</table>
reflect these incremental costs. This would imply that the negative INPV impact is a more realistic scenario than the positive INPV impact scenario. DOE anticipates that most PC 5 and 6 battery charger application manufacturers could lose a significant portion of their INPV at TSL 3 and TSL 4. DOE projects that in the expected year of compliance, 2018, no PC 5 or 6 battery charger applications would meet the efficiency levels required at TSL 3 and TSL 4. DOE expects conversion costs to significantly increase from $1.3 million at TSL 2 to $39.6 million at TSL 3 and TSL 4. At TSL 3 and TSL 4, the PC 5 and 6 battery charger MPC increases to $127.00 compared to the baseline battery charger MPC value of $18.48. This represents a huge application price increase considering that the shipment-weighted average PC 5 and 6 battery charger application MPC in the no-new standards case is $131.14 and $262.21 respectively.

Table V–39—Applications in Product Class 7

Product Class 7

Golf Cars

Table V–40—Manufacturer Impact Analysis for Product Class 7 Battery Charger Applications—Flat Markup Scenario

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial Standard Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV $ millions</td>
<td>1,124</td>
<td>1,116</td>
</tr>
<tr>
<td>Change in INPV $ millions</td>
<td>(8)</td>
<td>(8)</td>
</tr>
<tr>
<td>( % )</td>
<td>(0.7)</td>
<td>(0.7)</td>
</tr>
<tr>
<td>Product Conversion Costs $ millions</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Capital Conversion Costs $ millions</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Total Investment Required $ millions</td>
<td>1.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Table V–41—Manufacturer Impact Analysis for Product Class 7 Battery Charger Applications—Pass-Through Markup Scenario

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial Standard Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV $ millions</td>
<td>1,124</td>
<td>1,134</td>
</tr>
<tr>
<td>Change in INPV $ millions</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>( % )</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Product Conversion Costs $ millions</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Capital Conversion Costs $ millions</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Total Investment Required $ millions</td>
<td>1.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Table V–42—Manufacturer Impact Analysis for Product Class 7 Battery Charger Applications—Constant Markup Scenario

<table>
<thead>
<tr>
<th>Units</th>
<th>No-standards case</th>
<th>Trial Standard Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPV $ millions</td>
<td>1,124</td>
<td>1,168</td>
</tr>
<tr>
<td>Change in INPV $ millions</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>( % )</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Product Conversion Costs $ millions</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Capital Conversion Costs $ millions</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Total Investment Required $ millions</td>
<td>1.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Golf cars are the only application in PC 7. Approximately 80 percent of the market incorporates baseline battery charger technology—the remaining 20 percent employs technology that meets the efficiency requirements at EL 1. The cost of a battery charger in PC 7, though higher relative to other product classes, remains a small portion of the overall selling price of a golf car. This analysis, however, focuses on the application manufacturer (OEM). DOE identified one small U.S. manufacturer of golf car battery chargers. The impacts of standards on small businesses is addressed in the Regulatory Flexibility Analysis (see section VII.B for the results of that analysis).

TSL 1 and TSL 2 set the efficiency level at EL 1 for PC 7. At TSL 1 and TSL 2, DOE estimates impacts on the change in INPV to range from $8 million to $44 million, or a change in INPV of −0.7 percent to 3.9 percent. At TSL 1 and TSL 2, industry free cash flow is estimated to decrease to $87 million, or a decrease of 1 percent, compared to the no-standards case value of $88 million in 2017.

Percentage impacts on INPV range from slightly negative to slightly positive at TSL 1 and TSL 2. DOE does not anticipate that PC 7 battery charger

Percentage impacts on INPV range from slightly negative to slightly positive at TSL 1 and TSL 2. DOE does not anticipate that PC 7 battery charger
application manufacturers, the golf car manufacturers, would lose a significant portion of their INPV at this TSL. DOE projects that in the expected year of compliance, 2018, 20 percent of all PC 7 battery charger applications would meet or exceed the efficiency levels required at TSL 1 and TSL 2. DOE expects conversion costs to be $1.7 million at TSL 1 and TSL 2. TSL 3 and TSL 4 set the efficiency level at EL 2 for PC 7. This represents max-tech for PC 7. At TSL 3 and TSL 4, DOE estimates impacts on the change in INPV to range from $126 million to $20 million, or a change in INPV of –11.2 percent to 1.7 percent. At TSL 3 and TSL 4, industry free cash flow is estimated to decrease to $86 million, or a decrease of 3 percent, compared to the no-standards case value of $88 million in 2017.

Percentage impacts on INPV range from moderately negative to slightly positive at TSL 3 and TSL 4. DOE projects that in the expected year of compliance, PC 7 battery charger applications would meet the efficiency levels required at TSL 3 and TSL 4. DOE expects conversion costs to increase from $1.7 million at TSL 1 and TSL 2 to $5.1 million at TSL 3 and TSL 4. This represents a relatively modest amount compared to the no-standards case INPV of $1.124 million and annual cash flow of $88 million for PC 7 battery charger applications. At TSL 3 and TSL 4 the battery charger MPC increases to $164.14 compared to the baseline battery charger MPC value of $88.07. This change represents only a moderate increase in the application price since the shipment-weighted average application MPC is $2,608.09.

b. Impacts on Employment

DOE attempted to quantify the number of domestic workers involved in battery charger production. Based on manufacturer interviews and reports from vendors such as Hoover’s, Dun and Bradstreet, and Manta, the vast majority of all small appliance and consumer electronic applications are manufactured abroad. When looking specifically at the battery charger component, which is typically designed by the application manufacturer but sourced for production, the same dynamic holds to an even greater extent. That is, in the rare instance when an application’s production occurs domestically, it is very likely that the battery charger component is still produced and sourced overseas. For example, DOE identified several power tool applications with some level of domestic manufacturing. However, based on more detailed information obtained during interviews, DOE believes the battery charger components for these applications are sourced from abroad.

Also, DOE was able to find a few manufacturers of medium and high-power applications with facilities in the U.S. However, only a limited number of these companies produce battery chargers domestically for these applications. Therefore, based on manufacturer interviews and DOE’s research, DOE believes that golf cars are the only application with U.S.-based battery charger manufacturing. Any change in U.S. production employment due to new battery charger energy conservation standards is likely to come from changes involving these particular products.

At the adopted efficiency levels, domestic golf car manufacturers will need to decide whether to attempt to manufacture more efficient battery chargers in-house and try to compete with a greater level of vertical integration than their competitors, move production to lower-wage regions abroad, or outsource their battery charger manufacturing. Based on available data, DOE believes one of the latter two strategies would be more likely for domestic golf car manufacturers. DOE describes the major implications for golf car employment in section VII.B because the major domestic manufacturer is also a small business manufacturer. DOE does not anticipate any major negative changes in the domestic employment of the design, technical support, or other departments of battery charger application manufacturers located in the U.S. in response to new energy conservation standards. Standards may require some companies to redesign their battery chargers, change marketing literature, and train some technical and sales support staff. However, during interviews, manufacturers, when asked if their domestic employment levels would change due to new standards, generally agreed these changes would not lead to positive or negative changes in employment, outside of the golf car battery charger industry.

c. Impacts on Manufacturing Capacity

DOE does not anticipate that the standards adopted by this final rule would adversely impact manufacturer capacity. The battery charger application industry is characterized by rapid product development lifecycles. DOE believes a compliance date of two years, the date of the publication of the final rule, would provide sufficient time for manufacturers to ramp up capacity to meet the adopted standards for battery chargers.

d. Impacts on Subgroups of Manufacturers

Using average cost assumptions to develop an industry cash-flow estimate is not adequate for assessing differential impacts among manufacturer subgroups. Small manufacturers, niche equipment manufacturers, and manufacturers exhibiting a cost structure substantially different from the industry average could be affected disproportionately. DOE addressed manufacturer subgroups in the MIA, by breaking out manufacturers by application grouping (consumer electronics, small appliances, power tools, and high energy application). Because certain application groups are disproportionately impacted compared to the overall product class groupings, DOE reports those manufacturer application group results individually so they can be considered as part of the overall MIA. For the results of this manufacturer subgroup, see section VI.B.

DOE also identified small businesses as a manufacturer subgroup that could potentially be disproportionally impacted. DOE discusses the impacts on the small business subgroup in the regulatory flexibility analysis, section VI.B.

e. Cumulative Regulatory Burden

One aspect of assessing manufacturer burden involves looking at the cumulative impact of multiple DOE standards and the regulatory actions of other Federal agencies and States that affect the manufacturers of a covered product or equipment. DOE believes that a standard level is not economically justified if it contributes to an unacceptable cumulative regulatory burden. While any one regulation may not impose a significant burden on manufacturers, the combined effects of recent or impending regulations may have serious consequences for some manufacturers, groups of manufacturers, or an entire industry. Assessing the impact of a single regulation may overlook this cumulative regulatory burden. In addition to energy conservation standards, other regulations can significantly affect manufacturers’ financial operations. Multiple regulations affecting the same manufacturer can strain profits and lead companies to abandon product lines or markets with lower expected future returns than competing products. For these reasons, DOE conducts an analysis of cumulative regulatory burden as part...
of its rulemakings pertaining to product efficiency. For the cumulative regulatory burden analysis, DOE looks at other regulations that could affect battery charger application manufacturers that will take effect approximately three years before or after the compliance date of new energy conservation standards for these products. The compliance years and expected industry conversion costs of relevant new energy conservation standards are indicated in Table V–43.

### Table V–43—Other DOE Regulations Potentially Affecting Battery Charger Application Manufacturers

<table>
<thead>
<tr>
<th>Federal energy conservation standards</th>
<th>Approximate compliance date</th>
<th>Estimated total industry conversion expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and Battery Backup Systems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The dates listed are an approximation. The exact dates are pending final DOE action.
† For energy conservation standards for rulemakings awaiting DOE final action, DOE does not have a finalized estimated total industry conversion cost.

DOE is aware that the CEC already has energy conservation standards in place for battery chargers. As of the compliance date for the standards established in this rule is reached, the CEC standards will be preempted. Therefore, DOE did not consider the CEC standards as contributing to the cumulative regulatory burden of this rulemaking.

3. National Impact Analysis

a. Significance of Energy Savings

To estimate the energy savings attributable to potential standards for battery chargers, DOE compared their energy consumption under the no-standards case to their anticipated energy consumption under each TSL. The savings are measured over the entire lifetime of products purchased in the 30-year period that begins in the year of anticipated compliance with new standards (2018–2047). Table V–44 and Table V–45 present DOE’s projections of the national energy savings for each TSL considered for battery chargers. The savings were calculated using the approach described in section IV.H of this document.

### Table V–44—Battery Chargers: Cumulative Primary National Energy Savings for Products Shipped in 2018–2047 (QUADS)

<table>
<thead>
<tr>
<th>Product class</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0.004</td>
</tr>
<tr>
<td>2, 3, 4</td>
<td>0.088</td>
</tr>
<tr>
<td>5, 6</td>
<td>0.000</td>
</tr>
<tr>
<td>7</td>
<td>0.012</td>
</tr>
</tbody>
</table>

### Table V–45—Battery Chargers: Cumulative FFC National Energy Savings for Products Shipped in 2018–2047 (QUADS)

<table>
<thead>
<tr>
<th>Product class</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0.004</td>
</tr>
<tr>
<td>2, 3, 4</td>
<td>0.092</td>
</tr>
<tr>
<td>5, 6</td>
<td>0.000</td>
</tr>
<tr>
<td>7</td>
<td>0.013</td>
</tr>
</tbody>
</table>

OMB Circular A–4 requires agencies to present analytical results, including separate schedules of the monetized benefits and costs that show the type and timing of benefits and costs. Circular A–4 also directs agencies to consider the variability of key elements underlying the estimates of benefits and costs. For this rulemaking, DOE undertook a sensitivity analysis using nine, rather than 30, years of product shipments. The choice of a nine-year period is a proxy for the timeline in EPCA for the review of certain energy conservation standards and potential revision of and compliance with such revised standards. The review timeframe established in EPCA is generally not synchronized with the product lifetime, product manufacturing cycles, or other factors specific to battery chargers. Thus, such results are presented for informational purposes only and are not indicative of any change in DOE’s analytical methodology. The NES sensitivity analysis results based on a nine-year analytical period are

presented in Table V–46. The impacts are counted over the lifetime of battery chargers purchased in 2018–2026.

**TABLE V–46—BATTERY CHARGERS: CUMULATIVE FFC NATIONAL ENERGY SAVINGS FOR PRODUCTS SHIPPED IN 2018–2026 (QUADS)**

<table>
<thead>
<tr>
<th>Product class</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0.001</td>
</tr>
<tr>
<td>2, 3, 4</td>
<td>0.028</td>
</tr>
<tr>
<td>5, 6</td>
<td>0.000</td>
</tr>
<tr>
<td>7</td>
<td>0.004</td>
</tr>
</tbody>
</table>

b. Net Present Value of Consumer Costs and Benefits

DOE estimated the cumulative NPV of the total costs and savings for consumers that would result from the TSLs considered for battery chargers. In accordance with OMB's guidelines on regulatory analysis, DOE calculated NPV using both a 7-percent and a 3-percent real discount rate. Table V–47 shows the consumer NPV results with impacts counted over the lifetime of products purchased in 2018–2047.

**TABLE V–47—BATTERY CHARGERS: CUMULATIVE NET PRESENT VALUE OF CONSUMER BENEFITS FOR PRODUCTS SHIPPED IN 2018–2047**

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Trial standard level (billion 2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 percent</td>
<td>0.9 1.2 16.2 47.9</td>
</tr>
<tr>
<td>7 percent</td>
<td>0.5 0.6 9.5 27.9</td>
</tr>
</tbody>
</table>

The NPV results based on the aforementioned 9-year analytical period are presented in Table V–48. The impacts are counted over the lifetime of products purchased in 2018–2026. As mentioned previously, such results are presented for informational purposes only and are not indicative of any change in DOE's analytical methodology or decision criteria.

**TABLE V–48—BATTERY CHARGERS: CUMULATIVE NET PRESENT VALUE OF CONSUMER BENEFITS FOR PRODUCTS SHIPPED IN 2018–2026**

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Trial standard level (billion 2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 percent</td>
<td>0.3 0.4 6.2 18.1</td>
</tr>
<tr>
<td>7 percent</td>
<td>0.2 0.3 4.8 14.1</td>
</tr>
</tbody>
</table>

c. Indirect Impacts on Employment

DOE expects energy conservation standards for battery chargers to reduce energy bills for consumers of those products, with the resulting net savings being redirected to other forms of economic activity. These expected shifts in spending and economic activity could affect the demand for labor. As described in section IV.N of this document, DOE used an input/output model of the U.S. economy to estimate indirect employment impacts of the TSLs that DOE considered in this rulemaking. DOE understands that there are uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Therefore, DOE generated results for near-term timeframes, where these uncertainties are reduced.

The results suggest that the adopted standards are likely to have a negligible impact on the net demand for labor in the economy. The net change in jobs is so small that it would be imperceptible in national labor statistics and might be offset by other, unanticipated effects on employment. Chapter 16 of the final rule TSD presents detailed results regarding anticipated indirect employment impacts.

4. Impact on Utility or Performance of Products

Based on testing conducted in support of this rule, DOE has concluded that the standards adopted in this final rule would not reduce the utility or performance of the battery chargers under consideration in this rulemaking. Manufacturers of these products currently offer units that meet or exceed the adopted standards. DOE has also declined to adopt battery charger

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marking requirements as part of this final rule, providing manufacturers with more flexibility in the way that they design, label, and market their products.

5. Impact of Any Lessening of Competition

DOE has also considered any lessening of competition this is likely to result from the adopted standards. The Attorney General of the United States (Attorney General) determines the impact, if any, of any lessening of competition likely to result from a proposed standard and is required to transmit such determination in writing to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. (42 U.S.C. 6295(o)(2)(B)(i)(V) and (B)(iii))

To assist the Attorney General in making this determination, DOE provided the Department of Justice (“DOJ”) with copies of the SNOPR and the accompanying SNOPR TSD for review. In its assessment letter responding to DOE, DOJ concluded that the proposed energy conservation standards for battery chargers are unlikely to have a significant adverse impact on competition. DOE is publishing the Attorney General’s assessment at the end of this final rule.

6. Need of the Nation To Conserve Energy

Enhanced energy efficiency, where economically justified, improves the Nation’s energy security, strengthens the economy, and reduces the environmental impacts (costs) of energy production. Reduced electricity demand due to energy conservation standards is also likely to reduce the cost of maintaining the reliability of the electricity system, particularly during peak-load periods. As a measure of this reduced demand, chapter 15 in the final rule TSD presents the estimated reduction in generating capacity, relative to the no-standards case, for the TSLs that DOE considered in this rulemaking.

Energy conservation resulting from standards for battery chargers is expected to yield environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases. Table V–49 provides DOE’s estimate of cumulative emissions reductions expected to result from the TSLs considered in this rulemaking. The table includes both power sector emissions and upstream emissions. The emissions were calculated using the multipliers discussed in section IV.K. DOE reports annual emissions reductions for each TSL in chapter 13 of the final rule TSD. The energy conservation standards established by this rule are economically justified under EPCA with regard to the added benefits achieved through reduced emissions of air pollutants and greenhouse gases.

Table V–49—Battery Chargers: Cumulative Emissions Reduction for Products Shipped in 2018–2047

<table>
<thead>
<tr>
<th>Trial Standard Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Sector Emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO(_2) (million metric tons)</td>
<td>6.49</td>
<td>10.25</td>
<td>32.08</td>
<td>41.78</td>
</tr>
<tr>
<td>SO(_2) (thousand tons)</td>
<td>4.10</td>
<td>6.48</td>
<td>20.29</td>
<td>26.44</td>
</tr>
<tr>
<td>NO(_X) (thousand tons)</td>
<td>7.02</td>
<td>11.09</td>
<td>34.68</td>
<td>45.16</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.015</td>
<td>0.024</td>
<td>0.075</td>
<td>0.098</td>
</tr>
<tr>
<td>CH(_4) (thousand tons)</td>
<td>0.582</td>
<td>0.919</td>
<td>2.877</td>
<td>3.749</td>
</tr>
<tr>
<td>N(_2)O (thousand tons)</td>
<td>0.083</td>
<td>0.131</td>
<td>0.409</td>
<td>0.533</td>
</tr>
<tr>
<td><strong>Upstream Emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO(_2) (million metric tons)</td>
<td>0.342</td>
<td>0.542</td>
<td>1.697</td>
<td>2.209</td>
</tr>
<tr>
<td>SO(_2) (thousand tons)</td>
<td>0.064</td>
<td>0.102</td>
<td>0.318</td>
<td>0.415</td>
</tr>
<tr>
<td>NO(_X) (thousand tons)</td>
<td>4.89</td>
<td>7.75</td>
<td>24.26</td>
<td>31.57</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>CH(_4) (thousand tons)</td>
<td>27.0</td>
<td>42.7</td>
<td>133.8</td>
<td>174.1</td>
</tr>
<tr>
<td>N(_2)O (thousand tons)</td>
<td>0.003</td>
<td>0.005</td>
<td>0.016</td>
<td>0.021</td>
</tr>
<tr>
<td><strong>Total FFC Emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO(_2) (million metric tons)</td>
<td>6.83</td>
<td>10.79</td>
<td>33.77</td>
<td>43.99</td>
</tr>
<tr>
<td>SO(_2) (thousand tons)</td>
<td>4.17</td>
<td>6.58</td>
<td>20.61</td>
<td>26.86</td>
</tr>
<tr>
<td>NO(_X) (thousand tons)</td>
<td>11.91</td>
<td>18.83</td>
<td>58.94</td>
<td>76.73</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.015</td>
<td>0.024</td>
<td>0.076</td>
<td>0.099</td>
</tr>
<tr>
<td>CH(_4) (thousand tons)</td>
<td>27.6</td>
<td>43.6</td>
<td>136.6</td>
<td>177.8</td>
</tr>
<tr>
<td>CH(_4) (thousand tons CO(_2)eq)*</td>
<td>772</td>
<td>1222</td>
<td>3826</td>
<td>4979</td>
</tr>
<tr>
<td>N(_2)O (thousand tons)</td>
<td>0.866</td>
<td>0.136</td>
<td>0.424</td>
<td>0.553</td>
</tr>
<tr>
<td>N(_2)O (thousand tons CO(_2)eq)*</td>
<td>22.7</td>
<td>35.9</td>
<td>112.5</td>
<td>146.6</td>
</tr>
</tbody>
</table>

* CO\(_2\)eq is the quantity of CO\(_2\) that would have the same GWP.

As part of the analysis for this rule, DOE estimated monetary benefits likely to result from the reduced emissions of CO\(_2\) and NO\(_X\) that DOE estimated for each of the considered TSLs for battery chargers. As discussed in section IV.L of this document, for CO\(_2\), DOE used recent values for the SCC developed by an interagency process. The four sets of SCC values for CO\(_2\) emissions reductions in 2015 resulting from that process (expressed in 2013$) are represented by $12.2/metric ton (the average value from a distribution that uses a 5-percent discount rate), $40.0/metric ton (the average value from a distribution that uses a 3-percent discount rate), $62.3/metric ton (the average value from a distribution that uses a 2.5-percent discount rate), and $117/metric ton (the 95th-percentile value from a distribution that uses a 3-percent discount rate). The values for later years are higher due to increasing...
damages (public health, economic and environmental) as the projected magnitude of climate change increases. Table V–50 presents the global value of CO₂ emissions reductions at each TSL. For each of the four cases, DOE calculated a present value of the stream of annual values using the same discount rate as was used in the studies upon which the dollar-per-ton values are based. DOE calculated domestic values as a range from 7 percent to 23 percent of the global values; these results are presented in chapter 14 of the final rule TSD.

**TABLE V–50—BATTERY CHARGERS: ESTIMATES OF GLOBAL PRESENT VALUE OF CO₂ EMISSIONS REDUCTION FOR PRODUCTS SHIPPED IN 2018–2047**

<table>
<thead>
<tr>
<th>TSL</th>
<th>Power Sector Emissions</th>
<th>Upstream Emissions</th>
<th>Total FFC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5% discount rate, average</td>
<td>3% discount rate, average</td>
<td>2.5% discount rate, average</td>
</tr>
<tr>
<td>1</td>
<td>51.9</td>
<td>223.6</td>
<td>350.4</td>
</tr>
<tr>
<td>2</td>
<td>81.5</td>
<td>351.9</td>
<td>551.8</td>
</tr>
<tr>
<td>3</td>
<td>254.2</td>
<td>1099.4</td>
<td>1724.3</td>
</tr>
<tr>
<td>4</td>
<td>331.4</td>
<td>1432.8</td>
<td>2246.9</td>
</tr>
<tr>
<td></td>
<td>2.7</td>
<td>11.6</td>
<td>18.3</td>
</tr>
<tr>
<td>2</td>
<td>4.2</td>
<td>18.4</td>
<td>28.9</td>
</tr>
<tr>
<td>3</td>
<td>13.1</td>
<td>57.4</td>
<td>90.2</td>
</tr>
<tr>
<td>4</td>
<td>17.1</td>
<td>74.8</td>
<td>117.5</td>
</tr>
<tr>
<td></td>
<td>54.6</td>
<td>235.3</td>
<td>368.7</td>
</tr>
<tr>
<td>2</td>
<td>85.7</td>
<td>370.3</td>
<td>580.6</td>
</tr>
<tr>
<td>3</td>
<td>267.3</td>
<td>1156.8</td>
<td>1814.5</td>
</tr>
<tr>
<td>4</td>
<td>348.6</td>
<td>1507.6</td>
<td>2364.4</td>
</tr>
</tbody>
</table>

*For each of the four cases, the corresponding SCC value for emissions in 2015 is $12.2, $40.0, $62.3, and $117 per metric ton (2013$).

DOE is well aware that scientific and economic knowledge about the contribution of CO₂ and other GHG emissions to changes in the future global climate and the potential resulting damages to the world economy continues to evolve rapidly. Thus, any value placed on reduced CO₂ emissions in this rulemaking is subject to change. DOE, together with other Federal agencies, will continue to review various methodologies for estimating the monetary value of reductions in CO₂ and other GHG emissions. This ongoing review will consider the comments on this subject that are part of the public record for this and other rulemakings, as well as other methodological assumptions and issues. However, consistent with DOE’s legal obligations, and taking into account the uncertainty involved with this particular issue, DOE has included in this rule the most recent values and analyses resulting from the interagency review process. DOE also estimated the cumulative monetary value of the economic benefits associated with NOₓ emissions reductions anticipated to result from the considered TSLs for battery chargers. The dollar-per-ton values that DOE used are discussed in section IV.L of this document. Table V–51 presents the cumulative present values for NOₓ emissions for each TSL calculated using 7-percent and 3-percent discount rates. This table presents values that use the low dollar-per-ton values, which reflect DOE’s primary estimate. Results that reflect the range of NOₓ dollar-per-ton values are presented in Table V.53.

**TABLE V–51—BATTERY CHARGERS: ESTIMATES OF PRESENT VALUE OF NOₓ EMISSIONS REDUCTION FOR PRODUCTS SHIPPED IN 2018–2047**

<table>
<thead>
<tr>
<th>TSL</th>
<th>Million 2013$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3% discount rate</td>
</tr>
<tr>
<td></td>
<td>Million 2013$</td>
</tr>
<tr>
<td>1</td>
<td>15.7</td>
</tr>
<tr>
<td>2</td>
<td>24.6</td>
</tr>
<tr>
<td>3</td>
<td>76.7</td>
</tr>
<tr>
<td>4</td>
<td>99.9</td>
</tr>
<tr>
<td>1</td>
<td>10.8</td>
</tr>
<tr>
<td>2</td>
<td>17.0</td>
</tr>
<tr>
<td>3</td>
<td>52.9</td>
</tr>
</tbody>
</table>
time in the atmosphere, the SCC values in future years reflect future climate-related impacts that continue beyond 2100.

C. Conclusion

When considering standards, the new or amended energy conservation standards that DOE adopts for any type (or class) of covered product must be designed to achieve the maximum improvement in energy efficiency that the Secretary determines is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A)) In determining whether a standard is economically justified, the Secretary must determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering the seven statutory factors discussed previously. (42 U.S.C. 6295(o)(2)(B)(i)). The new or amended standard must also result in significant conservation of energy. (42 U.S.C. 6295(o)(3)[B])
For this final rule, DOE considered the impacts of new standards for battery chargers at each TSL, beginning with the maximum technologically feasible level, to determine whether that level was economically justified. Where the max-tech level was not justified, DOE then considered the next most efficient level and undertook the same evaluation until it reached the highest efficiency level that is both technologically feasible and economically justified and saves a significant amount of energy.

To aid the reader as DOE discusses the benefits and/or burdens of each TSL, tables in this section present a summary of the results of DOE’s quantitative analysis for each TSL. In addition to the quantitative results presented in the tables, DOE also considers other burdens and benefits that affect economic justification. These include the impacts on identifiable subgroups of consumers who may be disproportionately affected by a national standard and impacts on employment.

DOE also notes that the economics literature provides a wide-ranging discussion of how consumers trade off upfront costs and energy savings in the absence of government intervention. Much of this literature attempts to explain why consumers appear to undervalue energy efficiency improvements. There is evidence that consumers undervalue future energy savings as a result of: (1) A lack of information; (2) a lack of sufficient salience of the long-term or aggregate benefits; (3) a lack of sufficient savings to warrant delaying or altering purchases; (4) excessive focus on the short term, in the form of inconsistent weighting of future energy cost savings relative to available returns on other investments; (5) computational or other difficulties associated with the evaluation of relevant tradeoffs; and (6) a divergence in incentives (for example, between renters and owners, or builders and purchasers). Having less than perfect foresight and a high degree of uncertainty about the future, consumers may trade off these types of investments at a rate higher than expected rate between current consumption and uncertain future energy cost savings.

In DOE’s current regulatory analysis, potential changes in the benefits and costs of a regulation due to changes in consumer purchase decisions are included in two ways. First, if consumers forego the purchase of a product in the standards case, this decreases sales for product manufacturers, and the impact on manufacturers attributed to lost revenue is included in the MIA. Second, DOE accounts for energy savings attributable only to products actually used by consumers in the standards case; if a regulatory option decreases the number of products purchased by consumers, this decreases the potential energy savings from an energy conservation standard. DOE provides estimates of shipments and changes in the volume of product purchases in chapter 9 of the final rule TSD. However, DOE’s current analysis does not explicitly control for heterogeneity in consumer preferences, preferences across subcategories of products or specific features, or consumer price sensitivity variation according to household income.65

While DOE is not prepared at present to provide a fuller quantifiable framework for estimating the benefits and costs of changes in consumer purchase decisions due to an energy conservation standard, DOE is committed to developing a framework that can support empirical quantitative tools for improved assessment of the consumer welfare impacts of appliance standards. DOE has posted a paper that discusses the issue of consumer welfare impacts of appliance energy conservation standards, and potential enhancements to the methodology by which these impacts are defined and estimated in the regulatory process.66 DOE welcomes comments on how to more fully assess the potential impact of energy conservation standards on consumer choice and how to quantify this impact in its regulatory analysis in future rulemakings.

1. Benefits and Burdens of TSLs Considered for Battery Charger Standards

Table V–53 and Table V–54 summarize the quantitative impacts estimated for each TSL for battery chargers. The efficiency levels contained in each TSL are described in section V.B of this document.

<table>
<thead>
<tr>
<th>TABLE V–53—BATTERY CHARGERS: SUMMARY OF NATIONAL IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Cumulative FFC Energy Savings quads</td>
</tr>
<tr>
<td>NPV of Consumer Costs and Benefits 2013$ billion</td>
</tr>
<tr>
<td>3% discount rate</td>
</tr>
<tr>
<td>7% discount rate</td>
</tr>
<tr>
<td>Cumulative FFC Emissions Reduction</td>
</tr>
<tr>
<td>CO₂ million metric tons</td>
</tr>
<tr>
<td>SO₂ thousand tons</td>
</tr>
<tr>
<td>NOₓ thousand tons</td>
</tr>
<tr>
<td>Hg tons</td>
</tr>
<tr>
<td>CH₄ thousand tons</td>
</tr>
<tr>
<td>CH₄ thousand tons CO₂eq*</td>
</tr>
<tr>
<td>N₂O thousand tons</td>
</tr>
<tr>
<td>N₂O thousand tons CO₂eq*</td>
</tr>
<tr>
<td>Value of Emissions Reduction</td>
</tr>
<tr>
<td>CO₂ 2013$ billion**</td>
</tr>
</tbody>
</table>

---

DOE first considered TSL 4, which represents the max-tech efficiency levels. TSL 4 would save 0.703 quads of energy, an amount DOE considers significant. Under TSL 4, the NPV of consumer benefit would be −$27.9 billion using a discount rate of 7 percent, and −$47.9 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 4 are 43.99 Mt of CO₂, 76.73 thousand tons of NOₓ, 26.86 thousand tons of SO₂, 0.099 ton of Hg, 177.8 thousand tons of CH₄, and 0.553 thousand tons of N₂O. The estimated monetary value of the CO₂ emissions reductions at TSL 4 ranges from $0.349 billion to $4.566 billion.

At TSL 4, the average LCC impact is a cost of $3.44 for PC 1, $2.79 for PC 2, $2.17 for PC 3, $4.91 for PC 4, $138.63 for PC 5, $129.15 for PC 6, and $80.05 for PC 7. The simple payback period is 7.4 years for PC 1, 19.5 years for PC 2, 31.2 years for PC 3, 20.7 years for PC 4, 29.1 years for PC 5, 12.5 years for PC 6, and 8.1 years for PC 7. The fraction of consumers experiencing a net LCC cost is 96.3 percent for PC 1, 73.8 percent for PC 2, 40.8 percent for PC 3, 25.8 percent for PC 4, 99.7 percent for PC 5, 100 percent for PC 6, and 100 percent for PC 7.

At TSL 4, the projected change in INPV ranges from a decrease of $15.892 million to an increase of $1,113 million, equivalent to −19.9 percent and 1.4 percent, respectively.

The Secretary concludes that at TSL 4 for battery chargers, the benefits of energy savings, emission reductions, and the estimated monetary value of the CO₂ emissions reductions would be outweighed by the economic burden on consumers (demonstrated by a negative NPV and LCC for all product classes), and the impacts on manufacturers, including the conversion costs and profit margin impacts that could result in a large reduction in INPV. Consequently, the Secretary has concluded that TSL 4 is not economically justified.

DOE then considered TSL 3. TSL 3 would save 0.540 quads of energy, an amount DOE considers significant. Under TSL 3, the NPV of consumer benefit would be −$9.5 billion using a discount rate of 7 percent, and −$16.2 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 3 are 33.77 Mt of CO₂, 58.94

### TABLE V–53—BATTERY CHARGERS: SUMMARY OF NATIONAL IMPACTS—Continued

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ−3% discount rate 2013$ million</td>
<td>26.5 to 60.4</td>
<td>41.6 to 94.7</td>
<td>129.6 to 295.4</td>
<td>168.9 to 385.1</td>
</tr>
<tr>
<td>NOₓ−7% discount rate 2013$ million</td>
<td>13.4 to 30.3</td>
<td>20.8 to 47.0</td>
<td>64.8 to 146.0</td>
<td>84.6 to 190.7</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (−) values.

*CO₂eq is the quantity of CO₂ that would have the same GWP.

**Range of the economic value of CO₂ reductions is based on estimates of the global benefit of reduced CO₂ emissions.

### TABLE V–54—BATTERY CHARGERS: SUMMARY OF MANUFACTURER AND CONSUMER IMPACTS

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1*</th>
<th>TSL 2*</th>
<th>TSL 3*</th>
<th>TSL 4*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry NPV (% change)</td>
<td>(0.2)–(0.0)</td>
<td>(0.7)–(0.0)</td>
<td>(3.2)–(0.7)</td>
<td>(19.9)–(1.4)</td>
</tr>
</tbody>
</table>

**C O

<table>
<thead>
<tr>
<th>Manufacturer Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry NPV (% change)</td>
</tr>
</tbody>
</table>

**C O

**C O

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1*</th>
<th>TSL 2*</th>
<th>TSL 3*</th>
<th>TSL 4*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 1—Low E, Inductive *</td>
<td>0.08</td>
<td>0.71</td>
<td>0.71</td>
<td>(3.44)</td>
</tr>
<tr>
<td>PC 2—Low E, Low-Voltage</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>(2.79)</td>
</tr>
<tr>
<td>PC 3—Low E, Medium-Voltage</td>
<td>0.08</td>
<td>0.08</td>
<td>1.36</td>
<td>(2.17)</td>
</tr>
<tr>
<td>PC 4—Low E, High-Voltage</td>
<td>0.11</td>
<td>0.11</td>
<td>(0.38)</td>
<td>(4.91)</td>
</tr>
<tr>
<td>PC 5—Medium E, Low-Voltage *</td>
<td>0.00</td>
<td>0.84</td>
<td>138.63</td>
<td>(138.63)</td>
</tr>
<tr>
<td>PC 6—Medium E, High-Voltage *</td>
<td>0.00</td>
<td>1.89</td>
<td>129.15</td>
<td>(129.15)</td>
</tr>
<tr>
<td>PC 7—High E</td>
<td>51.06</td>
<td>51.06</td>
<td>(80.05)</td>
<td>(80.05)</td>
</tr>
</tbody>
</table>

**C O

<table>
<thead>
<tr>
<th>Consumer Average LCC Savings (2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 1—Low E, Inductive *</td>
</tr>
<tr>
<td>PC 2—Low E, Low-Voltage</td>
</tr>
<tr>
<td>PC 3—Low E, Medium-Voltage</td>
</tr>
<tr>
<td>PC 4—Low E, High-Voltage</td>
</tr>
<tr>
<td>PC 5—Medium E, Low-Voltage *</td>
</tr>
<tr>
<td>PC 6—Medium E, High-Voltage *</td>
</tr>
<tr>
<td>PC 7—High E</td>
</tr>
</tbody>
</table>

**C O

<table>
<thead>
<tr>
<th>Consumer Simple PBP (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 1—Low E, Inductive *</td>
</tr>
<tr>
<td>PC 2—Low E, Low-Voltage</td>
</tr>
<tr>
<td>PC 3—Low E, Medium-Voltage</td>
</tr>
<tr>
<td>PC 4—Low E, High-Voltage</td>
</tr>
<tr>
<td>PC 5—Medium E, Low-Voltage *</td>
</tr>
<tr>
<td>PC 6—Medium E, High-Voltage *</td>
</tr>
<tr>
<td>PC 7—High E</td>
</tr>
</tbody>
</table>

**C O

<table>
<thead>
<tr>
<th>% of Consumers that Experience Net Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 1—Low E, Inductive *</td>
</tr>
<tr>
<td>PC 2—Low E, Low-Voltage</td>
</tr>
<tr>
<td>PC 3—Low E, Medium-Voltage</td>
</tr>
<tr>
<td>PC 4—Low E, High-Voltage</td>
</tr>
<tr>
<td>PC 5—Medium E, Low-Voltage *</td>
</tr>
<tr>
<td>PC 6—Medium E, High-Voltage *</td>
</tr>
<tr>
<td>PC 7—High E</td>
</tr>
</tbody>
</table>

*Parentheses indicate negative (−) values.
thousand tons of NO\textsubscript{x}, 20.61 thousand tons of SO\textsubscript{2}, 0.076 ton of Hg, 136.6 thousand tons of CH\textsubscript{4}, and 0.424 thousand tons of N\textsubscript{2}O. The estimated monetary value of the CO\textsubscript{2} emissions reduction at TSL 3 ranges from $0.267 billion to $3.504 billion.

At TSL 3, the average LCC impact is a savings of $0.71 for PC 1 and $0.06 for PC 2, and a cost of $1.36 for PC 3, $0.38 for PC 4, $138.63 for PC 5, $129.15 for PC 6, and $80.05 for PC 7. The simple payback period is 1.5 years for PC 1, 2.5 years for PC 2, 21.6 years for PC 3, 3.2 years for PC 4, 29.1 years for PC 5, 12.5 years for PC 6, and 8.1 years for PC 7.

The fraction of consumers experiencing a net LCC cost is 0.0 percent for PC 1, 33.1 percent for PC 2, 39.0 percent for PC 3, 12.6 percent for PC 4, 99.7 percent for PC 5, 100 percent for PC 6, and 100 percent for PC 7.

At TSL 3, the projected change in INPV ranges from a decrease of $2,517 billion to $18 million, equivalent to −0.7 percent and less than −0.1 percent, respectively.

The Secretary concludes that at TSL 3 for battery chargers, the benefits of energy savings, emission reductions, and the estimated monetary value of the CO\textsubscript{2} emissions reductions would be outweighed by the economic burden on consumers (demonstrated by a negative NPV and LCC for most product classes), and the impacts on manufacturers, including the conversion costs and profit margin impacts that could result in a large reduction in INPV. Consequently, the Secretary has concluded that TSL 3 is not economically justified.

DOE then considered TSL 2. TSL 2 would save 0.173 quads of energy, an amount DOE considers significant. Under TSL 2, the NPV of consumer benefit would be $0.6 billion using a discount rate of 7 percent, and $1.2 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 2 are 10.79 Mt of CO\textsubscript{2}, 18.83 thousand tons of NO\textsubscript{x}, 6.58 thousand tons of SO\textsubscript{2}, 0.024 ton of Hg, 43.6 thousand tons of CH\textsubscript{4}, and 0.136 thousand tons of N\textsubscript{2}O. The estimated monetary value of the CO\textsubscript{2} emissions reduction at TSL 2 ranges from $0.086 billion to $1.121 billion.

At TSL 2, the average LCC impact is a savings of $0.71 for PC 1, $0.07 for PC 2, $0.08 for PC 3, $0.11 for PC 4, $0.84 for PC 5, $1.89 for PC 6, and $51.06 for PC 7. The simple payback period is 1.5 years for PC 1, 0.6 years for PC 2, 0.8 years for PC 3, 1.4 years for PC 4, 2.7 years for PC 5, 1.1 years for PC 6, and 0.0 years for PC 7.

The fraction of consumers experiencing a net LCC cost is 0.0 percent for PC 1, 1.2 percent for PC 2, 0.6 percent for PC 3, 1.3 percent for PC 4, 0.6 percent for PC 5, 0.0 percent for PC 6, and 0.0 percent for PC 7.

At TSL 2, the projected change in INPV ranges from a decrease of $529 million to a decrease of $18 million, equivalent to −0.7 percent and less than −0.1 percent, respectively.

The Secretary concludes that at TSL 2 for battery chargers, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, and the estimated monetary value of the CO\textsubscript{2} emissions reductions, and positive average LCC savings would outweigh the negative impacts on some consumers and on manufacturers, including the conversion costs that could result in a reduction in INPV for manufacturers.

After considering the analysis and the benefits and burdens of TSL 2, the Secretary concludes that this TSL will offer the maximum improvement in efficiency that is technologically feasible and economically justified, and will result in the significant conservation of energy. Therefore, based on the above considerations, DOE is adopting energy conservation standards for battery chargers at TSL 2. The energy conservation standards for battery chargers are shown in Table V–55.

### Table V–55—Adopted Energy Conservation Standards for Battery Chargers

<table>
<thead>
<tr>
<th>Product class</th>
<th>Description</th>
<th>Maximum unit energy consumption (kWh/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low-Energy, Inductive</td>
<td>3.04</td>
</tr>
<tr>
<td>2</td>
<td>Low-Energy, Low-Voltage</td>
<td>0.1440 E\textsubscript{batt} + 2.95</td>
</tr>
<tr>
<td>3</td>
<td>Low-Energy, Medium-Voltage</td>
<td>For E\textsubscript{batt} &lt; 10Wh,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UEC = 1.42 kWh/yr;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E\textsubscript{batt} ≥ 10 Wh,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UEC = 0.0255 * E\textsubscript{batt} + 1.16</td>
</tr>
<tr>
<td>4</td>
<td>Low-Energy, High-Voltage</td>
<td>0.011 * E\textsubscript{batt} + 3.18</td>
</tr>
<tr>
<td>5</td>
<td>Medium-Energy, Low-Voltage</td>
<td>0.0257 * E\textsubscript{batt} + 0.815</td>
</tr>
<tr>
<td>6</td>
<td>Medium-Energy, High-Voltage</td>
<td>0.0778 * E\textsubscript{batt} + 2.4</td>
</tr>
<tr>
<td>7</td>
<td>High-Energy</td>
<td>0.0802(E\textsubscript{batt}) + 4.53</td>
</tr>
</tbody>
</table>

2. Summary of Annualized Benefits and Costs of the Adopted Standards

The benefits and costs of the adopted standards can also be expressed in terms of annualized values. The annualized net benefit is the sum of: (1) The annualized national economic value (expressed in 2013S) of the benefits from operating products that meet the adopted standards (consisting primarily of operating cost savings from using less energy, minus increases in product purchase costs, and (2) the annualized monetary value of the benefits of CO\textsubscript{2} and NO\textsubscript{x} emission reductions.\textsuperscript{67}

\textsuperscript{67}To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2014, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year’s shipments in the year in which the shipments occur (2020, 2030, etc.), and then discounted the present value from each year to 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO\textsubscript{2} reductions, for which DOE used case-specific discount rates. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year that yields the same present value.

Table V–56 shows the annualized values for battery chargers under TSL 2.

expressed in 2013S. The results under the primary estimate are as follows. Using a 7-percent discount rate for benefits and costs other than CO\textsubscript{2} reductions (for which DOE used a 3-percent discount rate along with the average SCC series corresponding to a value of $40.0/ton in 2015 (2013S)), the estimated cost of the adopted standards for battery chargers is $9 million per year in increased equipment costs, while the estimated benefits are $68 million per year in reduced equipment operating costs, $20 million per year in CO\textsubscript{2} reductions, and $1.92 million per year in reduced NO\textsubscript{x} emissions. In this
Additionally, the High Benefits Estimates include a price trend on the incremental product costs. The Primary, Low Benefits, and High Estimate, respectively.

Using a 3-percent discount rate for all benefits and costs and the average SCC series corresponding to a value of $40.0/ton in 2015 (in 2013$), the estimated cost of the adopted standards for battery chargers is $10 million per year in increased equipment costs, while the estimated annual benefits are $75 million in reduced operating costs, $20 million in CO2 reductions, and $2.25 million in reduced NOx emissions. In this case, the net benefit amounts to $88 million per year.

**TABLE V—ANNUALIZED BENEFITS AND COSTS OF ADOPTED STANDARDS (TSL 2) FOR BATTERY CHARGERS**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Discount rate</th>
<th>Primary estimate*</th>
<th>Low net benefits estimate</th>
<th>High net benefits estimate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Cost Savings .................................................................</td>
<td>7%</td>
<td>68</td>
<td>68</td>
<td>69</td>
</tr>
<tr>
<td>CO2 Reduction Monetized Value ($12.2/t case) **</td>
<td>3%</td>
<td>75</td>
<td>74</td>
<td>76</td>
</tr>
<tr>
<td>CO2 Reduction Monetized Value ($40.0/t case) **</td>
<td>3%</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>CO2 Reduction Monetized Value ($62.3/t case) **</td>
<td>2.5%</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>CO2 Reduction Monetized Value ($117/t case) **</td>
<td>3%</td>
<td>61</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>NOx Reduction Monetized Value ††</td>
<td>7%</td>
<td>1.92</td>
<td>1.92</td>
<td>4.34</td>
</tr>
<tr>
<td>Total Benefits ††</td>
<td>7% plus CO2 range</td>
<td>76 to 131</td>
<td>76 to 131</td>
<td>80 to 134</td>
</tr>
<tr>
<td>Consumer Incremental Product Costs</td>
<td>7%</td>
<td>90</td>
<td>90</td>
<td>94</td>
</tr>
<tr>
<td>Total ††</td>
<td>7% plus CO2 range</td>
<td>83 to 138</td>
<td>83 to 138</td>
<td>87 to 142</td>
</tr>
</tbody>
</table>

**Costs**

**Net Benefits**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Discount rate</th>
<th>Primary estimate*</th>
<th>Low net benefits estimate</th>
<th>High net benefits estimate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Cost Savings .................................................................</td>
<td>7%</td>
<td>68</td>
<td>68</td>
<td>69</td>
</tr>
<tr>
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<td>74</td>
<td>76</td>
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<td>6</td>
<td>6</td>
<td>6</td>
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<td>20</td>
<td>20</td>
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<td>7% plus CO2 range</td>
<td>83 to 138</td>
<td>83 to 138</td>
<td>87 to 142</td>
</tr>
</tbody>
</table>

* This table presents the annualized costs and benefits associated with battery chargers shipped in 2018–2047. These results include benefits to consumers which accrue after 2047 from the products purchased in 2018–2047. The results account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule. The Primary, Low Benefits, and High Benefits Estimates utilize projections of energy prices from the AEO 2015 Reference case, Low Estimate, and High Estimate, respectively. Additionally, the High Benefits Estimates include a price trend on the incremental product costs.

**The CO2 values represent global monetized values of the SCC, in 2013$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5%, 3%, and 2.5% discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3% discount rate. The SCC time series incorporate an escalation factor. The value for NOx is the average of high and low values found in the literature.**

**†† DOE estimated the monetized value of NOx emissions reductions using benefit per ton estimates from the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality Planning and Standards. (Available at: http://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-regulatory-impact-analysis.) See section IV.L.2 for further discussion. For DOE’s Primary Estimate and Low Net Benefits Estimate, the agency used a national benefit-per-ton estimate for particulate matter emitted from the Electric Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). For DOE’s High Net Benefits Estimate, the benefit-per-ton estimates were based on the Six Cities study (Lepule et al., 2011), which are nearly two-and-a-half times larger than those from the ACS study.**

VI. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

Section 1(b)(1) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), requires each agency to identify the problem that it intends to address, including, where applicable, the failures of private markets or public institutions that warrant new agency action, as well as to assess the significance of that problem. The problems that the adopted standards for battery chargers are intended to address are as follows:

1. Insufficient information and the high costs of gathering and analyzing relevant information leads some consumers to miss opportunities to make cost-effective investments in energy efficiency.
2. In some cases the benefits of more efficient equipment are not realized due to misaligned incentives between purchasers and users. An example of such a case is when the equipment purchase decision is made by a building contractor or building owner who does not pay the energy costs.
3. There are external benefits resulting from improved energy efficiency of appliances that are not captured by the users of such equipment. These benefits include externalities related to public health, environmental protection and national energy security that are not reflected in energy prices, such as reduced emissions of air pollutants and greenhouse gases that impact human health and global warming. DOE
attempts to qualify some of the external benefits through use of social cost of carbon values.

In addition, DOE has determined that this regulatory action is not a “significant regulatory action” under Executive Order 12866. Therefore, DOE did not present for review to the Office of Information and Regulatory Affairs (OIRA) in the OMB the draft rule and other documents prepared for this rulemaking, including a regulatory impact analysis (RIA). DOE has also reviewed this regulation pursuant to Executive Order 13563, issued on January 18, 2011. (76 FR 3281, Jan. 21, 2011) E.O. 13563 is supplemental to and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. To the extent permitted by law, agencies are required by Executive Order 13563 to: (1) Propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); (2) tailor regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

DOE emphasizes as well that Executive Order 13563 requires agencies to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible. In its guidance, OIRA has emphasized that such techniques may include identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes. For the reasons stated in the preamble, DOE believes that this final rule is consistent with these principles, including the requirement that, to the extent permitted by law, benefits justify costs and that net benefits are maximized.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires preparation of a final regulatory flexibility analysis (“FRA”) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel’s Web site (http://energy.gov/gc/office-general-counsel). DOE has prepared the following FRA for the products that are subject of this rulemaking.

1. Description of the Need for and Objectives of, the Rule

A description of the need for, and objectives of, the rule is set forth elsewhere in the preamble and not repeated here.

2. Description of Significant Issues Raised by Public Comment

DOE received no comments specifically on the initial regulatory flexibility analysis prepared for this rulemaking. Comments on the economic impacts of the rule are discussed elsewhere in the preamble and did not necessitate changes to the analysis required by the Regulatory Flexibility Act.

3. Description of Comments Submitted by the Small Business Administration

The Small Business Administration did not submit comments on DOE’s earlier proposal detailing the standards that DOE is adopting in this rule.

4. Description on Estimated Number of Small Entities Regulated

a. Methodology for Estimating the Number of Small Entities

For manufacturers of battery chargers, the SBA has set a size threshold, which defines those entities classified as “small businesses” for the purposes of the statute. DOE used the SBA’s small business size standards to determine whether any small entities would be subject to the requirements of the rule. 65 FR 30836, 30848 (May 15, 2000), as amended at 65 FR 53533, 53544 (Sept. 5, 2000) and codified at 13 CFR part 121. The size standards are listed by North American Industry Classification System (NAICS) code and industry description and are available at http://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf. Battery charger manufacturing is classified under NAICS 335999, “All Other Miscellaneous Electrical Equipment and Component Manufacturing.” The SBA sets a threshold of 500 employees or less for an entity to be considered as a small business for this category.

b. Manufacturer Participants

Before issuing the NOPR for this rulemaking, DOE contacted the potential small business manufacturers of battery chargers it had identified. One small business consented to being interviewed during the rulemaking. DOE also

...
obtained information about small business impacts while interviewing large manufacturers.

c. Industry Structure

With respect to battery chargers, industry structure is typically defined by the characteristics of the industry of the application(s) for which the battery chargers are produced. In the case of the small business DOE identified, however, the battery charger itself is the product the small business produces. That is, the company does not also produce the applications with which the battery charger is intended to be used—in this case, battery chargers predominantly intended for golf cars (PC 7).

A high level of concentration exists in the market for battery chargers used for golf cars. Two golf car battery charger manufacturers account for the vast majority of the golf car battery charger market and each have a similar share. Both competitors in the golf car battery charger market are, in terms of the number of their employees, small entities; one is foreign-owned and operated, while the other is a domestic small business, as defined by SBA. Despite this concentration, there is considerable competition for three main reasons. First, each golf car battery charger manufacturer sells into a market that is almost as equally concentrated: three golf car manufacturers supply the majority of the golf cars sold domestically and none of them manufactures golf car battery chargers. Second, while there are currently only two major suppliers of golf car battery chargers to the domestic market, the constant prospect of potential entry from other foreign countries has ceded substantial buying power to the three golf car OEMs. Third, golf car manufacturers can choose not to build electric golf cars (eliminating the need for the battery charger) by opting to build gas-powered products. DOE examined a price elasticity sensitivity scenario for this in appendix 12-B of the final rule TSD to assess this possibility. Currently, roughly three-quarters of the golf car market is electric-based, with the remainder gas-powered.

The majority of industry shipments flow to the “fleet” segment—i.e., battery chargers sold to golf car manufacturers who then lease the cars to golf courses. Most cars are leased for the first few years before being sold to smaller golf courses or other individuals for personal use. A smaller portion of golf cars are sold as new through dealer distribution.

Further upstream, approximately half of the battery chargers intended for golf car use is manufactured domestically, while the other half is foreign-sourced. During the design cycle of the golf car, the battery charger supplier and OEM typically work closely together when designing the battery charger.

The small business manufacturer is also a relatively smaller player in the markets for wheelchair and industrial lift battery chargers. Most wheelchair battery chargers and the wheelchairs themselves are manufactured overseas. Three wheelchair manufacturers supply the majority of the U.S. market, but do not have domestic manufacturing. DOE does not anticipate the adopted standard to have a negative impact on motorized wheelchair operations because the standard for PC 5 inherently scales with battery energy. Irrespective of the size of the battery used in wheelchair applications, charge current will only terminate when the battery has reached a predetermined max voltage and is fully charged. DOE therefore has no reason to believe that compliant chargers would undercharge certain types of batteries and affect a wheelchair’s runtime and performance. Further, battery chargers at the adopted standard already exist in the marketplace and these battery chargers have shown to charge wheelchair batteries effectively.

d. Comparison Between Large and Small Entities

As discussed in the previous section, there are two major suppliers in the golf car battery charger market. Both are small entities, although one is foreign-owned and operated and does not qualify as a small business per the SBA definition. These two small entities have a similar market share and sales volumes. DOE did not identify any large businesses with which to compare the projected impacts on small businesses.

5. Description and Estimate of Compliance Requirements

The U.S.-owned small business DOE identified manufactures battery chargers for golf cars (PC 7). DOE anticipates the adopted rule will require both capital and product conversion costs to achieve compliance. The ELs adopted for PCs 5, 6, and 7 will drive different levels of small business impacts. The compliance costs associated with the adopted TSLs are present in Table VI–1 through Table VI–3.

DOE does not expect the adopted TSL to require significant capital expenditures. Although some new assembly equipment and tooling would be required, the magnitude of these expenditures would be unlikely to cause significant adverse financial impacts. PC 7 drives the majority of these costs. See Table VI–1 for the estimated capital conversion costs for a typical small business.

---

**TABLE VI–1 ESTIMATED CAPITAL CONVERSION COSTS FOR A SMALL BUSINESS**

<table>
<thead>
<tr>
<th>Product class and estimated capital conversion cost</th>
<th>TSL 1</th>
<th>TSL 2*</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Classes 5 and 6</td>
<td>EL 1</td>
<td>EL 2</td>
<td>EL 2</td>
<td>EL 3</td>
</tr>
<tr>
<td>Product Class 7</td>
<td>EL 1</td>
<td>EL 1</td>
<td>EL 2</td>
<td>EL 2</td>
</tr>
<tr>
<td>Estimated Capital Conversion Costs (2013$)</td>
<td>$0.1</td>
<td>$0.1</td>
<td>$0.2</td>
<td>$0.2</td>
</tr>
</tbody>
</table>

*This is the TSL adopted in this final rule.

---

The product conversion costs associated with standards are more significant for the small business manufacturer than the projected capital conversion costs. TSL 2 for PC 7 reflects a technology change from a linear battery charger or less efficient high-frequency design battery charger at the baseline to a more efficient switch-mode or high-frequency design battery charger. This change would require manufacturers that produce linear or less efficient high-frequency design battery chargers to invest in the development of a new product design, which would require investments in engineering resources for R&D, testing and certification, and marketing and training changes. Again, the level of expenditure at each TSL is driven almost entirely by the changes required for PC 7 at each TSL. Additionally, based on market research conducted during the analysis period of this final rule, DOE has found that manufacturers (including those based domestically) who previously sold exclusively, or primarily, linear battery chargers, are now selling switch-mode battery chargers, which are capable of charging
batteries equal to similar batteries charged by linear battery chargers offered by the same manufacturer. See Table VI–2 for the estimated product conversion costs for a typical small business.

### Table VI–2 Estimated Product Conversion Costs for a Small Business

<table>
<thead>
<tr>
<th>Product class and estimated product conversion cost</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Classes 5 and 6</td>
<td>EL 1</td>
<td>EL 2</td>
<td>EL 3</td>
<td>EL 3</td>
</tr>
<tr>
<td>Product Class 7</td>
<td>EL 1</td>
<td>EL 1</td>
<td>EL 2</td>
<td>EL 2</td>
</tr>
<tr>
<td>Estimated Product Conversion Costs (2013$)</td>
<td>$1.8</td>
<td>$2.0</td>
<td>$5.1</td>
<td>$5.1</td>
</tr>
</tbody>
</table>

*This is the TSL adopted in this rulemaking.

Table VI–3 displays the total capital and product conversion costs associated with each TSL.

### Table VI–3 Estimated Total Conversion Costs for a Small Business

<table>
<thead>
<tr>
<th>Product class and estimated total conversion cost</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Classes 5 and 6</td>
<td>EL 1</td>
<td>EL 2</td>
<td>EL 3</td>
<td>EL 3</td>
</tr>
<tr>
<td>Product Class 7</td>
<td>EL 1</td>
<td>EL 1</td>
<td>EL 2</td>
<td>EL 2</td>
</tr>
<tr>
<td>Estimated Total Conversion Costs (2013$)</td>
<td>$1.9</td>
<td>$2.1</td>
<td>$4.3</td>
<td>$4.3</td>
</tr>
</tbody>
</table>

* This is the TSL adopted in this final rule making.

Based on its engineering analysis, manufacturer interviews and public comments, DOE believes TSL 2 for PC 7 would establish an efficiency level that standard linear battery chargers could not cost-effectively achieve. Not only would the size and weight of such chargers potentially conflict with end-user preferences, but the additional steel and copper requirements would make such chargers cost-prohibitive in the marketplace. Baseline linear designs are already significantly more costly to manufacture than the more-efficient switch-mode designs, as DOE’s cost efficiency curve shows in the engineering section (see Table IV–10).

While several battery chargers manufactured by the one small business DOE identified would need to be modified to meet the adopted standards for PC 7, this manufacturer also sells several switch-mode battery chargers. Therefore, DOE anticipates that this manufacturer could comply with the proposal by modifying their existing switch-mode battery charger specifications. This would require significantly fewer R&D resources than completely redesigning all of their production line. Additionally, DOE acknowledges that some or all existing domestic linear battery charger manufacturing could be lost due to the adopted standards, since it is likely that switch-mode battery charger manufacturing would take place abroad.

6. Description of Steps Taken To Minimize Impacts to Small Businesses

The discussion in the previous sections analyzes impacts on small businesses that would result from the other TSLs DOE considered. Though TSLs lower than the adopted TSL are expected to reduce the impacts on small entities, DOE is required by EPCA to establish standards that achieve the maximum improvement in energy efficiency that are technically feasible and economically justified, and result in a significant conservation of energy. Once DOE determines that a particular TSL meets those requirements, DOE adopts that TSL in satisfaction of its obligations under EPCA.

With respect to TSL 4, DOE estimates that while there would be an additional 0.525 quads of energy savings at TSL 4 compared to the adopted standards, TSL 2, it would cause consumers to lose $27.9 billion using a 7-percent discount rate or $47.9 billion using a 3-percent discount rate, compared to consumers saving $0.6 billion using a 7-percent discount rate or saving $1.2 billion using a 3 percent discount rate at the adopted standards, TSL 2. Also, manufacturers could lose up to 19.9 percent of their INPV at TSL 4. DOE determined that the additional cost to consumers and the potential reduction in manufacturer INPV, would outweigh the potential energy savings benefits.

In addition, while TSL 1 would reduce the impacts on small business manufacturers, it would come at the expense of a significant reduction in energy savings and NPV benefits to consumers, achieving 36 percent lower energy savings and 17 to 25 percent less NPV benefits to consumers compared to the energy savings and NPV benefits at TSL 2.

EPCA requires DOE to establish standards at the level that would achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. Based on its analysis, DOE concluded that TSL 2 achieves the maximum improvement in energy efficiency that is technologically feasible and economically justified. Therefore, DOE did not establish standards at the levels considered at TSL 3 and TSL 4 because DOE determined that they were not economically justified. DOE’s analysis of economic justification considers impacts on manufacturers, including small businesses. While TSL 1 would reduce the impacts on small business manufacturers, EPCA prohibits DOE from adopting TSL 1.

In summary, DOE concluded that establishing standards at TSL 2 balances the benefits of the energy savings and the NPV benefits to consumers at TSL 2.
2 with the potential burdens placed on battery charger application manufacturers, including small business manufacturers. Accordingly, DOE did not adopt any of the other TSLs considered in the analysis, or the other policy alternatives detailed as part of the regulatory impacts analysis included in chapter 17 of the final rule TSD. Additional compliance flexibilities may be available through other means. EPCA provides that a manufacturer whose annual gross revenue from all of its operations does not exceed $8 million may apply for an exemption from all or part of an energy conservation standard for a period not longer than 24 months after the effective date of a final rule establishing the standard. Additionally, Section 504 of the Department of Energy Organization Act, 42 U.S.C. 7194, provides authority for the Secretary to adjust a rule issued under EPCA in order to prevent “special hardship, inequity, or unfair distribution of burdens” that may be imposed on that manufacturer as a result of such a rule. Manufacturers should refer to 10 CFR part 430, subpart E, and part 1003 for additional details.

C. Review Under the Paperwork Reduction Act

Manufacturers of battery chargers must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for battery chargers, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including battery chargers. 76 FR 12422 (March 7, 2011); 80 FR 5099 (Jan. 30, 2015). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. Public reporting burden for the certification is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

Pursuant to the National Environmental Policy Act (NEPA) of 1969, DOE has determined that this rule fits within the category of actions included in Categorical Exclusion (CX) B5.1 (Actions to conserve energy or water) and otherwise meets the requirements for application of a CX. See 10 CFR part 1021, App. B, B5.1(b); 1021.410(b) and App. B, B5(1)–(5). The rule fits within this category of actions because it is a rulemaking that establishes energy conservation standards for consumer products or industrial equipment, and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, DOE has made a CX determination for this rulemaking, and DOE does not need to prepare an Environmental Assessment or Environmental Impact Statement for this rule. DOE's CX determination for this rule is available at http://cnenepa.energy.gov/.

E. Review Under Executive Order 13132

Executive Order 13132, “Federalism.” 64 FR 43255 (Aug. 10, 1999) imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this final rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297) Therefore, no further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. 61 FR 4729 (Feb. 7, 1996). Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this final rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1531). The UMRA also requires a Federal agency to develop an effective process to permit
timely input by elected officers of State, local, and Tribal governments on a "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820. DOE's policy statement is also available at http://energy.gov/sites/prod/files/gcprod/documents/umra_97.pdf.

DOE has concluded that this final rule may require expenditures of $100 million or more in any one year by the private sector. Such expenditures may include: (1) Investment in research and development and in capital expenditures by battery charger manufacturers in the years between the final rule and the compliance date for the new standards, and (2) incremental additional expenditures by consumers to purchase higher-efficiency battery chargers, starting at the compliance date for the applicable standard.

Section 202 of UMRA authorizes a Federal agency to respond to the content requirements of UMRA in any other statement or analysis that accompanies the final rule. (2 U.S.C. 1532(c)). The content requirements of section 202(b) of UMRA relevant to a private sector mandate substantially overlap the economic analysis requirements that apply under section 325(o) of EPCA and Executive Order 12866. The SUPPLEMENTARY INFORMATION section of this document and the TSD for this final rule respond to those requirements.

Under section 205 of UMRA, the Department is obligated to identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a written statement under section 202 is required. (2 U.S.C. 1535(a)) DOE is required to select from those alternatives the most cost-effective and least burdensome alternative that achieves the objectives of the rule unless DOE publishes an explanation for doing otherwise, or the selection of such an alternative is inconsistent with law. As required by 42 U.S.C. 6295(d), (f), and (o), this final rule establishes energy conservation standards for battery chargers that are designed to achieve the maximum improvement in energy efficiency that DOE has determined to be both technologically feasible and economically justified. A full discussion of the alternatives considered by DOE is presented in chapter 17 of the TSD for this final rule.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Public Law 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516, note) provides for Federal agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 53 FR 8859 (March 18, 1988), DOE has determined that this rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2006

Pursuant to Executive Order 12630, "Governmental Actions and Interference with Constitutionally Protected Property Rights" 53 FR 8859 (March 18, 1988), DOE has determined that this rule and the compliance date for the new standards, and (2) incremental additional expenditures by consumers to purchase higher-efficiency battery chargers, starting at the compliance date for the applicable standard.

Section 202 of UMRA authorizes a Federal agency to respond to the content requirements of UMRA in any other statement or analysis that accompanies the final rule. (2 U.S.C. 1532(c)). The content requirements of section 202(b) of UMRA relevant to a private sector mandate substantially overlap the economic analysis requirements that apply under section 325(o) of EPCA and Executive Order 12866. The SUPPLEMENTARY INFORMATION section of this document and the TSD for this final rule respond to those requirements.

Under section 205 of UMRA, the Department is obligated to identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a written statement under section 202 is required. (2 U.S.C. 1535(a)) DOE is required to select from those alternatives the most cost-effective and least burdensome alternative that achieves the objectives of the rule unless DOE publishes an explanation for doing otherwise, or the selection of such an alternative is inconsistent with law. As required by 42 U.S.C. 6295(d), (f), and (o), this final rule establishes energy conservation standards for battery chargers that are designed to achieve the maximum improvement in energy efficiency that DOE has determined to be both technologically feasible and economically justified. A full discussion of the alternatives considered by DOE is presented in chapter 17 of the TSD for this final rule.

K. Review Under Executive Order 13211

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any significant energy action. A “significant energy action” is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

DOE has concluded that this regulatory action, which sets forth energy conservation standards for battery chargers, is not a significant energy action because the standards are not likely to have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as such by the Administrator at OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects on this final rule.

L. Review Under the Information Quality Bulletin for Peer Review

On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review (the Bulletin). 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal Government, including influential scientific information related to agency regulatory actions. The purpose of the bulletin is to enhance the quality and credibility of the Government’s scientific information. Under the Bulletin, the energy conservation standards rulemaking analyses are “influential scientific information,” which the Bulletin defines as “scientific information the agency reasonably can determine will have, or does have, a clear and substantial impact on important public policies or private sector decisions.” Id at FR 2667.

In response to OMB’s Bulletin, DOE conducted formal in-progress peer reviews of the energy conservation standards development process and analyses and has prepared a Peer Review Report pertaining to the energy conservation standards rulemaking analyses. Generation of this report involved a rigorous, formal, and documented evaluation using objective criteria and qualified and independent reviewers to make a judgment as to the technical/scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of programs and/or projects. The “Energy Conservation Standards Rulemaking Peer Review Report” dated February 2007 has been disseminated and is available at the following Web site: www1.eere.energy.gov/buildings/appliance_standards/peer_review.html.
M. Congressional Notification

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is a “major rule” as defined by 5 U.S.C. 804(2).

VII. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this final rule.

List of Subjects in 10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Intergovernmental relations, Reporting and recordkeeping requirements, and Small businesses.

Issued in Washington, DC, on May 6, 2016.

David Friedman,
Principal Deputy Assistant Secretary, Energy Efficiency and Renewable Energy.

For the reasons set forth in the preamble, DOE amends part 430 of chapter II, subchapter D, of title 10 of the Code of Federal Regulations, as set forth below:

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

1. The authority citation for part 430 continues to read as follows:

<table>
<thead>
<tr>
<th>Product class</th>
<th>Product class description</th>
<th>Rated battery energy (E batt **)</th>
<th>Special characteristic or battery voltage</th>
<th>Maximum UEC (kWh/yr) (as a function of E batt **)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ...........</td>
<td>Low-Energy ..................</td>
<td>≤5 Wh ...............</td>
<td>Inductive Connection * ..........</td>
<td>3.04</td>
</tr>
<tr>
<td>2 ...........</td>
<td>Low-Energy, Low-Voltage ...</td>
<td>&lt;100 Wh ...........</td>
<td>&lt;4 V ..................................</td>
<td>0.1440 * E batt + 2.95 For E batt &lt;10 Wh, 1.42 kWh</td>
</tr>
<tr>
<td>3 ...........</td>
<td>Low-Energy, Medium-Voltage</td>
<td>4–10 V .................</td>
<td>1.42 kWh</td>
<td></td>
</tr>
<tr>
<td>4 ...........</td>
<td>Low-Energy, High-Voltage ..</td>
<td>&gt;10 V ..................</td>
<td>0.0255 * E batt + 1.16</td>
<td></td>
</tr>
<tr>
<td>5 ...........</td>
<td>Medium-Energy, Low-Voltage</td>
<td>100–3000 Wh ......</td>
<td>0.11 * E batt + 3.18</td>
<td></td>
</tr>
<tr>
<td>6 ...........</td>
<td>Medium-Energy, High-Voltage</td>
<td>&lt;20 V .................</td>
<td>0.0257 * E batt + 0.815</td>
<td></td>
</tr>
<tr>
<td>7 ...........</td>
<td>High-Energy ..................</td>
<td>≥20 V ..............</td>
<td>0.078 * E batt + 2.4</td>
<td></td>
</tr>
<tr>
<td>8 ...........</td>
<td>High-Energy ..................</td>
<td>&gt;3000 Wh ...........</td>
<td>0.0502 * E batt + 4.53</td>
<td></td>
</tr>
</tbody>
</table>

* Inductive connection and designed for use in a wet environment (e.g. electric toothbrushes).
** E batt = Rated battery energy as determined in 10 CFR part 429.39(a).

(2) A battery charger shall not be subject to the standards in paragraph (z)(1) of this section if it is a device that requires Federal Food and Drug Administration (FDA) listing and approval as a life-sustaining or life-supporting device in accordance with section 513 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360(c)).

Appendix

Note: The following letter from the Department of Justice will not appear in the Code of Federal Regulations.

DEPARTMENT OF JUSTICE

Antitrust Division

WILLIAM J. BAER
Assistant Attorney General
Main Justice Building, 950 Pennsylvania Avenue NW., Washington, DC 20530–0001, (202) 514–2401/(202) 616–2645 (Fax)

October 30, 2015.

Anne Harkavy

Dear Deputy General Counsel Harkavy: I am responding to your September 1, 2015, letter seeking views of the Attorney General about the impact on competition of proposed energy conservation standards for battery chargers. Your request was submitted under Section 325(o)(2)(B)(i)(V), which required the Attorney General to make determination of the impact of any lessening of competition this is likely to result from the imposition of proposed energy conservation standards. The Attorney General’s responsibility for responding to requests from other departments about the effect of a program on competition has been delegated to the Assistant Attorney General for the Antitrust Division in 28 CFR 0.40(g).

In conducting its analysis, the Antitrust Division examines whether a proposed standard may lessen competition, for example, by substantially limiting consumer choice or increasing industry concentration. A lessening of competition could result in higher prices to manufacturers and consumers.

We have reviewed the proposed standards contained in the Supplemental Notice of Proposed Rulemaking (80 Fed. Reg. 52,850, Sep. 1, 2015) and the related Technical Support Documents. We have also reviewed information presented at the public meeting held on the proposed standards on September 15, 2015.

Based on this review, our conclusion is that the proposed energy conservation standards for battery chargers are unlikely to have a significant adverse impact on competition.

Sincerely,
William J. Baer.

[FR Doc. 2016–12835 Filed 6–10–16; 8:45 am]
BILLING CODE 6450–01–P
Part III

Department of Energy

10 CFR Parts 429 and 430
Energy Conservation Program: Energy Conservation Standards for Dehumidifiers; Final Rule
DEPARTMENT OF ENERGY

10 CFR Parts 429 and 430
[Docket Number EERE–2012–BT–STD–0027]
RIN 1904–AC81

Energy Conservation Program: Energy Conservation Standards for Dehumidifiers


ACTION: Final rule.

SUMMARY: The Energy Policy and Conservation Act of 1975 (EPCA), as amended, prescribes energy conservation standards for various consumer products and certain commercial and industrial equipment, including dehumidifiers. EPCA also requires the U.S. Department of Energy (DOE) to periodically determine whether more-stringent standards would be technologically feasible and economically justified, and would save a significant amount of energy. In this final rule, DOE is adopting more-stringent energy conservation standards for dehumidifiers. It has determined that the amended energy conservation standards for these products would result in significant conservation of energy, and are technologically feasible and economically justified.

DATES: The effective date of this rule is August 12, 2016. Compliance with the amended standards established for dehumidifiers in this final rule is required on and after June 13, 2019.

ADDRESSES: The docket for this rulemaking, which includes Federal Register notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is available for review at www.regulations.gov. All documents in the docket are listed in the www.regulation.gov index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

A link to the docket Web page can be found at: http://www.regulations.gov/#/docketDetail?D=EERE-2012-BT-STD-0027. The www.regulations.gov Web page will contain instructions on how to access all documents, including public comments, in the docket.

For further information on how to review the docket, contact Ms. Brenda Edwards at (202) 586–2945 or by email: Brenda.Edwards@ee.doe.gov.


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DOE's analysis of the impacts of the adopted standards on consumers is described in section IV.F of this document.

B. Impact on Manufacturers

The industry net present value (INPV) is the sum of the discounted cash flows to the industry from the base year through the end of the analysis period (2016 to 2048). Using a real discount rate of 8.4 percent, DOE estimates that the INPV for manufacturers of dehumidifiers in the case without adopted standards is $179.5 million in 2014$. Under the adopted standards, DOE expects that manufacturers may lose up to 20.9 percent of this INPV, which is approximately $37.5 million. Additionally, DOE identified five other DOE regulations that impact dehumidifier manufacturers and considered potential manufacturer impacts associated with the cumulative burden of these regulations, as discussed in section V.B.2.e of this document. Based on DOE's interviews with the manufacturers of dehumidifiers and impacts analysis, DOE does not expect significant impacts on manufacturing capacity or loss of employment for the industry as a whole to result from the standards for dehumidifiers.

DOE's analysis of the impacts of the adopted standards on manufacturers is described in section IV.J of this document.

3 The average LCC savings are measured relative to the efficiency distribution in the no-new-standards case, which depicts the market in the compliance year in the absence of standards (see section IV.F.9). The simple PBP, which is designed to compare specific dehumidifier efficiency levels, is measured relative to the baseline model (see section IV.C.1.a).
C. National Benefits and Costs

DOE’s analyses indicate that the adopted energy conservation standards for dehumidifiers would save a significant amount of energy. Relative to the case without amended standards the lifetime energy savings for dehumidifiers purchased in the 30-year period that begins in the anticipated year of compliance with the amended standards (2019–2048), amount to 0.30 quadrillion Btu (quads). This represents a savings of 7.4 percent relative to the energy use of these products in the case without amended standards (referred to as the “no-new-standards case”).

The cumulative net present value (NPV) of total consumer costs and savings of the standards for dehumidifiers ranges from $1.28 billion (at a 7-percent discount rate) to $2.71 billion (at a 3-percent discount rate).

This NPV expresses the estimated total value of future operating-cost savings minus the estimated increased product costs for dehumidifiers purchased in 2019–2048. In addition, the standards for dehumidifiers are projected to yield significant environmental benefits. DOE estimates that the standards would result in cumulative greenhouse gas emission reductions (over the same period as for energy savings) of 18.6 million metric tons (Mt) of carbon dioxide (CO$_2$), 11.0 thousand tons of sulfur dioxide (SO$_2$), 33.1 tons of nitrogen oxides (NO$_x$), 77.9 thousand tons of methane (CH$_4$), 0.23 thousand tons of nitrous oxide (N$_2$O), and 0.04 tons of mercury (Hg). The cumulative reduction in CO$_2$ emissions through 2030 amounts to 5.3 Mt.

The value of the CO$_2$ reductions is calculated using a range of values per metric ton of CO$_2$ (otherwise known as the “Social Cost of Carbon,” or SCC) developed by a Federal interagency working group. The derivation of the SCC values is discussed in section 0. Using discount rates appropriate for each set of SCC values, DOE estimates that the net present monetary value of the CO$_2$ emissions reduction (not including CO$_2$ equivalent emissions of other gases with global warming potential) is between $0.1 billion and $1.9 billion, with a value of $0.6 billion using the central SCC case represented by $40.0/t in 2015. DOE also estimates that the net present monetary value of the NO$_x$ emissions reduction to be $0.03 billion at a 7-percent discount rate, and $0.07 billion at a 3-percent discount rate.

Table I.3 summarizes the national economic benefits and costs expected to result from the adopted standards for dehumidifiers.

### TABLE I.3—SUMMARY OF NATIONAL ECONOMIC BENEFITS AND COSTS OF AMENDED ENERGY CONSERVATION STANDARDS FOR DEHUMIDIFIERS *

<table>
<thead>
<tr>
<th>Category</th>
<th>Present value (billion 2014$)</th>
<th>Discount rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>1.4</td>
<td>7</td>
</tr>
<tr>
<td>CO$_2$ Reduction Value ($12.2/t case) **</td>
<td>0.1</td>
<td>5</td>
</tr>
<tr>
<td>CO$_2$ Reduction Value ($40.0/t case) **</td>
<td>0.6</td>
<td>3</td>
</tr>
<tr>
<td>CO$_2$ Reduction Value ($62.3/t case) **</td>
<td>1.0</td>
<td>3</td>
</tr>
<tr>
<td>CO$_2$ Reduction Value ($117/t case) **</td>
<td>1.9</td>
<td>3</td>
</tr>
<tr>
<td>NO$_x$ Reduction Value †</td>
<td>0.03</td>
<td>7</td>
</tr>
<tr>
<td>Total Benefits ††</td>
<td>2.0</td>
<td>3</td>
</tr>
</tbody>
</table>

| Cost | 0.11 | 7 |

| Net Benefits | 1.9 | 7 |
| Including CO$_2$ and NO$_x$ Reduction Monetized Value †† | 3.4 | 3 |

* This table presents the costs and benefits associated with dehumidifiers shipped in 2019–2048. These results include benefits to consumers which accrue after 2048 from the products purchased in 2019–2048. The costs account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule.

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4 All monetary values in this section are expressed in 2014 dollars and, where appropriate, are discounted to 2015 unless explicitly stated otherwise. Energy savings in this section refer to the full-fuel-cycle savings (see section IV.H for discussion).

5 The quantity refers to full-fuel-cycle (FFC) energy savings. FFC energy savings includes the energy consumed in extracting, processing, and transporting primary fuels (i.e., coal, natural gas, petroleum fuels), and, thus, presents a more complete picture of the impacts of energy efficiency standards. For more information on the FFC metric, see section IV.H.2.

6 A metric ton is equivalent to 1.1 short tons. Results for NO$_x$ and Hg are presented in short tons.

7 DOE calculated emissions reductions relative to the no-new-standards-case, which reflects key assumptions in the Annual Energy Outlook 2015 (AEO 2015) Reference case, which generally represents current legislation and environmental regulations for which implementing regulations were available as of October 31, 2014.


9 DOE estimated the monetized value of NO$_x$ emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality Planning and Standards. (Available at: [http://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-regulatory-impact-analysis].) See section IV.L.2 for further discussion. Note that the agency is primarily using a national benefit-per-ton estimate for NO$_x$ emitted from the Electricity Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Kweski et al., 2009). If the benefit-per-ton estimates were based on the Six Cities study (Lepuerle et al., 2011), the values would be nearly two-and-a-half times larger.
The benefits and costs of the adopted standards, for dehumidifiers sold in 2019–2048, can also be expressed in terms of annualized values. The monetary values for the total annualized net benefits are the sum of (1) the national economic value of the benefits in reduced consumer operating costs, minus (2) the increases in product purchase prices and installation costs, plus (3) the value of the benefits of CO₂ and NOₓ emission reductions, all annualized.10

Although the value of operating cost savings and CO₂ emission reductions are both important, two issues are relevant. First, the national operating cost savings are domestic U.S. consumer monetary savings that occur as a result of market transactions, whereas the value of CO₂ reductions is based on a global value. Second, the assessments of operating cost savings and CO₂ savings are performed with different methods that use different time frames for analysis. The national operating cost savings is measured for the lifetime of dehumidifiers shipped in 2019–2048. Because CO₂ emissions have a very long residence time in the atmosphere,11 the SCC values in future years reflect future CO₂-emissions impacts that continue beyond 2100.

Estimates of annualized benefits and costs of the adopted standards are shown in Table I.4. The results under the primary estimate are as follows. Using a 7-percent discount rate for benefits and costs other than CO₂ reduction, (for which DOE used a 3-percent discount rate along with the SCC series that has a value of $40.0/t in 2015),12 the estimated cost of the standards in this rule is $11 million per year in increased equipment costs, while the estimated annual benefits are $136 million in reduced equipment operating costs, $34 million in CO₂ reductions, and $2.9 million in reduced NOₓ emissions. In this case, the net benefit amounts to $163 million per year. Using a 3-percent discount rate for all benefits and costs and the SCC series has a value of $40.0/t in 2015, the estimated cost of the standards is $10 million per year in increased equipment costs, while the estimated annual benefits are $162 million in reduced operating costs, $34 million in CO₂ reductions, and $3.7 million in reduced NOₓ emissions. In this case, the net benefit amounts to $189 million per year.

| TABLE I.4—ANNUALIZED BENEFITS AND COSTS OF AMENDED STANDARDS FOR DEHUMIDIFIERS |
|---------------------------------|-----------------|-----------------|
|                                | Discount rate   | Primary estimate| Low net benefits estimate | High net benefits estimate |
| Benefits                        |                 |                 |                             |
| Consumer Operating Cost Savings | 7%              | 136             | 131                         | 141.                        |
| CO₂ Reduction Value ($12.2/t case)** | 3%              | 162             | 154                         | 169.                        |
| CO₂ Reduction Value ($40.0/t case)** | 5%              | 10              | 10                          | 11.                         |
| CO₂ Reduction Value ($62.3/t case)** | 2.5%            | 34              | 34                          | 35.                         |
| CO₂ Reduction Value ($117/t case)** | 3%              | 50              | 49                          | 51.                         |
| NOₓ Reduction Value†            | 7%              | 104             | 102                         | 106.                        |
| Total Benefits††                | 7% plus CO₂ range | 2.9            | 2.9                         | 6.7.                        |
| Costs                           |                 |                 |                             |
| Consumer Incremental Product Costs | 7%              | 11              | 11                          | 10.                         |
| Total†                          | 7% plus CO₂ range | 139 to 232     | 132 to 224                  | 148 to 244.                |

10 To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2015, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year's shipments in the year in which the shipments occur (e.g., 2020 or 2030), and then discounted the present value from each year to 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO₂ reductions, for which DOE used case-specific discount rates, as shown in Table I.3. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year that yields the same present value.


12 DOE used a 3-percent discount rate because the SCC values for the series used in the calculation were derived using a 3-percent discount rate (see section IV.L).


**TABLE I.4—ANNUALIZED BENEFITS AND COSTS OF AMENDED STANDARDS FOR DEHUMIDIFIERS **—Continued

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Primary estimate</th>
<th>Low net benefits estimate</th>
<th>High net benefits estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>163 ..............</td>
<td>156 ........................</td>
<td>173. ........................</td>
</tr>
<tr>
<td>3% plus CO₂ range</td>
<td>165 to 259 ......</td>
<td>157 to 248 ..............</td>
<td>178 to 274 ..............</td>
</tr>
<tr>
<td>3%</td>
<td>189 ..............</td>
<td>180 ........................</td>
<td>203. ........................</td>
</tr>
</tbody>
</table>

* This table presents the annualized costs and benefits associated with dehumidifiers shipped in 2019–2048. These results include benefits to consumers which accrue after 2048 from the dehumidifiers purchased from 2019–2048. The results account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule. The Primary, Low Benefits, and High Benefits Estimates utilize projections of energy prices from the AEO 2015 Reference case, Low Economic Growth case, and High Economic Growth case, respectively. In addition, incremental product costs reflect a medium decline rate in the Primary Estimate, a low decline rate in the Low Benefits Estimate, and a high decline rate in the High Benefits Estimate. The methods used to derive projected price trends are explained in section IV.F.

** The CO₂ values represent global monetized values of the SCC, in 2014$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5%, 3%, and 2.5% discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3% discount rate. The SCC time series incorporate an escalation factor.

†† DOE estimated the monetized value of NOₓ emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality Planning and Standards. (Available at: http://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-regulatory-impact-analysis.) See section IV.L.2 for further discussion. For DOE’s Primary Estimate and Low Net Benefits Estimate, the agency used a national benefit-per-ton estimate for particulate matter emitted from the Electric Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). For DOE’s High Net Benefits Estimate, the benefit-per-ton estimates were based on the Six Cities study (Lepuele et al., 2011), which are nearly two-and-a-half times larger than those from the ACS study.

† Total Benefits for both the 3% and 7% cases are derived using the series corresponding to the average SCC with 3-percent discount rate ($40.0/ton case). In the rows labeled “7% plus CO₂ range” and “3% plus CO₂ range,” the operating cost and NOₓ benefits are calculated using the labeled discount rate, and those values are added to the full range of CO₂ values.

DOE’s analysis of the national impacts of the adopted standards is described in sections IV.H, IV.K, and IV.L of this document.

**Conclusion**

Based on the analyses culminating in this final rule, DOE found the benefits to the nation of the standards (energy savings, consumer LCC savings, positive NPV of consumer benefit, and emission reductions) outweigh the burdens (loss of INPV and LCC increases for some users of these products). DOE has concluded that the standards in this final rule represent the maximum improvement in energy efficiency that is technologically feasible and economically justified, and would result in significant conservation of energy.

**II. Introduction**

The following section briefly discusses the statutory authority underlying this final rule, as well as some of the relevant historical background related to the establishment of standards for dehumidifiers.

**A. Authority**

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA or the Act), Public Law 94–163 (42 U.S.C. 6291–6309, as codified) established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program covering most major household appliances (collectively referred to as “covered products”), which includes the dehumidifiers that are the subject of this rulemaking. (42 U.S.C. 6295(cc)) EPCA, as amended, prescribed energy conservation standards for dehumidifiers manufactured on or after October 1, 2007, and more stringent energy conservation standards for dehumidifiers manufactured on or after October 1, 2012. (42 U.S.C. 6295(cc)) Under 42 U.S.C. 6295(m), the agency must periodically review its already established energy conservation standards for a covered product.

Pursuant to EPCA, DOE’s energy conservation program for covered products consists essentially of four parts: (1) Testing; (2) labeling; (3) the establishment of Federal energy conservation standards and labels; and (4) certification and enforcement procedures. The Federal Trade Commission (FTC) is primarily responsible for labeling, and DOE implements the remainder of the program. Subject to certain criteria and conditions, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of each covered product. (42 U.S.C. 6295(o)(3)(A)) Manufacturers of covered products must use the prescribed DOE test procedure as the basis for certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA and when making representations to the public regarding the energy use or efficiency of those products. (42 U.S.C. 6293(c) and 6295(s)) Similarly, DOE must use these test procedures to determine whether the products comply with standards adopted pursuant to EPCA. (42 U.S.C. 6295(s)) The DOE test procedures for dehumidifiers currently appear at title 10 of the Code of Federal Regulations (CFR) part 430, subpart B, appendix X.

DOE must follow specific statutory criteria for prescribing new or amended standards for covered products, including dehumidifiers. Any new or amended standard for a covered product must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A) and (3)(B)) Furthermore, DOE may not adopt any standard that would not result in the significant conservation of energy. (42 U.S.C. 6295(o)(3)) Moreover, DOE may not prescribe a standard: (1) For certain products, including dehumidifiers, if no test procedure has been established for the product, or (2) if DOE determines by rule that the standard is not technologically feasible or economically justified. (42 U.S.C. 6295(o)(3)(A)–(B)) In deciding whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. (42 U.S.C. 6295(o)(3)(A)–(B))
EPCA, as amended, established the first energy conservation standards for dehumidifiers manufactured as of October 1, 2007, based on the EF metric. As discussed in section II.B.1, subsequent amendments prescribed energy conservation standards for dehumidifiers manufactured on or after October 1, 2012. DOE is conducting this rulemaking pursuant to 42 U.S.C. 6295(n)(1), which requires DOE, no later than 6 years after issuance of any final rule establishing or amending a standard, to publish either a notice of proposed rulemaking or a final rule establishing or amending a standard. DOE initiated this rulemaking by issuing an analytical Framework Document, “Energy Conservation Standards Rulemaking Framework Document for Dehumidifiers.” 77 FR 49739 (Aug. 17, 2012). The Framework Document explained the issues, analyses, and process that DOE anticipated using to develop energy conservation standards for dehumidifiers.

DOE held a public meeting on September 24, 2012, to solicit comments from interested parties regarding the Framework Document and DOE’s proposed analytical approach. DOE sought feedback from interested parties on these subjects and provided information regarding the rulemaking process that DOE would follow.

1. Current Standards

EPCA prescribes energy conservation standards for dehumidifiers manufactured on or after October 1, 2012. In a final rule published on March 23, 2009, DOE codified these standards at 10 CFR 430.32(v)(2), 74 FR 12058. These standards are set forth in Table II.1.

<table>
<thead>
<tr>
<th>Product class* (pints/day)</th>
<th>Energy factor (EF)** (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 35.00</td>
<td>1.35</td>
</tr>
<tr>
<td>35.01–45.00</td>
<td>1.50</td>
</tr>
<tr>
<td>45.01–54.00</td>
<td>1.60</td>
</tr>
<tr>
<td>54.01–75.00</td>
<td>1.70</td>
</tr>
<tr>
<td>75.01 or more</td>
<td>2.5</td>
</tr>
</tbody>
</table>

* Product capacity in pints/day is measured according to the DOE test procedure in appendix X of 10 CFR 430.
** EF is a measure of the water removed from the air per unit of energy consumed by a dehumidifier and is calculated according to appendix X.

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<td>1.50</td>
</tr>
<tr>
<td>45.01–54.00</td>
<td>1.60</td>
</tr>
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<td>2.5</td>
</tr>
</tbody>
</table>

* Product capacity in pints/day is measured according to the DOE test procedure in appendix X of 10 CFR 430.
** EF is a measure of the water removed from the air per unit of energy consumed by a dehumidifier and is calculated according to appendix X.

TABLE II.1—FEDERAL ENERGY EFFICIENCY STANDARDS FOR DEHUMIDIFIERS
Comments received following the publication of the framework document helped DOE identify and resolve issues related to the subsequent preliminary analysis. In the preliminary analysis, DOE conducted in-depth technical analyses in the following areas: (1) Engineering; (2) markups to determine product price; (3) energy use; (4) life-cycle cost and payback period; and (5) national impacts. The preliminary technical support document (TSD) that presented the methodology and results of each of these analyses is available at http://www.regulations.gov/#/documentDetail;D=EERE-2012-BT-STD-0027-0015.

DOE also conducted, and included in the preliminary TSD, several other analyses that supported the major analyses. These analyses included: (1) The market and technology assessment; (2) the screening analysis, which contributes to the engineering analysis; and (3) the shipments analysis, which contributes to the LCC and PBP analysis and national impact analysis (NIA). In addition to these analyses, DOE began preliminary work on the manufacturer impact analysis (MIA) and identified the methods to be used for the consumer subgroup analysis, the emissions analysis, the employment impact analysis, and the utility impact analysis.

DOE published a notice of public meeting and availability of the preliminary TSD on May 22, 2014, 79 FR 29380. DOE subsequently held a public meeting on June 13, 2014, to discuss and receive comments on the preliminary TSD. DOE received comments on topics including: Whole-home dehumidifier coverage and test procedures, product classes, design options, efficiency levels, use of experience curves, shipments projections, social cost of carbon estimates and the associated monetization of carbon dioxide, and small business impacts. After reviewing these comments, DOE gathered additional information, held further discussions with manufacturers, and completed and revised the various analyses described in the preliminary analysis.

On June 3, 2015, DOE published a notice of proposed rulemaking (hereafter, the “June 2015 NOPR”) and notice of public meeting, 80 FR 31645. The June 2015 NOPR and accompanying TSD presented the results of DOE’s updated analyses and proposed amended standards for dehumidifiers. On July 7, 2015, DOE held a public meeting to discuss the issues detailed in the June 2015 NOPR. Interested parties commented on various aspects of the proposed rule and submitted supplemental written comments. Following the public meeting, DOE gathered additional information and performed additional analyses to supplement the analyses presented in the June 2015 NOPR. The results of these analyses are detailed in the TSD accompanying this final rule, available in the docket at the regulations.gov Web site. DOE considered the comments received since publication of the June 2015 NOPR, including those received at the NOPR public meeting, in developing amended standards for dehumidifiers.

III. General Discussion

DOE developed this final rule after considering comments, data, and information from interested parties that represent a variety of interests. The following discussion addresses issues raised by these commenters.

A. Product Classes and Scope of Coverage

When evaluating and establishing energy conservation standards, DOE divides covered products into product classes by the type of energy used or by capacity or other performance-related features that justify differing standards. In making a determination whether a performance-related feature justifies a different standard, DOE must consider such factors as the utility of the feature to the consumer and other factors DOE determines are appropriate. (42 U.S.C. 6295(q))

Existing energy conservation standards divide portable and whole home dehumidifiers into five product classes based on product capacity in the number of pints per day (pints/day) of moisture that the product removes from ambient air at test conditions, as measured by the applicable DOE test procedure, appendix X. In this rulemaking, DOE is establishing new product classes that differentiate dehumidifiers not only by product capacity but by product configuration as well (i.e., between portable and whole-home configurations). For portable dehumidifiers, DOE is establishing the following three product classes based on the product capacity:15 (1) 25.00 pints/day or less; (2) 25.01 to 50.00 pints/day; and (3) 50.01 pints/day or more. For whole-home dehumidifiers, DOE is adopting the following two product classes based on product case volume:16 (1) Less than or equal to 8.0 ft³; and (2) greater than 8.0 ft³.

The product classes for portable dehumidifiers analyzed for this final rule are different from those examined in DOE’s initial analysis and the June 2015 NOPR, while the product classes for whole-home dehumidifiers are the same. In the May 2014 Preliminary TSD, DOE initially analyzed five product classes for portable dehumidifiers based on product capacity. Due, in part, to comments received on the preliminary TSD, DOE proposed only three product classes for portable dehumidifiers in the June 2015 NOPR: (1) 30.00 pints/day or less; (2) 30.01 to 45.00 pints/day; and (3) 45.01 pints/day or more. For this final rule, DOE adjusted the product capacity thresholds between these three product classes after considering comments and conducting additional discussions with manufacturers and further analysis.

Comments received relating to the scope of coverage and product classes are discussed in section IV.A of this final rule.

B. Test Procedure

DOE’s current energy conservation standards for dehumidifiers are expressed in terms of EF, in L/kWh, and are a function of product capacity, expressed in pints/day. (See 10 CFR 430.32(v)(2)).

EPCA specifies that the dehumidifier test criteria used under the ENERGY STAR17 program in effect as of January 1, 2001,18 must serve as the basis for the DOE test procedure for dehumidifiers, unless revised by DOE. (42 U.S.C. 6293(b)(13)) The ENERGY STAR test criteria required that American National Standards Institute (ANSI)/Association of Home Appliance Manufacturers (AHAM) Standard DH–1, “Dehumidifiers,” be used to measure product capacity while the Canadian Standards Association (CAN/CSA) standard CAN/CSA-C749–1994 (R2005), “Performance of Dehumidifiers,” be used to calculate the EF. The version of AHAM Standard DH–1 in use at the time the ENERGY STAR test criteria were adopted was AHAM Standard DH–1–1992. In 2006, DOE adopted these test criteria, along

14 Industry data track shipments from manufacturers into the distribution chain. Data on national unit retail sales are lacking, but are presumed to be close to shipments under normal circumstances.

15 Note that the test conditions for the new product classes are different from those for the existing product classes.

16Product case volume is the rectangular volume that the product case occupies, exclusive of any duct attachment collars or other external components.

17For more information on the ENERGY STAR program, please visit www.energystar.gov.

with related definitions and tolerances, as its test procedure for dehumidifiers at 10 CFR part 430, subpart B, appendix X. 71 FR 71340, 71347, 71366–71368 (Dec. 8, 2006).

On October 31, 2012, DOE published a final rule to establish a new test procedure for dehumidifiers that references ANSI/AHAM Standard DH–1–2008, “Dehumidifiers,” (ANSI/AHAM DH–1–2008) for both energy use and product capacity measurements. 77 FR 65995 (Oct. 31, 2012). The final rule also adopted standby and off mode provisions that satisfy the requirement in EPCA for DOE to include measures of standby mode and off mode energy consumption in its test procedures for residential products, if technically feasible. (42 U.S.C. 6295(gg)(2)(A)) This new DOE test procedure, codified at that time at 10 CFR part 430, subpart B, appendix X1, established a new metric, IEF, which incorporates measures of active, standby, and off mode energy use, in addition to the existing EF metric.

DOE subsequently removed the existing test procedures at appendix X and redesignated the test procedures at appendix X1 as appendix X. 79 FR 7366 (Feb. 7, 2014). Any representations of energy use, including standby mode or off mode energy consumption, or efficiency of portable dehumidifiers must be made in accordance with the results of testing pursuant to the redesignated appendix X.

On May 21, 2014, DOE published a NOPR (the “May 2014 Test Procedure NOPR”) proposing further amendments to the dehumidifier test procedures in appendix X. 79 FR 29272. In addition to making clarifications and corrections in appendix X, DOE proposed creating a new appendix, appendix X1, which would: (1) Require certain active mode testing at a lower ambient temperature; (2) add a measure of fan-only mode energy consumption in the IEF metric; and (3) include testing methodology and measures of performance for whole-home dehumidifiers.

On February 4, 2015, DOE published a supplemental notice of proposed rulemaking (the “February 2015 Test Procedure SNOPR”). 80 FR 5994. In the SNOPR, DOE maintained its proposals from the NOPR, except that DOE proposed: (1) Adjustments and clarifications to the whole-home dehumidifier test setup and conduct; (2) a method to determine whole-home dehumidifier case volume; (3) a method for measuring energy use in off-cycle mode, including any fan operation; (4) a clarification to the relative humidity and product capacity equations; and (5) additional technical corrections and clarifications.

In response to the May 2014 Test Procedure NOPR, June 2014 public meeting, and February 2015 Test Procedure SNOPR, DOE received comments from interested parties related to the test procedure. DOE addressed these issues in the test procedure final rule to establish a new appendix X1 published on July 31, 2015 (the “July 2015 Test Procedure Final Rule,” 80 FR 45801), and based its analysis in this notice on product capacities and efficiencies determined according to the appendix X1 test procedure.

C. Technological Feasibility

1. General

In each energy conservation standards rulemaking, DOE conducts a screening analysis based on information gathered on all current technology options and prototype designs that could improve the efficiency of the products or equipment that are the subject of the rulemaking. As the first step in such an analysis, DOE develops a list of technology options for consideration in consultation with manufacturers, design engineers, and other interested parties. DOE then determines which of those means for improving efficiency are technologically feasible. DOE considers technologies incorporated in commercially available products or in working prototypes to be technologically feasible. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(i).

After DOE has determined that particular technology options are technologically feasible, it further evaluates each technology option in light of the following additional screening criteria: (1) Practicability to manufacture, install, and service; (2) adverse impacts on product utility or availability; and (3) adverse impacts on health or safety. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(ii)–(iv). Additionally, it is DOE policy not to include in its analysis any proprietary technology that is a unique pathway to achieving a certain efficiency level. Section IV.B of this document discusses the results of the screening analysis for dehumidifiers, particularly the designs DOE considered, those it screened out, and those that are the basis for the standards considered in this rulemaking. For further details on the screening analysis for this rulemaking, see chapter 4 of the final rule TSD.

2. Maximum Technologically Feasible Levels

When DOE proposes to adopt an amended standard for a type or class of covered product, it must determine the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible for such product. (42 U.S.C. 6295(p)(1)) Accordingly, in the engineering analysis, DOE determined the maximum technologically feasible (“max-tech”) improvements in energy efficiency for dehumidifiers, using the design parameters for the most efficient products available on the market or in working prototypes. The max-tech levels that DOE determined for this rulemaking are described in section IV.C of this final rule and in chapter 5 of the final rule TSD.

D. Energy Savings

1. Determination of Savings

For each trial standard level (TSL), DOE projected energy savings from application of the TSL to dehumidifiers purchased in the 30-year period that begins in the year of compliance with any amended standards (2019–2048). The savings are measured over the entire lifetime of products purchased in the 30-year analysis period. DOE quantified the energy savings attributable to each TSL as the difference in energy consumption between each standards case and the no-new-standards case. The no-new-standards case represents a projection of energy consumption that reflects how the market for a product would likely evolve in the absence of amended energy conservation standards.

DOE used its NIA spreadsheet models to estimate energy savings from potential amended standards for dehumidifiers. The NIA spreadsheet model (described in section IV.H of this document) calculates savings in site energy, which is the energy directly consumed by products at the locations where they are used. Based on the site energy, DOE calculates national energy savings (NES) in terms of primary energy savings at the site or at power plants, and also in terms of full-fuel-cycle (FFC) energy savings. The FFC metric includes the energy consumed in extracting, processing, and transporting primary fuels (i.e., coal, natural gas, petroleum fuels), and thus presents a more complete picture of the impacts of

\footnote{DOE also presents a sensitivity analysis that considers impacts for products shipped in a 9-year period.}
energy conservation standards. Doe’s approach is based on the calculation of an FFC multiplier for each of the energy types used by covered products or equipment. For more information on FFC energy savings, see section IV.H.2 of this document. For natural gas, the primary energy savings are considered to be equal to the site energy savings.

2. Significance of Savings

To adopt standards for a covered product, DOE must determine that such action would result in “significant” energy savings. (42 U.S.C. 6295(o)(3)(B)) Although the term “significant” is not defined in the Act, the U.S. Court of Appeals, for the District of Columbia Circuit in Natural Resources Defense Council v. Herrington, 768 F.2d 1355, 1373 (D.C. Cir. 1985), indicated opined that Congress intended “significant” energy savings in the context of EPCA to be savings that were not “genuinely trivial.” The energy savings for all the TSLs considered in this rulemaking, including the adopted standards, are nontrivial, and, therefore, DOE considers them “significant” within the meaning of section 325 of EPCA.

E. Economic Justification

1. Specific Criteria

As noted in this preamble, EPCA provides seven factors to be evaluated in determining whether a potential energy conservation standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(II)(VIII)) The following sections discuss how DOE has addressed each of those seven factors in this rulemaking.

a. Economic Impact on Manufacturers and Consumers

In determining the impacts of a potential amended standard on manufacturers, DOE conducts an MIA, as discussed in section IV.J. DOE first uses an annual cash-flow approach to determine the quantitative impacts. This step includes both a short-term assessment—based on the cost and capital requirements during the period between when a regulation is issued and when entities must comply with the regulation—and a long-term assessment over a 30-year period. The industry-wide impacts analyzed include: (1) INPV, which values the industry on the basis of expected future cash flows; (2) cash flows by year; (3) changes in revenue and income; and (4) other measures of impact, as appropriate.

Second, DOE analyzes and reports the impacts on different types of manufacturers, including impacts on small manufacturers. Third, DOE considers the impact of standards on domestic manufacturer employment and manufacturing capacity, as well as the potential for standards to result in plant closures and loss of capital investment. Finally, DOE takes into account cumulative impacts of various DOE regulations and other regulatory requirements on manufacturers.

For individual consumers, measures of economic impact include the changes in LCC and PBP associated with new or amended standards. These measures are discussed further in the following section. For consumers in the aggregate, DOE also calculates the national net present value of the economic impacts applicable to a particular rulemaking. DOE also evaluates the LCC impacts of potential standards on identifiable subgroups of consumers that may be affected disproportionately by a national standard.

b. Savings in Operating Costs Compared to Increase in Price (LCC and PBP)

EPCA requires DOE to consider the savings in operating costs throughout the estimated average life of the covered product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the covered product that are likely to result from a standard. (42 U.S.C. 6295(o)(2)(B)(i)(II)) DOE conducts this comparison in its LCC and PBP analysis.

The LCC is the sum of the purchase price of a product (including its installation) and the operating cost (including energy, maintenance, and repair expenditures) discounted over the lifetime of the product. The LCC analysis requires a variety of inputs, such as product prices, product energy consumption, energy prices, maintenance and repair costs, product lifetime, and discount rates appropriate for consumers. To account for uncertainty and variability in specific inputs, such as product lifetime and discount rate, DOE uses a distribution of values, with probabilities attached to each value.

The PBP is the estimated amount of time (in years) it takes customers to recover the increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost due to a more-stringent standard by the change in annual operating cost for the year that standards are assumed to take effect.

For its LCC and PBP analysis, DOE assumes that consumers will purchase the covered products in the first year of compliance with amended standards. The LCC savings for the considered efficiency levels are calculated relative to the case that reflects projected market trends in the absence of amended standards. DOE’s LCC and PBP analysis is discussed in further detail in section IV.F.

c. Energy Savings

Although significant conservation of energy is a separate statutory requirement for adopting an energy conservation standard, EPCA requires DOE, in determining the economic justification of a standard, to consider the total projected energy savings that are expected to result directly from the standard. (42 U.S.C. 6295(o)(2)(B)(i)(III)) As discussed in section IV.H, DOE uses the NIA spreadsheet models to project national energy savings.

d. Lessening of Utility or Performance of Products

In establishing product classes, and in evaluating design options and the impact of potential standard levels, DOE evaluates potential standards that would not lessen the utility or performance of the considered products. (42 U.S.C. 6295(o)(2)(B)(i)(IV)) Based on data available to DOE, the standards adopted in this final rule would not reduce the utility or performance of the products under consideration in this rulemaking.

DOE discusses potential impacts on product utility in section IV.C.1.b of this document.

e. Impact of Any Lessening of Competition

EPCA directs DOE to consider the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from a standard. (42 U.S.C. 6295(o)(2)(B)(i)(V)) It also directs the Attorney General to determine the impact, if any, of any lessening of competition likely to result from a standard and to transmit such determination to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. (42 U.S.C. 6295(o)(2)(B)(i)(V)) DOE transmitted a copy of its proposed rule to the Attorney General with a request that the Department of Justice (DOJ) provide its determination on this issue. DOE received no adverse comments from DOJ regarding the proposed rule.
f. Need for National Energy Conservation

DOE also considers the need for national energy conservation in determining whether a new or amended standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(VI)) The energy savings from the adopted standards are likely to provide improvements to the security and reliability of the nation’s energy system. Reductions in the demand for electricity also may result in reduced costs for maintaining the reliability of the nation’s electricity system. DOE conducts a utility impact analysis to estimate how standards may affect the nation’s needed power generation capacity, as discussed in section IV.M of this document.

The adopted standards also are likely to result in environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases associated with energy production and use. DOE conducts an emissions analysis to estimate how potential standards may affect these emissions, as discussed in section IV.K of this document; the emissions impacts are reported in section V.B.6 of this document. DOE also estimates the economic value of emissions reductions resulting from the considered TSLs, as discussed in section IV.L of this document.

g. Other Factors

EPCA allows the Secretary of Energy, in determining whether a standard is economically justified, to consider any other factors that the Secretary deems to be relevant. (42 U.S.C. 6295(o)(2)(B)(i)(VII)) To the extent interested parties submit any relevant information regarding economic justification that does not fit into the other categories described above, DOE could consider such information under “other factors.”

2. Rebuttable Presumption

As set forth in 42 U.S.C. 6295(o)(2)(B)(iii), EPCA creates a rebuttable presumption that an energy conservation standard is economically justified if the additional cost to the consumer of a product that meets the standard is less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable DOE test procedure. DOE’s LCC and PBP analyses generate values used to calculate the effect potential amended energy conservation standards would have on the payback period for consumers. These analyses include, but are not limited to, the 3-year payback period contemplated under the rebuttable presumption test. In addition, DOE routinely conducts an economic analysis that considers the full range of impacts to consumers, manufacturers, the nation, and the environment, as required under 42 U.S.C. 6295(o)(2)(B)(i). The results of this analysis serve as the basis for DOE’s evaluation of the economic justification for a potential standard level (thereby supporting or rebutting the results of any preliminary determination of economic justification). The rebuttable presumption payback calculation is discussed in section IV.F of this final rule.

IV. Methodology and Discussion of Related Comments

This section addresses the analyses DOE has performed for this rulemaking with regard to dehumidifiers. Separate subsections address each component of DOE’s analyses. DOE used several analytical tools to estimate the impact of the standards considered in this document. The first tool is a spreadsheet that calculates the LCC savings and PBP of potential amended or new energy conservation standards. The national impacts analysis uses a second spreadsheet set that provides shipments forecasts and calculates national energy savings and net present value of total consumer costs and savings expected to result from potential energy conservation standards. DOE uses the third spreadsheet tool, the Government Regulatory Impact Model (GRIM), to assess manufacturer impacts of potential standards. These three spreadsheet tools are available on the DOE Web site for this rulemaking: https://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/55. Additionally, DOE used output from the latest version of the Energy Information Administration’s (EIA) Annual Energy Outlook (AEO), a widely known energy forecast for the United States, for the emissions and utility impact analyses.

A. Market and Technology Assessment

DOE develops information in the form of reduced emissions of air pollutants and greenhouse gases associated with energy production and use. DOE also considers the need for national energy conservation in determining whether a new or amended standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(VI)) The energy savings from the adopted standards are likely to provide improvements to the security and reliability of the nation’s energy system. Reductions in the demand for electricity also may result in reduced costs for maintaining the reliability of the nation’s electricity system. DOE conducts a utility impact analysis to estimate how standards may affect the nation’s needed power generation capacity, as discussed in section IV.M of this document.

The adopted standards also are likely to result in environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases associated with energy production and use. DOE conducts an emissions analysis to estimate how potential standards may affect these emissions, as discussed in section IV.K of this document; the emissions impacts are reported in section V.B.6 of this document. DOE also estimates the economic value of emissions reductions resulting from the considered TSLs, as discussed in section IV.L of this document.

2. Rebuttable Presumption

As set forth in 42 U.S.C. 6295(o)(2)(B)(iii), EPCA creates a rebuttable presumption that an energy conservation standard is economically justified if the additional cost to the consumer of a product that meets the standard is less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable DOE test procedure. DOE’s LCC and PBP analyses generate values used to calculate the effect potential amended energy conservation standards would have on the payback period for consumers. These analyses include, but are not limited to, the 3-year payback period contemplated under the rebuttable presumption test. In addition, DOE routinely conducts an economic analysis that considers the full range of impacts to consumers, manufacturers, the nation, and the environment, as required under 42 U.S.C. 6295(o)(2)(B)(i). The results of this analysis serve as the basis for DOE’s evaluation of the economic justification for a potential standard level (thereby supporting or rebutting the results of any preliminary determination of economic justification). The rebuttable presumption payback calculation is discussed in section IV.F of this final rule.

IV. Methodology and Discussion of Related Comments

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A. Market and Technology Assessment

DOE develops information in the market and technology assessment that provides an overall picture of the market for the products concerned, including the purpose of the products, the industry structure, manufacturers, market characteristics, and technologies used in the products. This activity includes both quantitative and qualitative assessments, based primarily on publicly available information. The subjects addressed in the market and technology assessment for this rulemaking include: (1) A determination of the scope of the rulemaking and product classes; (2) manufacturers and industry structure; (3) existing efficiency programs; (4) shipments information; (5) market and industry trends; and (6) technologies or design options that could improve the energy efficiency of dehumidifiers. The key findings of DOE’s market assessment are summarized below. See chapter 3 of the final rule TSD for further discussion of the market and technology assessment.

1. Scope of Coverage and Product Classes

EPCA defines a dehumidifier as a product that is self-contained, electrically operated, mechanically encased, and a product that incorporates a refrigerated surface to condense moisture from the atmosphere. It further defines it as having a refrigerating system with an electric motor; a fan for air circulation; and a means for collecting or disposing of the condensate. (42 U.S.C. 6291(34)) In the July 2015 Test Procedure Final Rule, DOE clarified that this definition of a dehumidifier, codified at 10 CFR 430.2, does not apply to portable air conditioners, room air conditioners, or packaged terminal air conditioners. 80 FR 45801, 45804–45805 (July 31, 2015).21

In the July 2015 Test Procedure Final Rule, DOE also added definitions to 10 CFR 430.2 for portable dehumidifiers and whole-home dehumidifiers. Portable dehumidifiers are designed to operate within the dehumidified space without ducting attached, although ducting may be attached optionally. Whole-home dehumidifiers are designed to be installed with inlet ducting for return process air and outlet ducting that supplies dehumidified process air to one or more locations in the dehumidified space. In the July 2015 Test Procedure Final rule, DOE further established that dehumidifiers that are able to operate as both a portable and whole-home dehumidifier be tested and rated for both configurations. 80 FR 45801, 45805–45806 (July 31, 2015).

When evaluating and establishing energy conservation standards, DOE may divide covered products into product classes by the type of energy used, by capacity, or by other performance-related factors that justify

21 Room air conditioners and packaged terminal air conditioners are defined as a separate covered products under EPCA. (42 U.S.C. 6292(a)(2), 6295(c), 6311(f)(1), 6311(10)(A), and 6313(a)(3)) Portable air conditioners were determined by DOE to be covered products under EPCA in a final determination published on 80 FR 45801, 45805–45806 (July 31, 2015).
a different standard. In making a determination whether a performance-related feature justifies a different standard, DOE must consider such factors as the utility of the feature to the consumer and other factors DOE determines are appropriate. (42 U.S.C. 6295(q))

Under 42 U.S.C. 6295(cc)(2), standards are established for five product classes of dehumidifiers, based on the capacity of the unit in pints of water extracted per day, as shown in Table IV.1. Representations of capacity to comply with the current dehumidifier energy conservation standards are determined based on the current DOE test procedure in appendix X, as designated in the test procedure final rule published on February 7, 2014. 79 FR 7366.

### Table IV.1—Current Dehumidifier Product Classes

<table>
<thead>
<tr>
<th>Capacity (pints/day)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 35.00.</td>
<td></td>
</tr>
<tr>
<td>35.01–45.00.</td>
<td></td>
</tr>
<tr>
<td>45.01–54.00.</td>
<td></td>
</tr>
<tr>
<td>54.01–75.00.</td>
<td></td>
</tr>
<tr>
<td>75.00 or more.</td>
<td></td>
</tr>
</tbody>
</table>

a. Preliminary Analysis and NOPR Proposals

In the preliminary analysis conducted for this rulemaking, DOE considered the following portable dehumidifier product classes that were based on the existing product classes, but with capacities adjusted for the lower ambient temperature proposed in the May 2014 Test Procedure NOPR.

### Table IV.2—Preliminary Analysis Portable Dehumidifier Product Classes

<table>
<thead>
<tr>
<th>Capacity (pints/day)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.00 or less.</td>
<td></td>
</tr>
<tr>
<td>20.01 to 30.00.</td>
<td></td>
</tr>
<tr>
<td>30.01 to 35.00.</td>
<td></td>
</tr>
<tr>
<td>35.01 to 45.00.</td>
<td></td>
</tr>
<tr>
<td>45.01 or more.</td>
<td></td>
</tr>
</tbody>
</table>

In the preliminary analysis, DOE also considered two product classes for whole-home dehumidifiers, differentiated by product case volume.

### Table IV.3—Preliminary Analysis Whole-Home Dehumidifier Product Classes

<table>
<thead>
<tr>
<th>Case Volume (cubic feet)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than or equal to 8.0</td>
<td></td>
</tr>
<tr>
<td>greater than 8.0</td>
<td></td>
</tr>
</tbody>
</table>

In response to the preliminary analysis, DOE received comments stating that the test procedure changes proposed in the May 2014 Test Procedure NOPR would increase test-to-test variation and make it more difficult to establish product classes based on capacity thresholds for the portable dehumidifiers. DOE subsequently conducted additional analysis that indicated that product construction and performance under the proposed test conditions were similar for products with capacities of 20 pints/day or less and 20.01 to 30 pints/day. DOE observed the same similarities between products in the 30.01 to 35 pints/day and 35.01 to 45 pints/day product classes. DOE, therefore, proposed to establish only three portable product classes based on capacity and maintained the same two proposed product classes for whole-home dehumidifiers. DOE proposed the revised product class structure in the June 2015 NOPR. 80 FR 31645, 31656–31658 (June 3, 2015).

### Table IV.4—June 2015 NOPR Dehumidifier Product Classes

<table>
<thead>
<tr>
<th>Portable (capacity, pints/day)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.00 or less.</td>
<td></td>
</tr>
<tr>
<td>30.01 to 45.00.</td>
<td></td>
</tr>
<tr>
<td>45.01 or more.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Whole-Home (case volume, cubic feet)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than or equal to 8.0.</td>
<td></td>
</tr>
<tr>
<td>greater than 8.0</td>
<td></td>
</tr>
</tbody>
</table>

b. Comments and Responses

Scope of Coverage

Aprilaire Inc. (Aprilaire) stated that not requiring air conditioners to meet dehumidifier standards results in unfair competition because air conditioners often provide a dehumidification mode, yet are regulated only for cooling modes. (Aprilaire, No. 34 at p. 3) Although portable dehumidifiers and whole-home dehumidifiers have different applications and overall performance, they both: (1) Fall under the statutory definition of a dehumidifier; (2) provide the same dehumidification function; and (3) can be characterized with the same energy efficiency performance metrics. In contrast, EPCA provides separate definitions for “furnace,” “heat pump,” and “unit heater” as mutually exclusive covered products (42 U.S.C. 6291(23), (24), and (45)), subject to separate energy conservation standards (42 U.S.C. 6295(f), (d), and (aa)). In the absence of statutory differentiation between portable dehumidifiers and whole-home dehumidifiers, DOE is addressing both product configurations in this rulemaking for amended dehumidifier standards. DOE, however, is establishing separate product classes for portable and whole-home dehumidifiers.

Definitions

Aprilaire suggested that DOE re-evaluate the definition for whole-home dehumidifiers because both whole-home dehumidifiers and portable dehumidifiers may or may not include ducting. Aprilaire stated that the correct distinction between the two is that whole-home dehumidifiers come with integral or external controls that allow the dehumidifier to function in concert with the central air distribution system. Aprilaire commented that a definition based on a distinction of controls compatibility with a central air system would include air conditioners, which DOE specifically excluded from...
coverage. Further, Aprilaire commented that the definitions of the two types of dehumidifiers should reflect a number of other distinctions, including: Application flexibility, air flow rates, typical installation, and necessary installation expertise. (Aprilaire, No. 34 at pp. 3–4; Aprilaire, Public Meeting Transcript, No. 35 at p. 28) In addition to establishing definitions for portable dehumidifiers and whole-home dehumidifiers, DOE acknowledged in the July 2015 Test Procedure Final Rule that certain dehumidifiers offer optional or removable ducting, and therefore can be operated as either a portable dehumidifier or a whole-home dehumidifier. DOE has addressed these types of products in appendix X1 by requiring manufacturers to test and rate these products in both configurations. For all other products available on the market, the presence of ducts or lack thereof is the only reliably identifiable characteristic to differentiate between the two product types. For certain units, the additional characteristics identified by Aprilaire may also differentiate between portable dehumidifiers and whole-home dehumidifiers, but information on those characteristics may be subjective or not publicly available. Therefore, DOE is maintaining the presence of ducts as the primary differentiator between portable dehumidifiers and whole-home dehumidifiers.

Product Classes
Pacific Gas and Electric Company, Southern California Gas Company, San Diego Gas and Electric, and Southern California Edison (California Investor-Owned Utilities (IOUs)) supported DOE’s proposal to consolidate dehumidifiers into fewer product classes; however, they requested that DOE consider whether capacity or physical size and weight is the more appropriate attribute for setting product classes. They stated that if dehumidifiers are typically available in two size and weight ranges and that physical size defines unique utility, product class definitions should account for physical size in addition to capacity. They warned that setting product classes based solely on capacity ratings may inadvertently encourage manufacturers to build units rated for low capacity by simply using larger components that increase weight, resulting in negative impacts on portability and a corresponding loss of utility to consumers. (California IOUs, No. 41 at pp. 1–2) Therma-Stor LLC (Therma-Stor, No. 1) and Aprilaire disagreed with the proposed product classes based on capacity and/or physical size for the purpose of applying substantially different minimum efficiency levels. They commented that the establishment of classes is arbitrary and may not have sufficient granularity. (Therma-Stor, No. 38 at p. 1; Aprilaire, Public Meeting Transcript, No. 35 at p. 25; Aprilaire, No. 34 at p. 2) During interviews, multiple manufacturers of portable dehumidifiers stated that their products are typically built upon two product platforms with different case sizes. They noted that the two product sizes provide consumers with unique utility because the smaller units are more portable and weigh less than the large units. Typically, condensate removal capacity is also correlated with case size. The manufacturers stated that DOE should ensure that both product platforms are maintained with any amended energy conservation standards to provide consumers the option of purchasing the smaller, more portable products. Consistent with 42 U.S.C. 6295(q), DOE retained multiple portable dehumidifier product classes based on product capacity in this final rule. In its engineering analysis, however, DOE did not consider technology changes that would significantly impact the portability of the two lower-capacity product classes. Manufacturers may choose different pathways to improve efficiency, including by increasing component sizes and weights, but DOE’s analysis shows that there are pathways to improving efficiency that would not affect consumer utility.

For whole-home dehumidifiers, certain space-constrained installation locations limit the case size that may be installed. Accordingly, manufacturers of these space-constrained products would be limited in their ability to increase component sizes to achieve higher efficiencies. Because some technologies are only able to be implemented in larger case volumes, DOE continues to base the whole-home dehumidifier product classes on case volume to ensure that space-constrained whole-home dehumidifiers would be able to maintain their smaller product volumes at the higher efficiency levels.

Electrolux Major Appliances—North America (Electrolux) suggested that the second portable dehumidifier product class include units with capacities from 30.01 to 50.00 pints/day because, under the capacity thresholds proposed in the June 2015 NOPR, units previously rated at 70 pints/day would inappropriately be categorized into the highest-capacity product class. According to Electrolux, these products would be rated at 46 pints/day under appendix X1, but based on DOE’s description of products in each proposed product class, Electrolux expects that DOE intended for these products to be classified in the middle-capacity portable dehumidifier product class. Electrolux stated that the current 70 pint/day unit, which is a very high volume and popular capacity, would effectively be eliminated from the market under the proposed standard level for the highest-capacity portable dehumidifier product class. (Electrolux, No. 36 at p. 1)

AHAM noted that the reduced temperature conditions for portable dehumidifiers in appendix X1 decrease the measured capacity by about 35 percent, on average, as compared to the previous test conditions. Therefore, although AHAM and GE Appliances (GE) agreed with the establishment of three product classes, they suggested that the proposed product classes be slightly revised to reflect results from the test procedure at appendix X1. They suggested that the new portable dehumidifier product classes be: (1) less than 25.00 pints/day; (2) 25.01–50.00 pints/day; and (3) 50.01 pints/day or greater. (AHAM, No. 39 at pp. 2–4; GE, No. 42 at p. 1) Based on the comments in response to the June 2015 NOPR and on information gathered during in-depth information gathered during confidential manufacturer interviews, DOE has revised the portable dehumidifier product classes, consistent with AHAM’s recommendation, to better reflect how portable dehumidifiers are expected to perform when tested according to appendix X1. DOE estimates that the distribution of portable dehumidifier models among the three revised product classes is the same as was originally determined in the NOPR analysis because the rated capacity of these models would adjust in the same proportion as the capacity thresholds between the classes.

c. Final Rule Product Classes
After reviewing comments received in response to the June 2015 NOPR and evaluating additional information, DOE determined that an adjustment of the portable dehumidifier product classes is appropriate. DOE notes that these revised product classes more accurately capture the intent of DOE’s original proposals when considering the impacts of the new test procedure at appendix X1, and are supported by data from manufacturers. In summary, DOE is establishing the following three portable dehumidifier product classes, based on product capacity, and two whole-home dehumidifier product classes, based on case volume, in this final rule.
TABLE IV.5—FINAL RULE DEHUMIDIFIER PRODUCT CLASSES

<table>
<thead>
<tr>
<th>Portable (capacity, pints/day):</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.00 or less.</td>
</tr>
<tr>
<td>25.01 to 50.00.</td>
</tr>
<tr>
<td>50.01 or more.</td>
</tr>
<tr>
<td>Whole-Home (case volume, cubic feet):</td>
</tr>
<tr>
<td>less than or equal to 8.0.</td>
</tr>
<tr>
<td>greater than 8.0.</td>
</tr>
</tbody>
</table>

2. Technology Options

In the market analysis and technology assessment for the June 2015 NOPR, DOE identified 14 technology options that would be expected to improve the efficiency of dehumidifiers, as measured by the DOE test procedure (80 FR 31645, 31659 (June 3, 2015)).

TABLE IV.6—NOPR TECHNOLOGY OPTIONS FOR DEHUMIDIFIERS

1. Built-in hygrometer/humidistat.
2. Improved compressor efficiency.
3. Improved condenser and evaporator performance.
4. Improved controls.
5. Improved defrost methods.
6. Improved demand-defrost controls.
7. Improved fan and fan-motor efficiency.
8. Improved flow-control devices.
10. Washable air filters.
11. Pre-cooling air-to-air heat exchanger.
13. Improved refrigeration system insulation.
14. Refrigerant-desiccant systems.

In the public meeting for the June 2015 NOPR, interested parties discussed the use of alternative refrigerants as another possible technology option for dehumidifiers. Aprilaire noted that dehumidifiers are a relatively small market and there are currently no alternative refrigerant compressors available for these products. (Aprilaire, Public Meeting Transcript, No. 35 at p. 47) Southern Company suggested that alternative refrigerants are currently being explored for refrigerators, which will likely impact the dehumidifier and other similar product’s market in the near future. (Southern Company, Public Meeting Transcript, No. 35 at p. 47) CE stated that dehumidifiers would not transition to alternative refrigerants within the next five years. (GE, Public Meeting Transcript, No. 35 at p. 48) DOE included alternative refrigerants as a technology option for consideration in the final rule analysis because available information indicates that there are potential efficiency gains associated with this change. After identifying all potential technology options for improving the efficiency of dehumidifiers, DOE performed a screening analysis (section IV.B of this document and chapter 4 of the final rule TSD) to determine which technologies merited further consideration. See chapter 5 of the final rule TSD for additional information on the technology options included in the engineering analysis.

B. Screening Analysis

DOE uses the following four screening criteria to determine which technology options are suitable for further consideration in an energy conservation standards rulemaking:

1. Technological feasibility.
   Technologies that are not incorporated in commercial products or in working prototypes will not be considered further.

2. Practicability to manufacture, install, and service.
   If it is determined that mass production and reliable installation and servicing of a technology in commercial products could not be achieved on the scale necessary to serve the relevant market at the time of the projected compliance date of the standard, then that technology will not be considered further.

3. Impacts on product utility or product availability.
   If it is determined that a technology would have significant adverse impact on the utility of the product to significant subgroups of consumers or would result in the unavailability of any covered product type with performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as products generally available in the United States at the time, it will not be considered further.

4. Adverse impacts on health or safety.
   If it is determined that a technology would have significant adverse impacts on health or safety, it will not be considered further. 10 CFR part 430, subpart C, appendix A, 4(a)(4) and 5(b).

In sum, if DOE determines that a technology, or a combination of technologies, fails to meet one or more of the above four criteria, it will be excluded from further consideration in the engineering analysis. The reasons for eliminating any technology are discussed below.

The subsequent sections include comments from interested parties pertinent to the screening criteria, DOE’s evaluation of each technology option against the screening analysis criteria, and whether DOE determined that a technology option should be excluded (“screened out”) based on the screening criteria.

1. Screened-Out Technologies

For the June 2015 NOPR, DOE screened out pre-cooling air-to-air heat exchangers and heat pipes for portable dehumidifiers with capacities up to 45 pints/day because the likely increases in case size and overall weight would result in adverse impacts on product utility to consumers. 80 FR 31645, 31659–31660 (June 3, 2015).

Therma-Stor objected to the screening analysis determination that certain technology options are not suitable for low-capacity portable dehumidifiers. Therma-Stor believes that the improvements considered by DOE are applicable for all capacities and sizes of dehumidifiers. (Therma-Stor, No. 38 at p. 2) DOE agrees that these technology options are feasible for dehumidifiers of all capacities. However, as discussed in the June 2015 NOPR, DOE found that pre-cooling air-to-air heat exchangers and heat pipes are not currently incorporated in low-capacity portable dehumidifiers. DOE determined that including these technologies would require significantly larger case sizes for the low-capacity portable dehumidifiers, resulting in adverse impacts on consumer utility. For high-capacity portable dehumidifiers, DOE observes that certain products available on the market already incorporate air-to-air heat exchangers and a similar case size increase would be required for heat pipes. Therefore, DOE has maintained air-to-air heat exchangers and heat pipes as potential design options for this larger-capacity portable dehumidifier product class.

Although, as discussed in section b of this document, DOE is establishing the high-capacity portable dehumidifier product class for products with capacity greater than 50 pints/day rather than the 45 pints/day proposed in the June 2015 NOPR, the models that DOE considered to be high-capacity portable units in the preliminary analysis would remain classified in this product class based on available test data. Therefore, the determination to screen out pre-cooling air-to-air heat exchangers and heat pipes for portable dehumidifiers other than high-capacity dehumidifiers remains unchanged. DOE has retained these technology options for portable dehumidifiers with capacities greater than 50 pints/day and whole-home dehumidifiers.

2. Remaining Technologies

Through a review of each technology, DOE tentatively concludes that all of the other identified technologies listed in section IV.A.2 met all four screening criteria to be examined further as design...
options in DOE’s final rule analysis. In summary, DOE did not screen out the following technology options:

**TABLE IV.7—FINAL RULE REMAINING DESIGN OPTIONS FOR DEHUMIDIFIERS**

1. Built-in hygrometer/humidistat.
2. Improved compressor efficiency.
3. Improved condenser and evaporator performance.
4. Improved controls.
5. Improved defrost methods.
6. Improved demand-defrost controls.
7. Improved fan and fan-motor efficiency.
8. Improved flow-control devices.
10. Washable air filters.
11. Pre-cooling air-to-air heat exchanger (high-capacity portable and whole-home dehumidifiers).
12. Heat pipes (high-capacity portable and whole-home dehumidifiers).
13. Improved refrigeration system insulation.
14. Refrigerant-desiccant systems.
15. Alternative refrigerants.

DOE determined that these design options are technologically feasible because they are technologies included in commercially available products or working prototypes. DOE also finds that all of the remaining design options meet the other screening criteria (i.e., practicable to manufacture, install, and service and do not result in adverse impacts on consumer utility, product availability, health, or safety). For additional details, see chapter 4 of the final rule TSD.

C. Engineering Analysis

In the engineering analysis, DOE establishes the relationship between the manufacturer production cost (MPC) and improved dehumidifier efficiency. This relationship serves as the basis for cost-benefit calculations for individual consumers, manufacturers, and the Nation. DOE typically structures the engineering analysis using one of three approaches: (1) Design option; (2) efficiency level; or (3) reverse engineering (or cost assessment). The design-option approach involves adding the estimated cost and associated efficiency of various efficiency-improving design changes to the baseline product to model different levels of efficiency. The efficiency-level approach uses estimates of costs and efficiencies of products available on the market at distinct efficiency levels to develop the cost-efficiency relationship. The reverse-engineering approach involves testing products for efficiency and determining cost from a detailed bill of materials (BOM) derived from reverse engineering representative products. The efficiency ranges from that of the least-efficient dehumidifier sold today (i.e., the baseline) to the maximum technologically feasible efficiency level. At each efficiency level examined, DOE determines the MPC; this relationship is referred to as a cost-efficiency curve.

1. Efficiency Levels
   a. Baseline Efficiency Levels

A baseline unit is typically a product that just meets current Federal energy conservation standards and provides basic consumer utility. DOE uses the baseline unit for comparison in several phases of its rulemaking analyses, including the engineering analysis, LCC analysis, PBP analysis, and NIA. To determine energy savings that will result from an amended energy conservation standard, DOE compares energy use at each of the higher efficiency levels to the energy consumption of the baseline unit. Similarly, to determine the changes in price to the consumer that will result from an amended energy conservation standard, DOE compares the price of a unit at each higher efficiency level to the price of a unit at the baseline.

For the June 2015 NOPR, DOE determined baseline efficiency levels by adjusting the existing minimum EF levels to IEF values as would be measured under appendix X1. DOE determined the appropriate adjusted baseline efficiency levels based on its test sample, which included a market-representative range of manufacturers, capacities, and efficiencies, and additional numerical adjustments for baseline features identified through market analysis. The most significant adjustments accounted for the lower ambient test temperature, and energy consumption in standby mode, off mode, and fan-only mode. Where DOE combined portable dehumidifier product classes between the preliminary analysis and the June 2015 NOPR, it set the baseline efficiency level for the combined product classes at the lower of the two baseline IEF levels considered in the preliminary analysis for the two previously separate product classes, which represents the minimum IEF, as determined according to appendix X1, that DOE expects from any dehumidifiers within the combined product class that are currently compliant with the existing standards. DOE also proposed separate baseline efficiencies for the two whole-home dehumidifier product classes. 80 FR 31645, 31661 (June 3, 2015). Table IV.8 and Table IV.9 present the baseline efficiency levels proposed in the NOPR analysis.

### Table IV.8—NOPR PORTABLE DEHUMIDIFIER BASELINE EFFICIENCY LEVELS

<table>
<thead>
<tr>
<th>Capacity (pints/day)</th>
<th>IEF (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.00 or less ...............</td>
<td>0.77</td>
</tr>
<tr>
<td>30.01–45.00 ...............</td>
<td>0.94</td>
</tr>
<tr>
<td>45.01 or more .............</td>
<td>2.07</td>
</tr>
</tbody>
</table>

### Table IV.9—NOPR WHOLE-HOME DEHUMIDIFIER BASELINE EFFICIENCY LEVELS

<table>
<thead>
<tr>
<th>Case Volume (cubic feet)</th>
<th>IEF (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0 or less ..................</td>
<td>1.77</td>
</tr>
<tr>
<td>More than 8.0 ...............</td>
<td>2.41</td>
</tr>
</tbody>
</table>

AHAM noted that DOE began the rulemaking analysis before the compliance date of the current energy conservation standards, and therefore the test sample may not represent products currently on the market. AHAM offered to share performance data if it received data from at least three manufacturers. (AHAM, Public Meeting Transcript, No. 35 at p. 40; AHAM, No. 39 at pp. 3–4) Although DOE conducted initial testing and analysis on units manufactured prior to October 1, 2012, DOE also supplemented that test sample when units complying with the most recent standards became available, beginning in 2013. In preparing and conducting the preliminary analysis, DOE acquired 12 additional portable dehumidifiers and conducted testing and teardowns to assess whether any technologies had changed to meet the currently applicable standards. DOE found that manufacturers incorporated more efficient compressors and larger heat exchangers to meet the new standards, but otherwise the products were similar in construction. DOE considered the more efficient components as technology options in the engineering analysis for the preliminary analysis, the June 2015 NOPR, and this final rule. DOE did not receive any additional performance data for this final rule.

Following publication of the June 2015 NOPR, DOE became aware of portable dehumidifiers available on the market with capacities greater than 50 pints/day (as measured under the new test procedure in appendix X1) that were not previously considered. The dehumidifiers previously considered in this higher-capacity portable dehumidifier product class are constructed similar to whole-home dehumidifiers, with more robust construction materials and components,
but are not designed to be installed with duct connections. The newly considered products are constructed similar to portable dehumidifiers with capacities less than 50 pints/day, with cases primarily made of plastic. DOE assessed the performance of these newly considered dehumidifiers with capacities greater than 50 pints/day and determined that they often include fan operation during off-cycle mode, as is common for portable dehumidifiers with lower capacities. Therefore, DOE determined that the baseline for this product class should be updated to account for fan operation in off-cycle mode, thereby reducing the baseline IEF. Based on test data, DOE estimated a fan power of 96.5 watts (W) for the greater than 50 pints/day product class, which was higher than the fan power estimated for the two lower-capacity portable dehumidifier product classes in order to maintain the necessary airflow through larger heat exchangers. DOE also incorporated the highest inactive mode or off-mode power, 2.12 W, observed in DOE’s test sample to estimate inactive and off-mode energy use for the high-capacity portable dehumidifier product class.

Table IV.10 and Table IV.11 show the baseline efficiency levels for portable dehumidifiers and whole-home dehumidifiers covered in this final rule, respectively. Note that the whole-home dehumidifier baseline efficiency levels are unchanged from the June 2015 NOPR.

### Table IV.10—Final Rule Portable Dehumidifier Baseline Efficiency Levels

<table>
<thead>
<tr>
<th>Capacity (pints/day)</th>
<th>IEF (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.00 or less</td>
<td>0.77</td>
</tr>
<tr>
<td>25.01–50.00</td>
<td>0.94</td>
</tr>
<tr>
<td>50.01 or more</td>
<td>1.73</td>
</tr>
</tbody>
</table>

### Table IV.11—Final Rule Whole-Home Dehumidifier Baseline Efficiency Levels

<table>
<thead>
<tr>
<th>Case Volume (cubic feet)</th>
<th>IEF (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0 or less</td>
<td>1.77</td>
</tr>
<tr>
<td>More than 8.0</td>
<td>2.41</td>
</tr>
</tbody>
</table>

Additional details on the selection of baseline units may be found in chapter 5 of the final rule TSD.

### Table IV.12—NOPR Portable Dehumidifier Efficiency Levels

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Integrated energy factor efficiency levels (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30.00 pints/day or less</td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Current Baseline with Maximum Observed Off-cycle Mode Power</td>
</tr>
<tr>
<td>2</td>
<td>Current Baseline with no Fan Operation During Off-cycle Mode/Gap Fill 1</td>
</tr>
<tr>
<td>3</td>
<td>Gap Fill 2/Max Tech</td>
</tr>
<tr>
<td>4</td>
<td>Max Tech</td>
</tr>
</tbody>
</table>

### Table IV.13—NOPR Whole-Home Dehumidifier Efficiency Levels

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Integrated energy factor efficiency levels (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.0 ft³ or less (case volume)</td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Gap Fill 1</td>
</tr>
<tr>
<td>2</td>
<td>Gap Fill 2/Max Tech</td>
</tr>
<tr>
<td>3</td>
<td>Max Tech</td>
</tr>
</tbody>
</table>

Additional details on the selection of incremental efficiency levels may be found in chapter 5, section 5.3.2 of the June 2015 NOPR TSD.

Fan Operation in Off-Cycle Mode

AHAM and GE suggested that elimination of fan operation in off-cycle mode at Efficiency Level 1 for portable dehumidifiers would impact air sampling and humidity control, and could require a change from active defrost to passive defrost. AHAM and GE also expect that Efficiency Level 1 would be difficult to achieve using other technology options, should a manufacturer choose to maintain fan operation in off-cycle mode. Therefore, they suggested that DOE include a gap fill efficiency level between baseline and Efficiency Level 1 that would not require the elimination of fan operation.

For the June 2015 NOPR, DOE considered incremental efficiency levels beyond the baseline based on existing efficiency levels (e.g., the ENERGY STAR level) available in the market and observed during investigative testing. Similar to the baseline efficiency levels discussed above, DOE adjusted the efficiency levels to reflect values that would be obtained when using appendix X1. In addition, DOE proposed that the first incremental efficiency level beyond the baseline for each portable dehumidifier product class, except for the highest-capacity product class, be achieved by the elimination of fan-only mode.

DOE further proposed max-tech efficiency levels that incorporate additional design options beyond those observed in its test sample. DOE then modeled the performance associated with these design options to estimate the max-tech IEF levels. 80 FR 31645, 31662–31663 (June 3, 2015).

Table IV.12 and Table IV.13 present the efficiency levels DOE considered in the June 2015 NOPR analysis.
in off-cycle mode. AHAM and GE further suggested that an IEF of 1.10 for portable dehumidifiers less than 30.00 pints/day is not an accurate representation of baseline efficiency with no fan operation in off-cycle mode. (AHAM, No. 39 at p. 5; GE, No. 42 at p. 2)

Due to the significant IEF decrease associated with continuous fan operation in off-cycle mode and the low cost of eliminating continuous fan operation, DOE continues to expect that manufacturers would eliminate fan operation in off-cycle mode as a first step to improving efficiency. Many dehumidifiers currently available on the market do not continuously operate the fan in off-cycle mode. DOE sought comment on this issue both in the proposed rule and in manufacturer interviews conducted in support of this final rule. DOE received comments and feedback that there would be no impact on consumer utility associated with removing continuous fan operation in off-cycle mode, and that many dehumidifiers either run the fan intermittently or for a short period of time during off-cycle mode. DOE also notes that, although it expects manufacturers to remove continuous fan operation in off-cycle mode to reach Efficiency Level 1, manufacturers may elect to switch from continuous fan operation to intermittent or short periods of fan operations along with other design options to improve efficiency. For its estimates of the IEF at the baseline, DOE assumed a baseline unit with continuous operation of the highest power fan motor in off-cycle mode, as observed in DOE’s test sample. For Efficiency Level 1, DOE assumed that the continuous highest-power fan operation would be replaced by the typical off-cycle mode power consumption without a fan running, as observed in its test sample.

Heat Exchanger Modifications

Aprilaire agreed with DOE that adjusting the size of the heat exchanger coil is one of the primary means of improving dehumidifier efficiency, and that modifying the blower motor has less of an impact on efficiency. However, Aprilaire stated that installation size restrictions for whole-home dehumidifiers often inhibit a manufacturer’s ability to increase the heat exchanger sizes to meet higher efficiency levels. (Aprilaire, Public Meeting Transcript, No. 35 at p. 49; Aprilaire, No. 34 at p. 2) DOE recognizes the constraints on case volume for whole-home dehumidifiers based on the installation location. Therefore, DOE constructed the whole-home dehumidifier product classes to ensure that units with case volume restrictions (i.e., case volume of 8.0 cubic feet or less) would not be held to the same energy conservations standards as those without size constraints (i.e., case volume more than 8.0 cubic feet).

Electrolux requested additional information on how DOE determined the increased heat exchanger size. (Electrolux, Public Meeting Transcript, No. 35 at p. 52) When adjusting the heat exchanger size in its model, DOE typically either added or removed a row of tube passes. The fins and other components of the heat exchangers were adjusted accordingly to accommodate the additional tube row, and the performance impacts were determined through modeling. When discussing increased heat exchanger size, DOE often refers to the resulting change in frontal surface area, although other associated heat exchanger characteristics were also adjusted.

Compressor Efficiency

In a joint comment, Appliance Standards Awareness Project (ASAP), Alliance to Save Energy, American Council for an Energy-Efficient Economy, Natural Resources Defense Council, and Northwest Energy Efficiency Alliance (hereinafter the “Joint Commenters”) commented that although variable-speed compressors, which can achieve significant energy savings in the field, would not improve dehumidifier efficiency as measured by the DOE test procedure, these compressors generally have higher efficiencies at full power compared to traditional compressors currently used in dehumidifiers. For example, the Joint Commenters stated that one compressor manufacturer offers R-410A permanent-magnet inverter rotary compressors with energy efficiency ratio (EER) values of 11.0–11.8 for cooling capacities of 7,600–13,700 British thermal units per hour. (Joint Commenters, No. 40 at p. 2) While DOE is not aware of any dehumidifiers currently available on the market or any prototypes that incorporate variable-speed compressors, DOE considered high-efficiency compressors for the higher efficiency levels. Specifically, DOE accounted for compressors with EERs up to 11.2, within the range identified by the Joint Commenters for variable-speed compressors in its engineering analysis. See chapter 5 of the final rule TSD for additional information.

The California IOUs recommended that DOE account for likely changes in the efficiency level of portable air conditioner markets, including energy conservation standards that may lead to greater availability of high efficiency compressors in the future. (California IOUs, No. 41 at p. 3) In this engineering analysis, DOE has considered the most efficient compressors currently available that are suitable for dehumidifiers. While DOE expects that dehumidifier manufacturers may shift to using more efficient available compressors in response to these amended standards, DOE does not necessarily expect that the maximum available compressor efficiency would increase in response to standards for dehumidifiers or closely related air conditioning products. If DOE becomes aware of more efficient compressors available or in working prototypes, it may consider those as potential technology options in any future rulemaking.

The California IOUs also recommended that DOE consider whether compressor availability, and the potential unavailability of dehumidifiers with certain capacities, would negatively impact consumers, assuming that other dehumidifiers with higher capacities were still available. Further, the California IOUs suggested that lower-capacity units provide no distinct utility from higher capacity units; instead, the product size and weight are more appropriate characteristics to define utility. (California IOUs, No. 41 at pp. 3–4) As discussed in section IV.A.1 of this document, DOE has established product classes for portable dehumidifiers based on product capacity, which is the primary consumer utility offered by dehumidifiers. DOE agrees with the California IOUs that lower product size and weight provide certain utility to consumers of low-capacity portable dehumidifiers. However, DOE observed that size and weight are directly correlated to product capacity, which is a measure of the primary function of the product to remove moisture from the conditioned space; therefore, DOE maintains capacity as the product class differentiator for portable dehumidifiers.

Additional Portable Dehumidifier Efficiency Level

The California IOUs, Joint Commenters, and ASAP recommended that DOE analyze an efficiency level for portable dehumidifiers at the maximum available efficiency, which would fall between Efficiency Level 3 and Efficiency Level 4 in the June 2015 NOPR and would closely align with Efficiency Level 4 from the preliminary analysis. According to these commenters, such an additional efficiency level would capture a
majority of the additional energy savings that would be associated with standards at the max-tech level while remaining cost-effective. The California IOUs further requested that DOE consider evaluating an additional efficiency level at “near max-tech,” excluding a shift to the highest-efficiency compressors. Acknowledging that the availability of high-efficiency compressors is currently a limiting factor, the California IOUs believe cost-effective energy savings would be achieved by optimizing other components without the use of the highest-efficiency compressors. (California IOUs, No. 41 at pp. 2–3; Joint Commenters, No. 40 at pp. 4–6; ASAP, Public Meeting Transcript, No. 35 at pp. 10, 38)

In the June 2015 NOPR analysis, DOE proposed the highest efficiency level at the maximum technologically feasible efficiency, which for dehumidifiers was slightly higher than the maximum efficiency available on the market. Because the difference between the max-tech and maximum available efficiencies was small (0.05 L/kWh) for the two lower-capacity portable dehumidifier product classes, DOE did not consider maintaining those maximum available efficiencies as separate efficiency levels in the June 2015 NOPR. Further, DOE notes that the same concerns regarding compressor availability would exist at a “near max-tech” level as at the max-tech. Accordingly, DOE did not analyze an additional efficiency level at the maximum available efficiency.

High-Capacity Portable Dehumidifier Efficiency Levels

Therma-Stor commented that the proposed efficiency levels are increased by a greater percentage for the higher-capacity portable dehumidifiers than for the lower-capacity portable dehumidifiers. Therma-Stor stated that high-capacity portable dehumidifiers already incorporate one or more efficiency features, yet of its seven current higher-capacity portable dehumidifier models, only one exceeds the proposed standard level. (Therma-Stor, No. 38 at pp. 2–3) For each product class analyzed in the standards rulemaking, DOE analyzed a representative sample of products to determine an appropriate baseline efficiency and improved efficiency levels. For the high-capacity portable dehumidifiers (50.01 pints/day or greater), DOE has updated the analysis for this product class to reflect new products on the market; however, DOE notes that multiple products in its test sample tested higher than the Efficiency Level 3 proposed in the June 2015 NOPR.

Whole-Home Dehumidifier Efficiency Levels

Aprilaire expressed concern that DOE’s analysis of whole-home dehumidifiers, with only two efficiency levels, lacked the granularity of the portable dehumidifier analysis, and therefore may not properly evaluate the whole-home dehumidifier market. (Aprilaire, No. 34 at p. 2) The efficiency levels considered in the engineering analysis are developed based on the performance of products on the market and in DOE’s test sample with different combinations of design options. Based on product testing and teardowns, DOE opted to include only one gap fill efficiency level for whole-home dehumidifiers with a case volume less than 8.0 cubic feet and two gap fill efficiency levels for whole-home dehumidifiers with case volumes greater than 8.0 cubic feet. DOE explains the design options associated with products at each of these efficiency levels in chapter 5 of the final rule TSD. Therma-Stor commented that DOE’s analysis of the whole-home dehumidifier market is incomplete due to the relatively small size of the segment, and the lack of substantial field studies. (Therma-Stor, No. 38 at p. 2) As described above for high-capacity portable dehumidifiers, DOE analyzed a representative sample of products for each whole-home dehumidifier product class to determine an appropriate baseline efficiency and improved efficiency levels.

Impact of Efficiency Levels

Southern Company recommended that DOE perform additional analysis to ensure that product utility is maintained at low temperatures when increasing the minimum efficiency under normal operating conditions. (Southern Company, Public Meeting Transcript, No. 35 at p. 38) In the rulemaking that established appendix X1, DOE determined that the representative operating condition for portable dehumidifiers is 65 degrees Fahrenheit (°F) dry-bulb temperature, and established this as the updated test condition for portable dehumidifiers. Accordingly, DOE based this final rule analysis on this test condition, which is lower than the dry-bulb temperature specified in the currently applicable test procedure, appendix X. As Southern Company suggested, lower operating temperatures may cause certain dehumidifiers to initiate defrosts, and thereby reduce overall performance. However, while some units designed to meet current energy conservation standards may enter a defrost mode at the 65 °F test condition, DOE expects that manufacturers would adjust their refrigeration systems to avoid defrosts due to any decrease in IEF required by amended standards. DOE does not expect the design options considered in this analysis to result in more frequent defrosts or any other impacts on performance at the representative operating conditions that would affect consumer utility compared to units currently available on the market.

In sum, DOE modified the baseline efficiency level from that proposed in the June 2015 NOPR and inserted a new Efficiency Level 1 for the high-capacity portable dehumidifier product class, and maintained all other efficiency levels as analyzed in the June 2015 NOPR. Table IV.14 and Table IV.15 present the efficiency levels DOE considered in this final rule analysis.

**Table IV.14—Final Rule Portable Dehumidifier Efficiency Levels**

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Efficiency level source</th>
<th>Integrated energy factor efficiency levels (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline ........</td>
<td>Current Baseline with Maximum Observed Off-cycle Mode Power ..........</td>
<td>0.77 0.94 1.73</td>
</tr>
<tr>
<td>1 ..................</td>
<td>Current Baseline with no Fan Operation During Off-cycle Mode ..........</td>
<td>1.10 1.20 2.15</td>
</tr>
<tr>
<td>2 ..................</td>
<td>Gap Fill 1 .........................</td>
<td>1.20 1.40 2.40</td>
</tr>
<tr>
<td>3 ..................</td>
<td>Gap Fill 2 .........................</td>
<td>1.30 1.60 2.80</td>
</tr>
<tr>
<td>4 ..................</td>
<td>Max Tech ..........................</td>
<td>1.57 1.80 3.66</td>
</tr>
</tbody>
</table>
TABLE IV.15—FINAL RULE WHOLE-HOME DEHUMIDIFIER EFFICIENCY LEVELS

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Efficiency level source</th>
<th>Integrated energy factor efficiency levels (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>8.0 ft³ or less (case volume)</td>
</tr>
<tr>
<td>Baseline ..........</td>
<td>Minimum Available</td>
<td>1.77</td>
</tr>
<tr>
<td>1 ..........</td>
<td>Gap Fill</td>
<td>2.09</td>
</tr>
<tr>
<td>2 ..........</td>
<td>Gap Fill 2/Max Tech</td>
<td>2.53</td>
</tr>
<tr>
<td>3 ..........</td>
<td>Max Tech</td>
<td>4.50</td>
</tr>
</tbody>
</table>

Additional details on the selection of incremental efficiency levels may be found in chapter 5 of the final rule TSD.

2. Manufacturer Production Cost Estimates

Based on product teardowns and cost modeling, DOE developed overall cost-efficiency relationships for each product class considered in that analysis. DOE selected products covering the range of efficiencies available on the market for the teardown analysis. During the teardown process, DOE created detailed bills of materials (BOMs) that included all components and processes used to manufacture the products. DOE used the BOMs from the teardowns as an input to a cost model, which was used to calculate the MPC for products covering the range of efficiencies available on the market. The MPC accounts for labor, material, overhead, and depreciation costs that a manufacturer would incur in producing a specific dehumidifier. DOE also developed BOMs and MPCs for theoretical units that would implement the identified max-tech components for dehumidifiers.

DOE estimated that the costs for these products reflected the costs for typical units at their respective efficiency levels, consistent with the efficiency-level approach. DOE then used the design-option approach to determine what changes would be needed for a particular unit to meet each incrementally higher efficiency level. DOE constructed cost-efficiency curves for multiple manufacturers to reflect the incremental MPC corresponding to each manufacturer's product line and available platforms. DOE combined the individual cost-efficiency curves based on estimates of each manufacturer's market share to develop an overall cost-efficiency curve representative of the entire industry.

In improving the max-tech efficiencies beyond the maximum available, as discussed in section IV.C.1.b of the June 2015 NOPR, DOE determined that this was a technologically feasible change that would improve product efficiencies. DOE's determination was based on the general availability of these components, efficiency gains associated with these technology options, and the minimal cost impacts beyond the additional costs of the components. The MPCs for the June 2015 NOPR analysis reflected this design option, as well as others, at the max-tech efficiency level.

Table IV.16 presents the MPC estimates DOE developed for the June 2015 NOPR. Id.

TABLE IV.16—NOPR DEHUMIDIFIER INCREMENTAL MANUFACTURER PRODUCTION COSTS [2013$]

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Portable product class capacities (pints/day)</th>
<th>Whole-home product class case volume (ft³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤30.00</td>
<td>30.01–45.00</td>
</tr>
<tr>
<td>EL1 ...............</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>EL2 ...............</td>
<td>1.69</td>
<td>2.39</td>
</tr>
<tr>
<td>EL3 ...............</td>
<td>4.27</td>
<td>8.07</td>
</tr>
<tr>
<td>EL4 ...............</td>
<td>19.38</td>
<td>22.42</td>
</tr>
</tbody>
</table>

Chapter 5 of the June 2015 NOPR TSD contains additional details on the analysis conducted in support of developing these MPC estimates.

Electrolux commented that a consumer would have to pay a cost adder of approximately $40 to buy a unit rated at 30 pints/day under the new test procedure at appendix X1 instead of a unit rated at 30 pints/day under the current appendix X, because the unit rated under appendix X1 would be a larger design that achieves 50 pints/day under appendix X. Electrolux was unsure whether the rated capacities at retail would shift lower (with no cost impact) or remain the same and result in much higher costs to consumers. (Electrolux, No. 36 at p. 1) As a result of discussions with confidential interviewees, DOE has concluded that manufacturers will likely educate consumers to explain the reduction in rated capacity under appendix X1. Therefore, DOE believes that a consumer who previously would have purchased a 70 pints/day dehumidifier rated under appendix X would now purchase a similarly constructed unit with a rated capacity between 25 and 50 pints/day.

In this final rule, DOE estimated, as it did previously with portable dehumidifiers at lower capacities, that the cost to move from the baseline efficiency level to Efficiency Level 1 for portable dehumidifiers with capacities greater than 50 pints/day would not require any increase in manufacturer production costs, as the removal of fan operation in off-cycle mode is essentially a controls programming adjustment. DOE further notes that the same design options and subsequent efficiency improvements previously considered in the June 2015 NOPR for this product class are still applicable.

In this final rule DOE also updated the MPCs to 2014$, the most recent year for which full-year data was available at the time of this analysis. DOE notes that
when updating the costs to current dollars, some variables based on changing costs (e.g., materials, shipping, etc.) increased while others decreased.

### Table IV.17—Final Rule Dehumidifier Incremental Manufacturer Production Costs [2014$]

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Portable product class capacities (pints/day)</th>
<th>Whole-Home product class case volume (ft$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤25.00</td>
<td>25.01–50.00</td>
</tr>
<tr>
<td>EL1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Portable product class capacities (pints/day)</th>
<th>Whole-Home product class case volume (ft$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤25.00</td>
<td>25.01–50.00</td>
</tr>
<tr>
<td>EL1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL2</td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>EL4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional details on the development of the incremental cost estimates may be found in chapter 5 of the final rule TSD.

### D. Markups Analysis

The markups analysis develops appropriate markups in the distribution channel to convert the MPC estimates derived in the engineering analysis to consumer prices. At each step in the distribution channel, companies mark up the price of the product to cover business costs and profit margin. For dehumidifiers, the main parties in the distribution chain are manufacturers and retailers.

The manufacturer markup converts MPC to manufacturer selling price (MSP). DOE developed an average manufacturer markup by examining the annual Securities and Exchange Commission (SEC) 10-K reports filed by publicly traded manufacturers primarily engaged in appliance manufacturing and whose combined product range includes dehumidifiers.

For retailers, DOE developed separate markups for baseline products (baseline markups) and for the incremental cost of more efficient products (incremental markups). Incremental markups are coefficients that relate the change in the MSP of higher-efficiency models to the change in the retailer sales price. DOE relied on economic data from the U.S. Census Bureau to estimate average baseline and incremental markups.24

Aprilaire urged that the analysis be expanded for whole-home dehumidifiers to include the additional costs of shipping larger and heavier products and additional installation costs for larger units. (Aprilaire, No. 34 at p. 5)

As in the preliminary and NOPR analyses, DOE used two different distribution channels for portable dehumidifiers and whole-home dehumidifiers. For the final rule analysis, DOE amended the distribution channel of the high-capacity portable dehumidifier product class, PC3. A share of the PC3 market uses the same distribution channel as PC1 and PC2: Units move from manufacturer to retailer to consumer. For the other share of the PC3 market, the distribution channel reflects its larger size and uses the whole-home dehumidifier distribution channel. To represent additional steps in the purchase of a larger unit, the whole-home dehumidifier distribution channel reflects two additional markups to include wholesalers and contractors used in the purchase of the larger dehumidifiers, including the third portable dehumidifier product class and whole-home dehumidifiers. As a result, DOE concluded that the wholesaler and contractor markups for the larger units include additional costs of shipping and installation.

AHAM made the following comments regarding the use of incremental markups for appliance retailers to estimate future prices of efficient products: (1) The incremental markup approach relies on an assumption of perfect competition, which is an outdated model of the economy; (2) Relatively constant percent gross margins observed in aggregated appliance retail industry data imply the use of fixed-percent markups over time; (3) Interview responses from appliance retailers are consistent with the use of fixed-percent markups. (AHAM, No. 39 at p. 7)

DOE responds to these points as follows:

(1) DOE’s incremental markup approach is based on the widely accepted economic view that prices closely reflect marginal costs in competitive markets and in markets with some degree of concentration.25 In the absence of data to support a different assumption, DOE retains its assumption for this rulemaking.

(2) In examining the relatively constant appliance retail percent margin trend and its underlying prices, DOE found that the average inflation-adjusted prices of appliances are relatively fixed during this period as well. This set of historical data has no bearing on firm markup behavior under product price increases, such as DOE projects would occur when higher-efficiency products are introduced. If prices are relatively constant, the incremental markup approach will arrive at the same price prediction as applying fixed-percent margin; hence, the historically constant percent margins do not necessarily imply a constant percent margin in the future, especially in the case of increased input prices. DOE evaluated time series margin and price data from three industries that experienced rapidly changing input prices—the LCD television retail market,26 the U.S. oil and gasoline market,27 and the U.S. housing market.28 The results indicate that dollar margins vary across different industries to reflect changes in input price, but the percent margins do not remain fixed over time in any of these industries. Appendix 6B in the TSD describes DOE’s findings.

(3) Regarding the interviews with appliance retailers, it is difficult for DOE to evaluate the characterization of the responses without knowing what questions were posed to the retailers. DOE’s analysis necessarily considers a simplified version of appliance retailing: Namely, a situation in which nothing changes except for those changes in appliance offerings that

24 U.S. Census, 2012 Annual Retail Trade Survey (ARTS), Electronics and Appliance Stores sectors.


26 LCD television data from DisplaySearch, a market research company affiliated with NPD Group.

27 U.S. Energy Information Agency, Oil price: Spot price in Cushing, Oklahoma for 42 gallon barrel of oil; Retail gas price: U.S. average retail price of gasoline, all grades and formulations.

DOE implicitly asks: Assuming the product cost increases while the other costs remain constant (no change in labor, material and operating costs), are retailers still able to keep the same markup over time as before? DOE recognizes that retailers are likely to seek to maintain the same markup on appliances if the price they pay goes up as a result of appliance standards, but DOE concludes that, over time, adjustment is likely to occur due to competitive pressures. Other retailers may find that they can gain sales by reducing the markup and maintaining the same per-unit operating profit. The incremental markup approach embodies the same perspective as the “preservation of per-unit operating profit markup scenario” used in the MIA (see section IV.J of this document).

DOE concludes that there is not sufficient evidence to support the application of fixed percent markups to the cost increment on efficient equipment. Firms generally cannot maintain fixed margins in the long run under changing cost conditions. Thus, DOE continues to apply the incremental markup approach to estimate the price increase for more efficient products.

Chapter 6 of the final rule TSD provides details on DOE’s development of markups for dehumidifiers.

E. Energy Use Analysis

DOE’s energy use analysis estimated the range of energy use of dehumidifiers in the field, i.e., as they are actually used by consumers. The energy use analysis provided the basis for other analyses DOE performed, particularly assessments of the energy savings and the savings in consumer operating costs that could result from adoption of amended standards.

A dehumidifier uses energy when the compressor is operating to remove moisture from the air. When the compressor is not operating, the dehumidifier may use energy by operating the fan to circulate air through the unit to sample the ambient relative humidity and to defrost the evaporator coils. When neither the fan nor the compressor is operating, energy is used in standby mode or off mode to supply power for functions such as keeping a user panel lit. DOE determined the annual energy consumption of dehumidifiers by multiplying the capacity (liters per day) by the hours of operation in dehumidification mode, dividing that quantity by the product efficiency, and adding the energy use for the fan mode and the standby and off mode.

The efficiency and capacity values were measured using a temperature of 73 °F for whole-home dehumidifiers, 65 °F for portable dehumidifiers, and a humidity set point of 60 percent, as stipulated in the test procedure for dehumidifiers in appendix X1. To estimate hours of operation in each mode, DOE used two recent field studies that measured daily hours of use in each operating mode for both portable and whole-home dehumidifiers. DOE paired these data with estimates of the number of months that dehumidifiers are used in a representative sample of U.S. households. DOE used data from the EIA’s 2009 Residential Energy Consumption Survey (RECS 2009), which was the most recent survey available at the time of DOE’s analysis. RECS is a national survey of housing units that collects statistical information on the consumption of and expenditures for energy in housing units along with data on energy-related characteristics of the housing units and occupants. RECS 2009 questioned each household on two aspects of dehumidifier use: (1) Ownership and (2) number of months of dehumidifier use. DOE estimated that consumers leave the dehumidifier to cycle on and off for the entire month or months of the dehumidification season.

DOE estimated the energy use for off-cycle mode and the standby and off mode using the hours of operation described above, along with data on average power in off-cycle and standby modes from the field studies. Thermo-Stor believes that there are many factors which influence dehumidifier operation and that there is no correlation between dehumidifier capacity and the amount of water vapor which must be removed. Thermo-Stor stated that a dehumidifier will be run as long as required to reduce humidity until it reaches a user’s setting. (Thermo-Stor, No. 38 at pp. 1–2)

Based on available data, DOE has accounted for the factors influencing dehumidifier operation in its analysis. The engineering analysis provided data on capacities and efficiencies, field metered data in available literature showed ranges of time percentages spent in different modes of operation, and the RECS household sample showed variation in months of dehumidifier use as reported by consumers. DOE assumed that consumers use readily available guides when deciding the size of dehumidifier they need to purchase given the amount of humidity they experience.

Chapter 7 of the final rule TSD provides details on DOE’s energy use analysis for dehumidifiers.

F. Life-Cycle Cost and Payback Period Analysis

In determining whether an energy conservation standard is economically justified, DOE considers the economic impact of potential standards on consumers. The effect of new or amended energy conservation standards on individual consumers usually involves a reduction in operating cost and an increase in purchase cost. DOE used the following two metrics to measure consumer impacts:

- LCC (life-cycle cost) is the total consumer cost of an appliance or product, generally over the life of the appliance or product. The LCC calculation includes total installed cost (equipment manufacturer selling price, distribution chain markups, sales tax, and installation costs), operating costs (energy, repair, and maintenance costs), equipment lifetime, and discount rate. Future operating costs are discounted to the time of purchase and summed over the lifetime of the appliance or product.
- PBP (payback period) measures the amount of time it takes consumers to recover the estimated higher purchase price of a more energy-efficient product through reduced operating costs. Inputs to the payback period calculation include the installed cost to the consumer and first-year operating costs. For any given efficiency level, DOE measures the change in LCC relative to the LCC in the no-new-standards case, which reflects the market in the absence of new or amended energy conservation standards, and includes baseline products as well as products with higher efficiency. In contrast, the PBP for a given efficiency level is measured relative to the baseline product only.

For each product class efficiency level, DOE calculated the LCC and PBP for a nationally representative set of housing units. As stated previously, DOE developed household samples with RECS 2009 data. For each sample household, DOE determined the energy
consumption for the dehumidifier and the appropriate electricity price. By developing a representative sample of households, the analysis captured the variability in energy consumption and energy prices associated with the use of dehumidifiers.

The LCC and PBP analyses are designed to support DOE’s consideration of the economic impact of potential standards on consumers of the products subject to the standard, as required by EPCA. The use of RECS 2009 to develop a consumer sample and to provide data for estimation of product energy use allows DOE to characterize the range of conditions in which covered appliances are operated. As a result, DOE is able to estimate how the energy savings would vary among households for each considered efficiency level.

Inputs to the calculation of total installed cost include the cost of the product—which includes MPCs, manufacturer markups, retailer and distributor markups, and sales taxes—and installation costs. Inputs to the calculation of operating expenses include annual energy consumption, energy prices and price projections, repair and maintenance costs, product lifetimes, and discount rates. DOE created distributions of values for product lifetime, discount rates, and sales taxes, with probabilities attached to each value, to account for their uncertainty and variability.

The computer model DOE uses to calculate the LCC and PBP, which incorporates Crystal Ball™ (a commercially available software program), relies on a Monte Carlo simulation to incorporate uncertainty and variability into the analysis. The Monte Carlo simulations randomly sample input values from the probability distributions and dehumidifier user samples. The model calculated the LCC and PBP for products at each efficiency level for 10,000 housing units per simulation run.

DOE calculated the LCC and PBP for all customers as if each were to purchase a new product in the expected year of compliance with amended standards. The amended standards apply to dehumidifiers manufactured 3 years after the date on which the amended standards for dehumidifiers are published. Therefore, for purposes of its analysis, DOE used 2019 as the first year of compliance with these amended standards.

Table IV.18 summarizes the approach and data DOE used to derive inputs to the LCC and PBP calculations. The subsections that follow provide further discussion. Details of the spreadsheet model, and of all the inputs to the LCC and PBP analyses, are contained in chapter 8 of the final rule TSD and its appendices.

### Table IV.18—Summary of Inputs and Methods for the LCC and PBP Analysis *

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Source/Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Cost</td>
<td>Derived by multiplying MPCs by manufacturer and retailer markups and sales tax, appropriate. Used historical data to derive a price scaling index to forecast product costs.</td>
</tr>
<tr>
<td>Installation Costs</td>
<td>For portable dehumidifiers, DOE assumed no installation costs with the baseline unit and no cost with efficiency level. For whole-home dehumidifiers, baseline installation cost were determined with data from RS Means Residential Cost Data. DOE assumed incremental installation costs with efficiency level.</td>
</tr>
<tr>
<td>Annual Energy Use</td>
<td>The total annual energy use derived from power demand of each mode multiplied by the hours per year. Average number of hours based on field data.</td>
</tr>
<tr>
<td>Energy Prices</td>
<td>Variability: Based on the 2009 RECS.</td>
</tr>
<tr>
<td>Energy Price Trends</td>
<td>Average and Marginal Electricity: Based on EEI 2014.</td>
</tr>
<tr>
<td>Repair and Maintenance Costs</td>
<td>Variability: Regional energy prices determined for 27 regions.</td>
</tr>
<tr>
<td>Product Lifetime</td>
<td>Based on AEO 2015 price forecasts.</td>
</tr>
<tr>
<td>Discount Rates</td>
<td>Assumed no change with efficiency level.</td>
</tr>
<tr>
<td>Compliance Date</td>
<td>R.S. Means Residential Cost Data book to estimate the baseline installation cost for whole-home dehumidifiers. DOE assumed that installation costs would not be impacted with increased efficiency levels in the NOPR analysis.</td>
</tr>
<tr>
<td></td>
<td>Aprilaire commented that large whole-home units will require additional installation work. (Aprilaire, No. 34 at p. 2) For this final rule, DOE reviewed the R.S. Means Residential Data, and estimated incremental installation costs for each efficiency level based on additional labor costs for larger sizes of HVAC ventilation work. See chapter 8 of the final rule TSD for further information on the derivation of the installation costs for whole-home dehumidifiers.</td>
</tr>
</tbody>
</table>

1. Product Cost

To calculate consumer product costs, DOE multiplied the MPCs developed in the engineering analysis by the markups described in this preamble (along with sales taxes). DOE used different markups for baseline products and higher-efficiency products, because DOE applies an incremental markup to the increase in MSP associated with higher-efficiency products.

2. Installation Cost

Installation cost includes labor, overhead, and any miscellaneous materials and parts needed to install the product. DOE used data from the 2015 R.S. Means Residential Cost Data book to estimate the baseline installation cost for whole-home dehumidifiers. DOE assumed that installation costs would not be impacted with increased efficiency levels in the NOPR analysis.

3. Annual Energy Consumption

For each sampled household, DOE determined the energy consumption for a dehumidifier at different efficiency levels using the approach described in section IV.E of this document.

4. Energy Prices

DOE derived marginal residential electricity and natural gas prices for 27 geographic areas. Marginal prices are

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32 DOE characterized the geographic distribution into 27 geographic areas to be consistent with the 27 states and group of states reported in RECS 2009.
appropriate for determining energy cost savings associated with possible changes to efficiency standards. For electricity, DOE derived marginal and average prices which vary by season, region, and baseline electricity consumption level. DOE estimated these prices using data published with the Edison Electric Institute (EEI), Typical Bill and Average Rates reports for summer and winter 2014. For the residential sector each report provides, for most of the major investor-owned utilities (IOUs) in the country, the total bill assuming household consumption levels of 500, 750, and 1,000 kWh for the billing period. DOE defined the average price as the ratio of the total bill to the total electricity consumption. DOE also used the EEI data to define a marginal price as the ratio of the change in the bill to the change in energy consumption.

For the residential sector, DOE defined the average price as the ratio of the total bill to the total electricity consumption. DOE also used the EEI data to define a marginal price as the ratio of the change in the bill to the change in energy consumption. DOE first calculated weighted-average values for each geographic area for each type of price. Each EEI utility in an area was assigned a weight based on the number of consumers it serves. Consumer counts were taken from the most recent EIA Form 861 data (2012).

DOE assigned seasonal average prices to all households in the LCC sample based on its location and its baseline monthly electricity consumption for an average summer or winter month. For sampled households who were assigned a product efficiency greater than or equal to the considered level for a standard, DOE then assigned marginal price to each household based on its location and the decremented electricity consumption. In the LCC sample, households could be assigned to one of 27 geographic areas.

To estimate future trends in electricity and natural gas prices, DOE used price forecasts in AEO 2015. To arrive at prices in future years, DOE multiplied the average and marginal prices described above by the forecast of annual average changes in national-average residential electricity and natural gas prices. Because the AEO 2015 forecasts prices only to 2040, DOE used the average rate of change during 2025–2040 to estimate the price trends beyond 2040.

5. Maintenance and Repair Costs

Repair costs are associated with repairing or replacing product components that have failed in an appliance; maintenance costs are associated with maintaining the operation of the product. Typically, small incremental increases in product efficiency produce no, or only minor, changes in repair and maintenance costs.

During the 2013 preliminary analysis phase of the rulemaking, DOE requested information as to whether maintenance and repair costs are a function of efficiency level and product class. Manufacturers responded that these costs would not increase with efficiency. As a result, DOE assumed that repair and maintenance costs do not scale with the efficiency of dehumidifiers.

6. Product Lifetime

For portable dehumidifiers, DOE used lifetime estimates from the Appliance Magazine (2005). An appliance lifetime report (Kubo, et al., 2001) and Northeast Energy Star Lighting and Appliance. DOE assumed whole-home dehumidifiers have the same life span as residential room air conditioners and applied the lifetime parameters derived for room air conditioners in the 2011 rulemaking to whole-home dehumidifiers. The analysis yielded an estimate of mean lifetime of approximately 11 years for portable dehumidifiers and approximately 19 years for whole-home dehumidifiers. DOE also used the data to develop a survival function that was incorporated as a probability distribution in the LCC analysis. See chapter 8, section 8.2.2.8 of the final rule TSD for further details.

7. Discount Rates

In the calculation of LCC, DOE applies discount rates appropriate to households to estimate the present value of future operating costs. DOE estimated a distribution of residential discount rates for dehumidifiers based on consumer financing costs and opportunity cost of funds related to appliance energy cost savings and maintenance costs.

To establish residential discount rates for the LCC analysis, DOE identified all relevant household debt or asset classes in order to approximate a consumer’s opportunity cost of funds related to appliance energy cost savings and maintenance costs. DOE then estimated the average percentage shares of the various types of debt and equity by household income group using data from the Federal Reserve Board’s Survey of Consumer Finances (SCF) for 1995, 1998, 2001, 2004, 2007, 2010, and 2013. Using the SCF and other sources, DOE then developed a distribution of rates for each type of debt and asset by income group to represent the rates that may apply in the year in which amended standards would take effect. DOE assigned each sample household a specific discount rate drawn from one of the distributions. The average rate across all types of household debt and equity and income groups, weighted by the shares of each class, is 4.4 percent. See chapter 8, section 8.2.5 of the final rule TSD for further details on the development of consumer discount rates.

8. Efficiency Distribution in the No-New-Standards Case

To accurately estimate the share of consumers that would be affected by a standard at a particular efficiency level, DOE’s LCC analysis considered the projected distribution of product efficiencies in the no-new-standards case (i.e., the case without new energy efficiency standards).
efficiency standards). DOE refers to this distribution of product efficiencies as a no-new-standards case efficiency distribution.

To estimate the efficiency distribution of dehumidifiers for 2019, DOE analyzed its Compliance Certification Database for dehumidifiers. To project the efficiency trend between 2019 and 2048, DOE used a 0.25 percent annual increase in shipment-weighted efficiency, as discussed in section IV.H. See chapter 8 of the final rule TSD for further information on the derivation of the efficiency distributions.

9. Payback Period Analysis

The PBP is the amount of time it takes the consumer to recover the additional installed cost of more efficient products, compared to baseline products, through energy cost savings. PBPs are expressed in years. PBPs that exceed the life of the product mean that the increased total installed cost is not recovered in reduced operating expenses.

The inputs to the PBP calculation for each efficiency level are the change in total installed cost of the product and the change in the first-year annual operating expenditures relative to the baseline. The PBP calculation uses the same inputs as the LCC analysis, except that discount rates are not needed.

As noted above, EPCA, as amended, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable test procedure, (42 U.S.C. 6295(o)(2)(B)(iii)) For each considered efficiency level, DOE determined the value of the first year’s energy savings by multiplying the energy savings by the average energy price forecast for the year in which compliance with the amended standard would be required. The results of the rebuttable presumption PBP analysis are summarized in section V.B.1.c of this document.

G. Shipments Analysis

DOE uses forecasts of annual product shipments to calculate the national impacts of potential amended energy conservation standards on energy use, NPV, and future manufacturer cash flows. The shipments model takes an accounting approach, tracking market shares of each product class and the vintage of units in the stock. Stock accounting uses product shipments as inputs to estimate the age distribution of in-service product stocks for all years. The age distribution of in-service product stocks is a key input to calculations of both the NES and NPV, because operating costs for any year depend on the age distribution of the stock.

To determine shipments to the replacement market, DOE estimated a stock of dehumidifiers by vintage by integrating historical shipments starting from 1972 for portable dehumidifiers and from 2004 for whole-home dehumidifiers. Over time, some units are retired and removed from the stock, triggering the shipment of a replacement unit. Depending on the vintage, a certain percentage of each type of unit will fail and need to be replaced. DOE based the retirement function on a probability distribution for the product lifetime that was developed in the LCC analysis. The shipments model assumes that no units are retired below a minimum product lifetime and that all units are retired before exceeding a maximum product lifetime.

To calibrate the estimated shipments with the historical data, DOE introduced into the model a market segment identified as existing households without dehumidifiers, also referred to as first-time owners. Based on the calibration, DOE estimated that 0.35 percent of existing households without a dehumidifier would annually purchase this product over the analysis period, 2019–2048.

For the final rule analysis, DOE applied price and efficiency elasticity parameters to estimate the effect of new standards on dehumidifier shipments. DOE estimated the price and efficiency elasticity parameters from a regression analysis that incorporated shipments, purchase price, and efficiency data specific to several residential appliances during 1989–2009. Based on evidence that the price elasticity of demand is significantly different over the short run and long run for other consumer goods (i.e., automobiles), DOE assumed that these elasticities decline over time. DOE estimated shipments in each standards case using the price and efficiency elasticity along with the change in the product price and operating costs between a standards case and the no-new-standards case. For details on the shipments analysis, see chapter 9 of the final rule TSD.

H. National Impact Analysis

The NIA assesses the national energy savings (NES) and the national net present value (NPV) from a national perspective of total consumer costs and savings that would be expected to result from new or amended standards at specific efficiency levels. ("Consumer" in this context refers to consumers of the product being regulated.) DOE calculates the NES and NPV based on projections of annual product shipments, along with the annual energy consumption and total installed cost data from the energy use and LCC analyses. For the present analysis, DOE forecasted the energy savings, operating cost savings, product costs, and NPV of consumer benefits over the lifetime of dehumidifiers sold from 2019 through 2048.

DOE evaluates the impacts of new and amended standards by comparing a case without such standards with standards-case projections. The no-new-standards case characterizes energy use and consumer costs for each product class in the absence of new or amended energy conservation standards. For this projection, DOE considers historical trends in efficiency and various forces that are likely to affect the mix of efficiencies over time. DOE compares the no-new-standards case with projections characterizing the market for each product class if DOE adopted new or amended standards at specific energy efficiency levels (i.e., the TSLs or standards cases) for that class. For the standards cases, DOE considers how a given standard would likely affect the market shares of products with efficiencies greater than the standard.

40 DOE uses data on manufacturer shipments as a proxy for national sales, as aggregate data on sales are lacking. In general one would expect a close correspondence between shipments and sales. 41 The NIA accounts for impacts in the 50 states and U.S. territories. 42 For the NIA, DOE adjusts the installed cost data from the LCC analysis to exclude sales tax, which is a transfer.
DOE uses a spreadsheet model to calculate the energy savings and the national consumer costs and savings from each TSL. Interested parties can review DOE’s analyses by changing various input quantities within the spreadsheet. The NIA spreadsheet model uses typical values (as opposed to probability distributions) as inputs. Table IV.19 summarizes the inputs and methods DOE used for the NIA analysis for the final rule. Discussion of these inputs and methods follows the table. See chapter 10 of the final rule TSD for further details.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipments</td>
<td>Annual shipments from shipments model.</td>
</tr>
<tr>
<td>Compliance Date of Standard</td>
<td>2019.</td>
</tr>
<tr>
<td>Efficiency Trends</td>
<td>No-New-Standards case: Shipment-Weighted Integrated Energy Factor (SWIEF) determined in 2019 for each of the considered products classes. Annual growth rate of 0.25 percent assumed for determining SWIEF between 2019 and 2048.</td>
</tr>
<tr>
<td>Annual Energy Consumption per Unit</td>
<td>Standard cases: Roll-up and shift scenario for 2019. Annual weighted-average values are a function of energy use at each TSL.</td>
</tr>
<tr>
<td>Total Installed Cost per Unit</td>
<td>Incorporates forecast of future product prices based on historical data.</td>
</tr>
<tr>
<td>Annual Energy Cost per Unit</td>
<td>Annual weighted-average values are as a function of the annual energy consumption per unit and energy prices.</td>
</tr>
<tr>
<td>Repair and Maintenance Cost per Unit</td>
<td>Annual values do not change with efficiency level.</td>
</tr>
<tr>
<td>Energy Prices</td>
<td>AEO 2015 forecasts (to 2040) and extrapolation through 2048.</td>
</tr>
<tr>
<td>Energy Site-to-Primary and FFC Conversion</td>
<td>A time-series conversion factor derived from AEO 2015.</td>
</tr>
<tr>
<td>Discount Rate</td>
<td>Three and seven percent real.</td>
</tr>
<tr>
<td>Present Year</td>
<td>Future costs and savings are discounted to 2015.</td>
</tr>
</tbody>
</table>

1. Product Efficiency Trends

A key component of the NIA is the trend in energy efficiency projected for the no-new-standards case and each of the standards cases. Section IV.8 of this document describes how DOE developed an energy efficiency distribution for the no-new-standards case (which yields a shipment-weighted average efficiency) for each of the considered product classes for the first year of the forecast period. To project the trend in efficiency for dehumidifiers over the entire shipments projection period, DOE employed shipments-weighted integrated energy factors (SWIEF) as a starting point for 2014 and assumed a 0.25 percent annual increase in shipment-weighted efficiency between 2014 and 2048. The approach is further described in chapter 10 of the final rule TSD.

For the standards cases, DOE used a “roll-up” scenario to establish the shipment-weighted efficiency for the year that standards are assumed to become effective (2019). In this scenario, the market of products in the no-new-standards case that do not meet the standard under consideration would “roll up” to meet the new standard level, and the market share of products above the standard would remain unchanged. For its projected efficiencies of TSLs, in addition to a “roll-up” scenario, DOE developed a shift scenario. In the shift scenario DOE developed growth trends for each trial standard level that maintained the same per-unit average total installed cost difference for the year 2019 between the no-new-standards case and each standards case over the entire projection period (2019–2048).

2. National Energy Savings

In 2011, in response to the recommendations of a committee on “Point-of-Use and Full-Fuel-Cycle Measurement Approaches to Energy Efficiency Standards” appointed by the National Academy of Sciences, DOE announced its intention to use FFC measures of energy use and greenhouse gas and other emissions in the national impact analyses and emissions analyses included in future energy conservation standards rulemakings. 76 FR 51281 (Aug. 18, 2011). After evaluating the approaches discussed in the August 18, 2011 notice, DOE published a statement of amended policy in which DOE explained its determination that EIA’s National Energy Modeling System (NEMS) is the most appropriate tool for its FFC analysis and its intention to use NEMS for that purpose. 77 FR 49701 (Aug. 17, 2012). NEMS is a public domain, multi-sector, partial equilibrium model of the U.S. energy sector that EIA uses to prepare its Annual Energy Outlook. The approach used for deriving FFC measures of energy use and emissions is described in appendix 10C of the final rule TSD. Aprilaire commented that DOE should separately show energy savings of whole-home dehumidifiers and portable dehumidifiers and stated that DOE has not shown that whole-home dehumidifier regulation will meet the requirement of “substantial” energy savings nor has DOE shown it meets the term used in the public meeting as “non-trivial.” (Aprilaire, No. 38 at p. 5) DOE shows energy savings for each product class in the National Impact Analysis. However when analyzing whether standards meet the EPAct requirement of “significant” energy savings, DOE considers the product type as a whole.

3. Net Present Value Analysis

The inputs for determining the NPV of the total costs and benefits experienced by consumers are: (1) Total annual installed cost; (2) total annual savings in operating costs; and (3) a discount factor to calculate the present value of costs and savings. DOE calculates net savings each year as the difference between the no-new-standards case and each standards case in terms of total savings in operating costs versus total increases in installed costs. DOE calculates operating cost savings over the lifetime of each product shipped during the forecast period. As discussed in section IV.F.1 of this document, DOE developed dehumidifier

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price trends based on historical Producer Price Index (PPI) data. Within the portable and whole-home product groups, DOE applied the same trends to forecast prices for each product class at each considered efficiency level. By 2048, which is the end date of the forecast period, the average dehumidifier price is forecasted to drop 37 percent relative to 2013. DOE’s projection of product prices for dehumidifiers is described in further detail in appendix 10C of the final rule TSD.

To evaluate the effect of uncertainty regarding price trends, DOE examined the effect of various product price forecasts on the consumer NPV for the considered TSls for dehumidifiers. In addition to the default price trend, DOE considered separate product price sensitivity cases for portable dehumidifiers and whole-home dehumidifiers. For portable dehumidifiers, DOE considered a case for a low price decline based on estimating an experience curve using PPI data for “small electric household appliances” from 1990 to 2009. A case for high price decline was based on the price forecast of the “furniture and appliances” series from AEO 2015. For whole-home dehumidifiers, a case for a low price decline was based on an exponential fit to the PPI from 1978 to 2014 for “air-conditioning, refrigeration, and forced air heating equipment.” The high price decline was based on the price forecast of the “furniture and appliances” series from AEO 2015. The approach used to forecast the price trends and the results of the sensitivity cases are described in appendix 10C of the final rule TSD.

The operating cost savings are energy cost savings, which are calculated using the estimated energy savings in each year and the projected price of the appropriate form of energy. To estimate energy prices in future years, DOE multiplied the average and marginal energy prices by the forecast of annual national-average residential energy price changes in the reference case from AEO 2015, which has an end year of 2040. To estimate price trends after 2040, DOE used the average annual rate of change in prices from 2020 to 2040. As part of the NIA, DOE also analyzed scenarios that used inputs from the AEO 2015 Low Economic Growth and High Economic Growth cases. Those cases have higher and lower energy price trends compared to the Reference case. NIA results based on these cases are presented in appendix 10C of the final rule TSD.

In calculating the NPV, DOE multiplies the net savings in future years by a discount factor to determine their present value. For this final rule, DOE estimated the NPV of consumer benefits using both a 3-percent and a 7-percent real discount rate. DOE uses these discount rates in accordance with guidance provided by the Office of Management and Budget (OMB) to Federal agencies on the development of regulatory analysis. The discount rates for the determination of NPV are in contrast to the discount rates used in the LCC analysis, which are designed to reflect a consumer’s perspective. The 7-percent real value is an estimate of the average before-tax rate of return to private capital in the U.S. economy. The 3-percent real value represents the “social rate of time preference,” which is the rate at which society discounts future consumption flows to their present value.

I. Consumer Subgroup Analysis

In analyzing the potential impact of new or amended standards on consumers, DOE evaluates the impact on identifiable subgroups of consumers that may be disproportionately affected by a national standard. DOE evaluates impacts on particular subgroups of consumers by analyzing the LCC, impacts and PBP for those particular consumers from alternative standard levels. For this final rule, DOE analyzed the impacts of the considered standard levels on low-income households and senior-only households. Chapter 11 in the final rule TSD describes the consumer subgroup analysis.

J. Manufacturer Impact Analysis

1. Overview

DOE performed an MIA to estimate the financial impacts of amended energy conservation standards on manufacturers of dehumidifiers and to estimate the potential impacts of such standards on employment and manufacturing capacity. The MIA has both quantitative and qualitative aspects and includes analyses of forecasted industry cash flows, the INPV, investments in research and development (R&D) and manufacturing capital, and domestic manufacturing employment. Additionally, the MIA seeks to determine how amended energy conservation standards might affect manufacturing employment, capacity, and competition, as well as how standards contribute to overall regulatory burden. Finally, the MIA serves to identify any disproportionate impacts on manufacturer subgroups, including small business manufacturers.

The quantitative part of the MIA primarily relies on the Government Regulatory Impact Model (GRIM), an industry cash flow model with inputs specific to this rulemaking. The key GRIM inputs include data on the industry cost structure, unit production costs, product shipments, manufacturer markups, and investments in R&D and manufacturing capital required to produce compliant products. The key GRIM outputs are the INPV, which is the sum of industry annual cash flows over the analysis period, discounted using the industry-weighted average cost of capital, and the impact to domestic manufacturing employment. The model uses standard accounting principles to estimate the impacts of more-stringent energy conservation standards on a given industry by comparing changes in INPV and domestic manufacturing employment between a no-new-standards case and the various TSls. To capture the uncertainty relating to manufacturer pricing strategy following amended standards, the GRIM estimates a range of possible impacts under different markup scenarios.

The qualitative part of the MIA addresses manufacturer characteristics and market trends. Specifically, the MIA considers such factors as manufacturing capacity, competition within the industry, the cumulative impact of other DOE and non-DOE regulations, and impacts on manufacturer subgroups. The complete MIA is outlined in chapter 12 of the final rule TSD.

DOE conducted the MIA for this rulemaking in three phases. In Phase 1 of the MIA, DOE conducted detailed interviews with manufacturers and prepared a profile of the dehumidifier manufacturing industry. During manufacturer interviews, DOE discussed engineering, manufacturing, and financial topics in order to identify concerns and to inform and validate assumptions used in the GRIM. See appendix 5A and 5B of the final rule TSD for a copy of the interview guides. See section IV.J.4 for a description of the key issues raised by manufacturers during the interviews.

Based on these manufacturer interviews, the market and technology assessment, and publicly available information, DOE derived financial inputs for the GRIM (e.g., revenues; materials, labor, overhead, and depreciation expenses; selling, general, and administrative expenses (SG&A); and R&D expenses). The public sources
of information DOE used in developing its characterization of the dehumidifier manufacturing industry, include company filings of form SEC 10–K filings, corporate annual reports, the U.S. Census Bureau’s Economic Census, and Hoover’s reports. In Phase 2 of the MIA, DOE prepared an industry cash-flow analysis to quantify the potential impacts of amended energy conservation standards. The GRIM uses several factors to determine a series of annual cash flows starting with the announcement of the standard and extending over a 30-year period following the compliance date of the standard. These factors include annual expected revenues, costs of sales, SG&A and R&D expenses, taxes, and capital expenditures (derived during Phase 1).

In general, energy conservation standards can affect manufacturer cash flow in three distinct ways: (1) Create a need for increased investment; (2) raise production costs per unit; and (3) alter revenue due to higher per-unit prices and changes in sales volumes.

In Phase 3 of the MIA, DOE evaluated subgroups of manufacturers that may be disproportionately impacted by amended standards or that may not be accurately represented by the average cost assumptions used to develop the industry cash flow analysis. Such manufacturer subgroups always include small business manufacturers, but may also include low-volume manufacturers (LVMs), niche players, and/or manufacturers exhibiting a cost structure that largely differs from the industry average. DOE identified one dehumidifier manufacturer subgroup for which average cost assumptions may not hold: Small businesses.

To identify small businesses for this analysis, DOE applied the size standards published by the Small Business Administration (SBA) to determine whether a company is considered a small business. See 13 CFR part 121. To be categorized as a small business, a manufacturer of dehumidifiers under North American Industry Classification System (NAICS) codes 333415 (“Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing”) or 335210 (“Small Electrical Appliance Manufacturing”), a dehumidifier manufacturer and its affiliates may employ a maximum of 1,250 employees or 1,500 employees, respectively. These thresholds include all employees in a business’ parent company and any other subsidiaries. Using these classifications in conjunction with a search of industry databases and the SBA member directory, DOE identified five manufacturers of dehumidifiers that qualify as small businesses, all of which are manufacturers of whole-home dehumidifiers and high-capacity portable dehumidifiers.

The dehumidifier manufacturer subgroup analysis is discussed in greater detail in chapter 12 of the final rule TSD and in section V.B.2 of this document.

In Phase 3, DOE also analyzed impacts of amended energy conservation standards for dehumidifiers on manufacturing capacity, direct employment, and cumulative regulatory burdens. Section V.B.2 discusses the findings of these analyses.

2. Government Regulatory Impact Model (GRIM)

DOE uses the GRIM to quantify the changes in industry cash flows resulting from amended energy conservation standards. The GRIM uses manufacturer costs, markups, shipments, and industry financial information to arrive at a series of no-new-standards-case annual cash flows absent new or amended standards, beginning with the present year, 2016, and continuing through 2048. The GRIM then models changes in costs, investments, shipments, and manufacturer margins that may result from new or amended energy conservation standards and compares these results against those in the no-new-standards-case forecast of annual cash flows. The primary quantitative output of the GRIM is the INPV, which DOE calculates by summing the stream of annual discounted cash flows over the full analysis period. For manufacturers of dehumidifiers, DOE used a real discount rate of 8.43 percent, the weighted-average cost of capital derived from industry financials and modified based on feedback received during confidential interviews with manufacturers.

The GRIM calculates cash flows using standard accounting principles and compares changes in INPV between the no-new-standards case and the various TSLs. The difference in INPV between the no-new-standards case and a standards case represents the financial impact of the amended standard on manufacturers at that particular TSL. As discussed previously, DOE collected the necessary information to develop key GRIM inputs from a number of sources, including publicly available data and interviews with manufacturers (described in section IV.J.4 of this document). The GRIM results are shown in section V.B.2.a of this document. Additional details about the GRIM can be found in chapter 12 of the final rule TSD.

a. Government Regulatory Impact Model Key Inputs

Manufacturer Production Costs

Manufacturing a higher efficiency product is typically more expensive than manufacturing a baseline product due to the use of more complex and typically more costly components. The changes in the MPCs of the analyzed products can affect the revenues, gross margins, and cash flow of the industry, making product cost data key GRIM inputs for DOE’s analysis. For each efficiency level for each product class, DOE used the MPCs developed in the engineering analysis, as described in section IV.C.2 of this document and further detailed in chapter 5 of the final rule TSD. Additionally, DOE used information from its teardown analysis, described in section IV.C of this final rule, to disaggregate the MPCs into material and labor costs. These cost breakdowns and equipment markups were validated with manufacturers during interviews.

No-New-Standards-Case Shipments Forecast

The GRIM estimates manufacturer revenues based on total unit shipment forecasts and the distribution of shipments by efficiency level. Changes in sales volumes and efficiency mix over time can significantly affect manufacturer finances. For this analysis, the GRIM used the NIA’s annual shipment forecasts derived from the shipments analysis from 2016 (the base year) to 2048 (the end of the analysis period). See chapter 9 of the final rule TSD for additional details on the shipments analysis.

Standards-Case Shipments Forecast

For each standards case, the GRIM assumes a small, constant percentage shift in shipments to higher efficiency levels, reflecting the idea that some efficiency improvements will occur independent of amended standards. The GRIM also assumes all remaining shipments of products below the projected minimum standard levels would roll up (i.e., be added) to the standard efficiency levels in response to


an increase in energy conservation standards. The GRIM also assumes that demand for higher-efficiency products (that are above the minimally compliant level) is a function of price, and is independent of the standard level.

Product and Capital Conversion Costs

Amended energy conservation standards may cause manufacturers to incur conversion costs to bring their production facilities and product designs into compliance with the new standards. For the purpose of the MIA, DOE classified these conversion costs into two major groups: (1) Product conversion costs and (2) capital conversion costs. Product conversion costs are investments in research, development, testing, and marketing, focused on making product designs comply with the new energy conservation standard. Capital conversion expenditures are investments in property, plant, and equipment to adapt or change existing production facilities so that new product designs can be fabricated and assembled.

Stranded Assets

If new or amended energy conservation standards require investment in new manufacturing capital, there also exists the possibility that they will render existing manufacturing capital obsolete. If the obsolete manufacturing capital is not fully depreciated at the time new or amended standards go into effect, these assets would be stranded and the manufacturer would have to write-down the residual value that had not yet been depreciated.

DOE used multiple sources of data to evaluate the level of product and capital conversion costs and stranded assets manufacturers would likely face to comply with amended dehumidifier energy conservation standards. DOE used manufacturer interviews to gather data on the level of investment anticipated at each proposed efficiency level and validated these assumptions using estimates of capital requirements derived from the product teardown analysis and engineering model described in section IV.C of this final rule. These estimates were then aggregated and scaled to derive total industry estimates of product and capital conversion costs and to protect confidential information.

In general, DOE assumes that all conversion-related investments occur between the year the final rule is published and the year by which manufacturers must comply with the new or amended standards. The investment figures used in the GRIM can be found in section V.B.2 of this document. For additional information on the estimated product conversion and capital conversion costs, see chapter 12 of the final rule TSD.

b. Government Regulatory Impact Model Scenarios

No-New-Standards-Case Markup

As discussed in section IV.D of this final rule, MSPs include direct manufacturing production costs (i.e., labor, material, overhead, and depreciation estimated in DOE’s MPCs) and all non-production costs (i.e., SG&A, R&D, and interest), along with profit. To calculate the MSPs in the GRIM, DOE applied manufacturer markups to the MPCs estimated in the engineering analysis. Based on publicly available financial information for manufacturers of dehumidifiers and comments from manufacturer interviews, DOE assumed the industry average no-new-standards-case markup on production costs to be 1.45. This markup takes into account the two-tiered sourcing structure of the majority of the portable dehumidifier segment, detailed below, in addition to the traditional one-tiered structure of the domestically-produced whole-home (and similarly constructed high-capacity portable) dehumidifier segment.

Lower-capacity portable dehumidifiers (product classes 1 and 2) and some high-capacity dehumidifiers (product class 3) are manufactured under contract by an overseas original equipment manufacturer (OEM). The engineering analysis, as detailed in chapter 5 of the final rule TSD, estimates the cost of manufacturing at the OEM. This production cost is marked up once by the OEM to the company contracting its manufacturer and again by the contracting company who imports the product and sells it to retailers. For imported portable dehumidifiers, the industry average baseline markup breaks down as follows:

<table>
<thead>
<tr>
<th>Markup Scenarios</th>
<th>Industry-Average Baseline Markups</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEM to Contracting Company</td>
<td>1.20</td>
</tr>
<tr>
<td>Contracting Company to First Customer Markup</td>
<td>1.21</td>
</tr>
<tr>
<td>Overall OEM to First Customer Markup</td>
<td>1.45</td>
</tr>
</tbody>
</table>

 AHAM cautioned that DOE not overlook the considerable capital and product conversion expenditures that manufacturers must face in redesigning significant component systems to meet TSL 3 with the new test procedure, appendix X1. AHAM commented that DOE should revise its analysis based on

48 “Gross margin” is defined as revenues minus cost of goods sold. On a unit basis, gross margin is selling price minus manufacturer production cost. In the GRIMs, markups determine the gross margin because various markups are applied to the manufacturer production costs to reach manufacturer selling price.
additional data from AHAM and manufacturer interviews, which may show that TSL 3 is no longer justified. (AHAM, No. 39 at p. 6) Additionally, AHAM commented that DOE should consider marketing costs necessary to explain to the public the change in capacities of units. (AHAM, No. 39 at p. 3)

DOE recognizes that the revised test procedure resulted in changes in capacity and efficiency. 80 FR 45802 (July 31, 2015). To ensure that the conversion cost estimates provided by manufacturers were reflective of the conversion costs dehumidifier manufacturers will face as a result of amended energy conservation standards, DOE conducted another round of manufacturer interviews following the June 2015 NOPR publication. DOE solicited information on all conversion costs during these interviews and was particularly interested in understanding the product conversion costs necessary for marketing, training, consumer education, and labeling that would help buyers of these products understand the new ranges of capacity and efficiency. (See the final rule TSD appendix 12A for the list of topics included in post-NOPR manufacturer interviews.) Based on feedback from these interviews, DOE has revised its conversion cost estimates, where applicable, for this final rule. See section V.B.2 of this final rule and chapter 12 of the final rule TSD for details on the revised industry conversion costs.

Aprilaire and Therma-Stor provided comments describing the potential impacts on the high-capacity portable dehumidifier and whole-home dehumidifier market segments. Aprilaire commented that it does not support DOE regulating the whole-home dehumidifier industry at this time, as it believes the small American-based businesses would face high, disproportionate impacts. (Aprilaire, No. 34 at p. 1) Additionally, Aprilaire commented that any decrease in market size and jobs for whole-home dehumidifiers would have a disproportionate effect on employment in the United States, and the job market specifically in Wisconsin. (Aprilaire, No. 34 at p. 5) Therma-Stor, also a small manufacturer located in Wisconsin, commented that if the June 2015 NOPR proposal goes into effect unchanged, it could put them and other domestic manufacturers out of business. Therma-Stor stated that it expects to reduce its employment headcount by one-half under the June 2015 NOPR proposal, which it stated was biased against manufacturers of high-capacity portable dehumidifiers and whole-home dehumidifiers. (Therma-Stor, No. 38 at p. 3)

DOE acknowledges that amended energy conservation standards for dehumidifiers could disproportionately impact small domestic manufacturers. As mentioned above, as a result of these comments and other comments submitted in response to the June 2015 NOPR, DOE solicited additional information from small and large dehumidifier manufacturers on the expected financial burdens related to compliance with the standard levels considered in the NOPR. Based on new feedback, for this final rule, DOE has updated the MIA, including its analysis of small business impacts and discussions of potential impacts on domestic production employment and manufacturing capacity. DOE based its selection of efficiency levels in this final rule on its updated analysis. See section V.B.2 of this final rule for DOE’s updated analysis of INPV impacts, and direct employment and manufacturing capacity impacts. See section VII.B of this final rule for a discussion of disproportionate impacts on small domestic dehumidifier manufacturers.

Regarding the baseline and incremental efficiency levels analyzed in the June 2015 NOPR, Therma-Stor commented that DOE’s determination that low-capacity portable dehumidifiers cannot be designed with efficiency enhancements to establish a minimum efficiency level two to three times less than high capacity portable dehumidifiers and whole-home dehumidifiers leads to an unfair and anti-competitive bias in favor of the manufacturers and importers of low-capacity portable dehumidifiers. (Therma-Stor, No. 38 at p. 2) Aprilaire commented that the whole-home dehumidifier industry has been analyzed at only two efficiency levels and asked why DOE did not analyze other efficiency levels, which may have less of an impact on the small businesses and the whole-home dehumidifier industry. (Aprilaire, Public Meeting Transcript, No. 35 at p. 83)

As described in section IV.C.1 of this final rule, DOE analyzed a representative sample of products in each product class to determine an appropriate baseline efficiency level and subsequent improved efficiency levels. For high-capacity portable dehumidifiers (50.01 pints/day or greater), DOE has updated the analysis and included an additional efficiency level for this product class to reflect products currently available on the market. Based on product testing and teardowns, DOE included only one gap fill efficiency level for whole-home dehumidifiers with a case volume less than 8.0 cubic feet and two gap fill efficiency levels for whole-home dehumidifiers with case volumes greater than 8.0 cubic feet. Based on the new feedback from interested parties, DOE has updated the MIA in this final rule, including its analysis of small, domestic business impacts, and its analysis of potential impacts on domestic production employment and manufacturing capacity. This updated analysis has directly impacted the selection of standard efficiency levels in this final rule. See section V.B.2 of this final rule for DOE’s updated analysis of INPV impacts, and direct employment and manufacturing capacity impacts.

4. Manufacturer Interviews

As a result of public comments received from interested parties following the publication of the June 2015 NOPR and DOE’s amended test procedure, DOE conducted additional confidential interviews with manufacturers. During interviews, DOE asked manufacturers to describe their recommendations relating to updates to the June 2015 NOPR analyses, particularly those that would be affected by the new dehumidifier test procedure. Specifically, DOE solicited feedback on product classes, efficiency levels, and industry conversion costs. Technical data obtained during these interviews informed updates to the engineering analysis for this final rule, where applicable. See sections IV.A.1 and IV.C.1 of this document for information about the changes to product classes and efficiency levels for this final rule.

The following sections describe the issues identified by manufacturers relating to DOE’s June 2015 NOPR analyses. These concerns are also presented in chapter 12 of the final rule TSD.

Unavailability of Products

Most manufacturers interviewed expressed concern that the proposed dehumidifier standards were too aggressive and could result in the unavailability of products of certain capacities. In particular, manufacturers stated that the efficiency levels proposed in the June 2015 NOPR for high-capacity portable dehumidifiers and whole-home dehumidifiers are too stringent relative to those for lower-capacity dehumidifiers. Manufacturers stated that this would reduce the
estimates the effect of potential energy conservation standards on power sector and site (where applicable) combustion emissions of CO₂, NOₓ, SO₂, and H₂O. The second component estimates the impacts of potential standards on emissions of two additional greenhouse gases, CH₄ and N₂O, as well as the reductions to emissions of all species due to “upstream” activities in the fuel production chain. These upstream activities comprise extraction, processing, and transporting fuels to the site of combustion. The associated emissions are referred to as upstream emissions.

The analysis of power sector emissions uses marginal emissions factors that were derived from data in AEO 2015, as described in section IV.M. The methodology is described in chapter 13 and 15 of the final rule TSD. Combustion emissions of CH₄ and N₂O are estimated using emissions intensity factors published by the EPA, GHG Emissions Factors Hub.50 The FFC upstream emissions are estimated based on the methodology described in chapter 15 of the final rule TSD. The upstream emissions include both emissions from fuel combustion during extraction, processing, and transportation of fuel, and “fugitive” emissions (direct leakage to the atmosphere) of CH₄ and CO₂.

The emissions intensity factors are expressed in terms of physical units per MWh or MMbtu of site energy savings. Total emissions reductions are estimated using the energy savings calculated in the national impact analysis.

For CH₄ and N₂O, DOE calculated emissions reduction in tons and also in terms of physical units per MWh or MMbtu of site energy savings. Total emissions reductions are estimated using the energy savings calculated in the national impact analysis.

50 Available at: http://www2.epa.gov/climateleadershiphub-center-corporate-climate-leadership/greenhouse-gas-emissions-factors-hub.

K. Emissions Analysis

The emissions analysis consists of two components. The first component includes recent government actions, for which implementing regulations were available as of October 31, 2014. DOE’s estimation of impacts accounts for the presence of the emissions control programs discussed in the following paragraphs.

SO₂ emissions from affected electric generating units (EGUs) are subject to nationwide and regional emissions cap-and-trade programs. Title IV of the Clean Air Act sets an annual emissions cap on SO₂ for affected EGUs in the 48 contiguous States and the District of Columbia (DC). (42 U.S.C. 7651 et seq.) SO₂ emissions from 28 eastern States and DC were also limited under the Clean Air Interstate Rule (CAIR). 70 FR 25162 (May 12, 2005). CAIR created an allowance-based trading program that operates along with the Title IV program. In 2008, CAIR was remanded to EPA by the U.S. Court of Appeals for the District of Columbia Circuit, but it remained in effect.52 In 2011, EPA issued a replacement for CAIR, the Cross-State Air Pollution Rule (CSAPR). 76 FR 48208 (August 8, 2011). On August 21, 2012, the DC Circuit issued a decision to vacate CSAPR,53 and the court ordered EPA to continue administering CAIR. On April 29, 2014, the U.S. Supreme Court reversed the judgment of the DC Circuit and remanded the case for further proceedings consistent with the Supreme Court’s opinion.54 On October 23, 2014, the DC Circuit lifted the stay of CSAPR.55 Pursuant to this action, CSAPR went into effect (and CAIR ceased to be in effect) as of January 1, 2015.

EIA was not able to incorporate CSAPR into AEO 2015, so it assumes implementation of CAIR. Although DOE’s analysis used emissions factors that assume that CAIR, not CSAPR, is the regulation in force, the difference between CAIR and CSAPR is not significant for the purpose of DOE’s analysis of emissions impacts from energy conservation standards.

The attainment of emissions caps is typically flexible among EGUs and is...
enforced through the use of emissions allowances and tradable permits. Under existing EPA regulations, any excess SO\textsubscript{2} emissions allowances resulting from the lower electricity demand caused by the adoption of an efficiency standard could be used to permit offsetting increases in SO\textsubscript{2} emissions by any regulated EGU. In past rulemakings, DOE recognized that there was uncertainty about the effects of efficiency standards on SO\textsubscript{2} emissions covered by the existing cap-and-trade system, but it concluded that negligible reductions in power sector SO\textsubscript{2} emissions would occur as a result of standards.

Beginning in 2016, however, SO\textsubscript{2} emissions will fall as a result of the Mercury and Air Toxics Standards (MATS) for power plants. 77 FR 9304 (Feb. 16, 2012). In the MATS rule, EPA established a standard for hydrogen chloride as a surrogate for acid gas hazardair pollutants (HAP), and also established a standard for SO\textsubscript{2} (a non-HAP acid gas) as an alternative equivalent surrogate standard for acid gas HAP. The same controls are used to reduce HAP and non-HAP acid gas; thus, SO\textsubscript{2} emissions will be reduced as a result of the control technologies installed on coal-fired power plants to comply with the MATS requirements for acid gas. AEO 2015 assumes that, in order to continue operating, coal plants must have either flue gas desulfurization or dry sorbent injection systems installed by 2016. Both technologies, which are used to reduce acid gas emissions, also reduce SO\textsubscript{2} emissions. Under the MATS, emissions will be far below the cap established by CAIR, so it is unlikely that excess SO\textsubscript{2} emissions allowances resulting from the lower electricity demand would be needed or used to permit offsetting increases in SO\textsubscript{2} emissions by any regulated EGU.\textsuperscript{56} Therefore, DOE believes that energy conservation standards will generally reduce SO\textsubscript{2} emissions in 2016 and beyond.

CAIR established a cap on NO\textsubscript{X} emissions in 28 eastern States and the District of Columbia.\textsuperscript{57} Energy conservation standards are expected to have little effect on NO\textsubscript{X} emissions in those States covered by CAIR because excess NO\textsubscript{X} emissions allowances resulting from the lower electricity demand could be used to permit offsetting increases in NO\textsubscript{X} emissions from other facilities. However, standards would be expected to reduce NO\textsubscript{X} emissions in the States not affected by the caps, so DOE estimated NO\textsubscript{X} emissions reductions from the standards considered in this final rule for these States.

The MATS limit mercury emissions from power plants, but they do not include emissions caps and, as such, DOE’s energy conservation standards would likely reduce Hg emissions. DOE estimated mercury emissions reduction using emissions factors based on AEO 2015, which incorporates the MATS.

L. Monetizing Carbon Dioxide and Other Emissions Impacts

As part of the development of this rule, DOE considered the estimated monetary benefits from the reduced emissions of CO\textsubscript{2} and NO\textsubscript{X} that are expected to result from each of the TSLs considered. In order to make this calculation analogous to the calculation of the NPV of consumer benefit, DOE considered the reduced emissions expected to result over the lifetime of products shipped in the forecast period for each TSL. This section summarizes the basis for the monetary values used for CO\textsubscript{2} and NO\textsubscript{X} emissions and presents the values considered in this final rule.

For this final rule, DOE relied on a set of values for the social cost of carbon (SCC) that was developed by a Federal interagency process. The basis for these values is summarized in the next section, and a more detailed description of the methodologies used is provided as an appendix to chapter 14 of the final rule TSD.

1. Social Cost of Carbon

The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) climate-change-related changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Estimates of the SCC are provided in dollars per metric ton of CO\textsubscript{2}. A domestic SCC value is meant to reflect the value of damages in the United States resulting from a unit change in CO\textsubscript{2} emissions, while a global SCC value is meant to reflect the value of damages worldwide.

Under section 1(b)(6) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), agencies must, to the extent permitted by law, “assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.” The purpose of the SCC estimates presented here is to allow agencies to incorporate the monetized social benefits of reducing CO\textsubscript{2} emissions into cost-benefit analyses of regulatory actions. The estimates are presented with an acknowledgement of the many uncertainties involved and with a clear understanding that they should be updated over time to reflect increasing knowledge of the science and economics of climate impacts.

As part of the interagency process that developed these SCC estimates, technical experts from numerous agencies met on a regular basis to consider public comments, explore the technical literature in relevant fields, and discuss key model inputs and assumptions. The main objective of this process was to develop a range of SCC values using a defensible set of input assumptions grounded in the existing scientific and economic literatures. In this way, key uncertainties and model differences transparently and consistently inform the range of SCC estimates used in the rulemaking process.

a. Monetizing Carbon Dioxide Emissions

When attempting to assess the incremental economic impacts of CO\textsubscript{2} emissions, the analyst faces a number of challenges. A report from the National Research Council\textsuperscript{58} points out that any assessment will suffer from uncertainty, speculation, and lack of information about: (1) Future emissions of GHGs; (2) the effects of past and future emissions on the climate system; (3) the impact of changes in climate on the physical and biological environment; and (4) the translation of these environmental impacts into economic damages. As a result, any effort to quantify and

\textsuperscript{56} DOE notes that the Supreme Court remanded EPA’s 2012 rule regarding national emission standards for hazardous air pollutants from certain electric utility steam generating units. See Michigan v. EPA (Case No. 14–46, 2015). DOE has tentatively determined that the remand of the MATS rule does not change the assumptions regarding the impact of energy efficiency standards on SO\textsubscript{2} emissions. Further, while the remand of the MATS rule may have an impact on the overall amount of mercury emitted by power plants, it does not change the impact of the energy efficiency standards on mercury emissions. DOE will continue to monitor developments related to this case and respond to them as appropriate.

\textsuperscript{57} CSAPR also applies to NO\textsubscript{X} and it supersedes the regulation of NO\textsubscript{X} under CAIR. As stated previously, the current analysis assumes that CAIR, not CSAPR, is the regulation in force. The difference between CAIR and CSAPR with regard to DOE’s analysis of NO\textsubscript{X} emissions is slight.

monetize the harms associated with climate change will raise questions of science, economics, and ethics and should be viewed as provisional.

Despite the limits of both quantification and monetization, SCC estimates can be useful in estimating the social benefits of reducing CO₂ emissions. The agency can estimate the benefits from reduced (or costs from increased) emissions in any future year by multiplying the change in emissions in that year by the SCC values appropriate for that year. The NPV of the benefits can then be calculated by multiplying each of these future benefits by an appropriate discount factor and summing across all affected years.

It is important to emphasize that the interagency process is committed to updating these estimates as the science and economic understanding of climate change and its impacts on society improves over time. In the meantime, the interagency group will continue to explore the issues raised by this analysis and consider public comments as part of the ongoing interagency process.

b. Development of Social Cost of Carbon Values

In 2009, an interagency process was initiated to offer a preliminary assessment of how best to quantify the benefits from reducing carbon dioxide emissions. To ensure consistency in how benefits are evaluated across Federal agencies, the Administration sought to develop a transparent and defensible method, specifically designed for the rulemaking process, to quantify avoided climate change damages from reduced CO₂ emissions. The interagency group did not undertake any original analysis. Instead, it combined SCC estimates from the existing literature to use as interim values until a more comprehensive analysis could be conducted. The outcome of the preliminary assessment by the interagency group was a set of five interim values: Global SCC estimates for 2007 (in 2006$) of $55, $33, $19, $10, and $5 per metric ton of CO₂. These interim values represented the first sustained interagency effort within the U.S. government to develop an SCC for use in regulatory analysis. The results of this preliminary effort were presented in several proposed and final rules.

c. Current Approach and Key Assumptions

After the release of the interim values, the interagency group reconvened on a regular basis to generate improved SCC estimates. Specially, the group considered public comments and further explored the technical literature in relevant fields. The interagency group relied on three integrated assessment models commonly used to estimate the SCC: The FUND, DICE, and PAG models. These models are frequently cited in the peer-reviewed literature and were used in the last assessment of the Intergovernmental Panel on Climate Change (IPCC). Each model was given equal weight in the SCC values that were developed.

Each model takes a slightly different approach to model how changes in emissions result in changes in economic damages. A key objective of the interagency process was to enable a consistent exploration of the three models, while respecting the different approaches to quantifying damages taken by the key modelers in the field. An extensive review of the literature was conducted to select three sets of input parameters for these models: Climate sensitivity, socio-economic and emissions trajectories, and discount rates. A probability distribution for climate sensitivity was specified as an input into all three models. In addition, the interagency group used a range of scenarios for the socio-economic parameters and a range of values for the discount rate. All other model features were left unchanged, relying on the model developers’ best estimates and judgments.

In 2010, the interagency group selected four sets of SCC values for use in regulatory analyses. Three sets of values are based on the average SCC from the three integrated assessment models, at discount rates of 2.5, 3, and 5 percent. The fourth set, which represents the 95th percentile SCC estimate across all three models at a 3-percent discount rate, was included to represent higher-than-expected impacts from climate change further out in the tails of the SCC distribution. The values grow in real terms over time. Additionally, the interagency group determined that a range of values from 7 percent to 23 percent should be used to adjust the global SCC to calculate domestic effects, although preference is given to consideration of the global benefits of reducing CO₂ emissions. Table IV.21 presents the values in the 2010 interagency group report,

<table>
<thead>
<tr>
<th>Year</th>
<th>5% Average</th>
<th>3% Average</th>
<th>2.5% Average</th>
<th>3% 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4.7</td>
<td>21.4</td>
<td>35.1</td>
<td>64.9</td>
</tr>
<tr>
<td>2015</td>
<td>5.7</td>
<td>23.8</td>
<td>38.4</td>
<td>72.8</td>
</tr>
<tr>
<td>2020</td>
<td>6.8</td>
<td>26.3</td>
<td>41.7</td>
<td>80.7</td>
</tr>
<tr>
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<td>29.6</td>
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</tr>
<tr>
<td>2030</td>
<td>9.7</td>
<td>32.8</td>
<td>50.0</td>
<td>100.0</td>
</tr>
<tr>
<td>2035</td>
<td>11.2</td>
<td>36.0</td>
<td>54.2</td>
<td>109.7</td>
</tr>
<tr>
<td>2040</td>
<td>12.7</td>
<td>39.2</td>
<td>58.4</td>
<td>119.3</td>
</tr>
<tr>
<td>2045</td>
<td>14.2</td>
<td>42.1</td>
<td>61.7</td>
<td>127.8</td>
</tr>
<tr>
<td>2050</td>
<td>15.7</td>
<td>44.9</td>
<td>65.0</td>
<td>136.2</td>
</tr>
</tbody>
</table>

59 It is recognized that this calculation for domestic values is approximate, provisional, and highly speculative. There is no a priori reason why domestic benefits should be a constant fraction of net global damages over time.

The SCC values used for this document were generated using the most recent versions of the three integrated assessment models that have been published in the peer-reviewed literature, as described in the 2013 update from the interagency working group (revised July 2015). Table IV.22 shows the updated sets of SCC estimates from the latest interagency update in 5-year increments from 2010 to 2050. The full set of annual SCC estimates between 2010 and 2050 is reported in appendix 14B of the final rule TSD. The central value that emerges is the average SCC across models at the 3-percent discount rate. However, for purposes of capturing the uncertainties involved in regulatory impact analysis, the interagency group emphasizes the importance of including all four sets of SCC values.

### Table IV.22—Annual SCC Values from 2013 Interagency Update (Revised July 2015), 2010–2050

<table>
<thead>
<tr>
<th>Year</th>
<th>Discount Rate</th>
<th>5% Average</th>
<th>3% Average</th>
<th>2.5% Average</th>
<th>3% 95th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td>10</td>
<td>31</td>
<td>50</td>
<td>86</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>11</td>
<td>36</td>
<td>56</td>
<td>105</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td>12</td>
<td>42</td>
<td>62</td>
<td>123</td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td>14</td>
<td>46</td>
<td>68</td>
<td>138</td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td>16</td>
<td>50</td>
<td>73</td>
<td>152</td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td>18</td>
<td>55</td>
<td>76</td>
<td>168</td>
</tr>
<tr>
<td>2040</td>
<td></td>
<td>21</td>
<td>60</td>
<td>84</td>
<td>183</td>
</tr>
<tr>
<td>2045</td>
<td></td>
<td>23</td>
<td>64</td>
<td>89</td>
<td>197</td>
</tr>
<tr>
<td>2050</td>
<td></td>
<td>26</td>
<td>69</td>
<td>95</td>
<td>212</td>
</tr>
</tbody>
</table>

It is important to recognize that a number of key uncertainties remain, and that current SCC estimates should be treated as provisional and revisable because they will evolve with improved scientific and economic understanding. The interagency group also recognizes that the existing models are imperfect and incomplete. The National Research Council report mentioned previously points out that there is tension between the goal of producing quantified estimates of the economic damages from an incremental ton of carbon and the limits of existing efforts to model these effects. There are a number of analytical challenges that are being addressed by the research community, including research programs housed in many of the Federal agencies participating in the interagency process to estimate the SCC. The interagency group intends to periodically review and reconsider those estimates to reflect increasing knowledge of the science and economics of climate impacts, as well as improvements in modeling.

In summary, in considering the potential global benefits resulting from reduced CO₂ emissions, DOE used the values from the 2013 interagency report (revised July 2015), adjusted to 2014$ using the implicit price deflator for gross domestic product (GDP) from the Bureau of Economic Analysis. For each of the four sets of SCC cases specified, the values for emissions in 2015 were $12.2, $40.0, $62.3, and $117 per metric ton avoided (values expressed in 2014$). DOE derived values after 2050 based on the trend in 2010–2050 in each of the four cases.

DOE multiplied the CO₂ emissions reduction estimated for each year by the SCC value for that year in each of the four cases. To calculate a present value of the stream of monetary values, DOE discounted the values in each of the four cases using the specific discount rate that had been used to obtain the SCC values in each case.

2. Social Cost of Other Air Pollutants

As noted previously, DOE has estimated how the considered energy conservation standards would decrease power sector NOₓ emissions in those 22 States not affected by the CAIR.

DOE estimated the monetized value of NOₓ emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis for the Clean Power Plan Final Rule, published in August 2015 by EPA’s Office of Air Quality Planning and Standards.63 The report includes high and low values for NOₓ (as PM₂.₅) for 2020, 2025, and 2030 discounted at 3 percent and 7 percent.64 These values are presented in chapter 14 of the final rule TSD. DOE assigned values for 2021–2024 and 2026–2029 using, respectively, the values for 2020 and 2025. DOE assigned values after 2030 using the value for 2030. DOE developed values specific to the end-use category for dehumidifiers using a method described in appendix 14C.

DOE multiplied the emissions reduction (tons) in each year by the associated $/ton values, and then discounted each series using discount rates of 3-percent and 7-percent as appropriate. DOE will continue to evaluate the monetization of avoided NOₓ emissions and will make any appropriate updates in energy conservation standards rulemakings.

DOE is evaluating appropriate monetization of avoided SO₂ and Hg emissions in energy conservation standards rulemakings. DOE has not

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64 In November 2013, OMB announced a new opportunity for public comment on the interagency technical support document underlying the revised SCC estimates. 78 FR 70586. In July 2015 OMB published a detailed summary and formal response to the many comments that were received. [https://www.whitehouse.gov/blog/2015/07/02/estimating-benefits-carbon-dioxide-emissions-reductions]. It also stated its intention to seek independent expert advice on opportunities to improve the estimates, including many of the approaches suggested by commenters.


66 For the monetized NOₓ benefits associated with PM₂.₅, the related benefits (derived from benefit-per-ton values) are primarily based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009), which is the lower of the two EPA central tendencies. Using the lower value is more conservative when making the policy decision concerning whether a particular standard level is economically justified. If the benefit-per-ton estimates were based on the Six Cities study (Lepuere et al., 2012), the values would be nearly two-and-a-half times larger. (See chapter 14 of the final rule TSD for further description of the studies mentioned in this preamble.)
included monetization of those emissions in the current analysis.

AHAM commented that monetization of avoided CO₂ emissions should include a more comprehensive analysis to understand the total environmental impact. It stated that any CO₂ analysis should include CO₂ emissions that are caused indirectly, as well as directly, from a standards change, such as increased carbon emissions required to manufacture a given standard level, the increased transportation and related emissions required for a given standard level, and reduced carbon emissions from peak load reductions. (AHAM, No. 39 at p. 7)

In response, DOE notes that EPCA directs DOE to consider the total projected amount of energy, or as applicable, water, savings likely to result directly from the imposition of the standard when determining whether a standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(II)) DOE interprets this to include energy used in the manufacture, and distribution of fuels used by appliances or equipment. In addition, DOE is using the FFC measure, which includes the energy consumed in extracting, processing, and transporting primary fuels. DOE’s current accounting of primary energy savings and the FFC measure are directly linked to the energy used by appliances or equipment. DOE believes that energy used in manufacturing or transporting appliances or equipment falls outside the boundaries of “directly” as intended by EPCA. DOE did not consider such energy use and air emissions in the NIA or in the emissions analysis. DOE’s analysis does account for impacts on CO₂ emissions from electricity load reduction.

The U.S. Chamber of Commerce objected to the continued use of the SCC in the cost-benefit analysis performed. AHAM stated that DOE should wait for comments on the 2013 interagency report to be resolved before it relies on the 2013 estimates, and, until that time DOE should rely on the 2010 estimates as it has done in rulemakings prior to May 2013. (U.S. Chamber of Commerce, No. 37 at p. 4; AHAM, No. 39 at p. 7)

The 2013 report provides an update of the SCC estimates based solely on the latest peer-reviewed version of the models, replacing model versions that were developed up to ten years ago in a rapidly evolving field. It does not revisit other assumptions with regard to the discount rate, reference case socioeconomic and emission scenarios, or equilibrium climate sensitivity. Improvements in the way damages are modeled are confined to those that have been incorporated into the latest versions of the models by the developers themselves in the peer-reviewed literature. Given the above, using the 2010 estimates would be inconsistent with DOE’s objective of using the best available information in its analyses. As noted previously, OMB published a detailed summary and formal response to the many comments that were received on the 2013 interagency report.

M. Utility Impact Analysis

The utility impact analysis estimates several effects on the electric power generation industry that would result from the adoption of new or amended energy conservation standards. The utility impact analysis estimates the changes in installed electrical capacity and generation that would result for each TSL. The analysis is based on published output from the NEMS associated with AEO 2015. NEMS produces the AEO Reference case, as well as a number of side cases designed to estimate the economy-wide impacts of changes to energy supply and demand. DOE uses published side cases to estimate the marginal impacts of reduced energy demand on the utility sector. These marginal factors are estimated based on the changes to electricity sector generation, installed capacity, fuel consumption and emissions in the AEO Reference case and various side cases. Details of the methodology are provided in the appendices to chapters 13 and 15 of the final rule TSD.

The output of this analysis is a set of time-dependent coefficients that capture the change in electricity generation, primary fuel consumption, installed capacity and power sector emissions due to a unit reduction in demand for a given end use. These coefficients are multiplied by the stream of electricity savings calculated in the NIA to provide estimates of selected utility impacts of new or amended energy conservation standards.

N. Employment Impact Analysis

DOE considers employment impacts in the domestic economy as one factor in selecting a standard. Employment impacts from new or amended energy conservation standards include both direct and indirect impacts. Direct employment impacts are any changes in the number of employees of manufacturers of the products subject to standards, their suppliers, and related service firms. The MIA addresses those impacts. Indirect employment impacts are changes in national employment that occur due to the shift in expenditures and capital investment caused by the purchase and operation of more-efficient appliances. Indirect employment impacts from standards consist of the net jobs created or eliminated in the national economy, other than in the manufacturing sector being regulated, caused by: (1) Reduced spending by end users on energy; (2) reduced spending on new energy supply by the utility industry; (3) increased consumer spending on new products to which the new standards apply; and (4) the effects of those three factors throughout the economy.

One method for assessing the possible effects on the demand for labor of such shifts in economic activity is to compare sector employment statistics developed by the Labor Department’s Bureau of Labor Statistics (BLS). BLS regularly publishes its estimates of the number of jobs per million dollars of economic activity in different sectors of the economy, as well as the jobs created elsewhere in the economy by this same economic activity. Data from BLS indicate that expenditures in the utility sector generally create fewer jobs (both directly and indirectly) than expenditures in other sectors of the economy. There are many reasons for these differences, including wage differences and the fact that the utility sector is more capital-intensive and less labor-intensive than other sectors. Energy conservation standards have the effect of reducing consumer utility bills. Because reduced consumer expenditures for energy likely lead to increased expenditures in other sectors of the economy, the general effect of efficiency standards is to shift economic activity from a less labor-intensive sector [i.e., the utility sector] to more labor-intensive sectors [e.g., the retail and service sectors]. Thus, the BLS data suggest that net national employment may increase due to shifts in economic activity resulting from energy conservation standards.

DOE estimated indirect national employment impacts for the standard levels considered in this final rule using an input/output model of the U.S. economy called Impact of Sector Energy Technologies version 3.1.1 (ImSET). 67

65 Data on industry employment, hours, labor compensation, value of production, and the implicit price deflator for output for these industries are available upon request by calling the Division of Industry Productivity Studies (202–691–5618) or by sending a request by email to dipsweb@bls.gov.


ImSET is a special-purpose version of the “U.S. Benchmark National Input-Output” (I–O) model, which was designed to estimate the national employment and income effects of energy-saving technologies. The ImSET software includes a computer-based I–O model having structural coefficients that characterize economic flows among 187 sectors most relevant to industrial, commercial, and residential building energy use.

DOE notes that ImSET is not a general equilibrium forecasting model, and understands the uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Because ImSET does not incorporate price changes, the employment effects predicted by ImSET may over-estimate actual job impacts over the long run for this rule. Therefore, DOE generated results for near-term timeframes, where these uncertainties are reduced. For more details on the employment impact analysis, see chapter 16 of the final rule TSD.

V. Analytical Results and Conclusions

The following section addresses the results from DOE’s analyses with respect to the considered energy conservation standards for dehumidifiers. It addresses the TSLs examined by DOE, the projected impacts of each of these levels if adopted as energy conservation standards for dehumidifiers, and the standards levels that DOE is adopting in this final rule. Additional details regarding DOE’s analyses are contained in the final rule TSD supporting this document.

A. Trial Standard Levels

DOE analyzed the benefits and burdens of four TSLs for dehumidifiers. These TSLs were developed by combining specific efficiency levels for each of the five product classes analyzed by DOE. DOE presents the results for the TSLs in this document, while the results for all efficiency levels that DOE analyzed are in the final rule TSD. Table V.1 presents the TSLs and the corresponding efficiency levels for dehumidifiers. TSL 4 represents the max-tech energy efficiency for all product classes. TSL 3 consists of the efficiency levels below the max-tech level for all product classes. The efficiency level for TSL 2 for product classes 1, 2, and 3 is one below the max-tech level, the same level as TSL3. The efficiency level for TSL 2 for product classes 4 and 5 is the baseline. TSL 1 consists of Efficiency Level 2 for product classes 1, 2, and 3 and the baseline for product classes 4 and 5.

### Table V.1—Trial Standard Levels for Dehumidifiers

<table>
<thead>
<tr>
<th>TSL</th>
<th>PC1 ≤25.00 pints/day</th>
<th>PC2 25.01–50.00 pints/day</th>
<th>PC3 ≥50.01 pints/day</th>
<th>PC4 ≤8.0 ft³</th>
<th>PC5 &gt;8.0 ft³</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL</td>
<td>AEU (kWh/yr)</td>
<td>EL</td>
<td>AEU (kWh/yr)</td>
<td>EL</td>
<td>AEU (kWh/yr)</td>
</tr>
<tr>
<td>1</td>
<td>0 505</td>
<td>2  808</td>
<td>2  867</td>
<td>0  809</td>
<td>0  967</td>
</tr>
<tr>
<td>2</td>
<td>3 422</td>
<td>3  603</td>
<td>3  665</td>
<td>0  809</td>
<td>0  967</td>
</tr>
<tr>
<td>3</td>
<td>3 422</td>
<td>3  603</td>
<td>3  665</td>
<td>1  681</td>
<td>2  660</td>
</tr>
<tr>
<td>4</td>
<td>4 351</td>
<td>4  534</td>
<td>4  509</td>
<td>2  565</td>
<td>3  519</td>
</tr>
</tbody>
</table>

B. Economic Justification and Energy Savings

1. Economic Impacts on Individual Consumers

DOE analyzed the economic impacts on dehumidifier consumers by looking at the effects potential amended standards at each TSL would have on the LCC and PBP. DOE also examined the impacts of potential standards on consumer subgroups. These analyses are discussed below.

a. Life-Cycle Cost and Payback Period

In general, higher-efficiency products affect consumers in two ways: (1) Purchase price increases, and (2) annual operating costs decrease. Inputs used for calculating the LCC and PBP include total installed costs (i.e., product price plus installation costs), and operating costs (i.e., annual energy use, energy prices, energy price trends, repair costs, and maintenance costs). The LCC calculation also uses product lifetime and a discount rate. Chapter 8 of the final rule TSD provides detailed information on the LCC and PBP analyses.

Table V.2 through Table V.3 show the LCC and PBP results for the TSL efficiency levels considered for each product class. In the first of each pair of tables, the simple payback is measured relative to the baseline product. In the second table, the impacts are measured relative to the efficiency distribution in the compliance year (see section IV.F.8 of this document). Because some consumers purchase products with higher efficiency in the no-new-standards case, the average savings are less than the difference between the average LCC of Efficiency Level 0 (baseline) and the average LCC at each TSL. The savings refer only to consumers who are affected by a standard at a given TSL. Those who already purchase a product with efficiency at or above a given TSL are not affected. Consumers for whom the LCC increases at a given TSL experience a net cost.
### TABLE V.2—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR DEHUMIDIFIER PC1

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2014$)</th>
<th>Simple payback (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year’s operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>208</td>
<td>78</td>
<td>736</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>210</td>
<td>71</td>
<td>674</td>
</tr>
<tr>
<td>2, 3</td>
<td>3</td>
<td>214</td>
<td>66</td>
<td>622</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>238</td>
<td>56</td>
<td>525</td>
</tr>
</tbody>
</table>

**Note:** The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline (EL 0) product.

### TABLE V.3—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR DEHUMIDIFIER PC1

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average LCC savings * (2014$)</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>2, 3</td>
<td>3</td>
<td>107</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>110</td>
</tr>
</tbody>
</table>

*The savings represent the average LCC for affected consumers.

### TABLE V.4—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR DEHUMIDIFIER PC2

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2014$)</th>
<th>Simple PBP (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year’s operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>252</td>
<td>124</td>
<td>1,173</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>255</td>
<td>107</td>
<td>1,010</td>
</tr>
<tr>
<td>2, 3</td>
<td>3</td>
<td>264</td>
<td>95</td>
<td>895</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>286</td>
<td>85</td>
<td>800</td>
</tr>
</tbody>
</table>

**Note:** The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline product.

### TABLE V.5—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR DEHUMIDIFIER PC2

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average LCC savings * (2014$)</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>157</td>
</tr>
<tr>
<td>2, 3</td>
<td>3</td>
<td>119</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>191</td>
</tr>
</tbody>
</table>

*The savings represent the average LCC for affected consumers.
### TABLE V.6—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR DEHUMIDIFIER PC3
[>50.00 pints/day]

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2014$)</th>
<th>Simple PBP (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year's operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1,302</td>
<td>134</td>
<td>1,269</td>
</tr>
<tr>
<td>2,3</td>
<td>2</td>
<td>1,407</td>
<td>121</td>
<td>1,147</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>1,433</td>
<td>105</td>
<td>994</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1,673</td>
<td>83</td>
<td>782</td>
</tr>
</tbody>
</table>

**Note:** The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline product.

### TABLE V.7—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR DEHUMIDIFIER PC3
[>50.00 pints/day]

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average LCC savings *  (2014$)</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>2,3</td>
<td>3</td>
<td>142</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>96</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.

### TABLE V.8—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR DEHUMIDIFIER PC4
[≤8.0 ft³]

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2014$)</th>
<th>Simple PBP (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year's operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>1,2</td>
<td>0</td>
<td>1,733</td>
<td>129</td>
<td>1,893</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1,769</td>
<td>110</td>
<td>1,613</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1,977</td>
<td>93</td>
<td>1,361</td>
</tr>
</tbody>
</table>

**Note:** The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline product.

### TABLE V.9—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR DEHUMIDIFIER PC4
[≤8.0 ft³]

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average LCC savings *  (2014$)</td>
</tr>
<tr>
<td>1,2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>242</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>242</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.

### TABLE V.10—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR DEHUMIDIFIER PC5
[>8.0 ft³]

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2014$)</th>
<th>Simple PBP (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year's operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>1,2</td>
<td>0</td>
<td>2,233</td>
<td>153</td>
<td>2,250</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.
### TABLE V.10—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL FOR DEHUMIDIFIER PC5—Continued

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs (2014$)</th>
<th>Simple PBP (years)</th>
<th>Average lifetime (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year’s operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2,325</td>
<td>108</td>
<td>1,581</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2,617</td>
<td>87</td>
<td>1,273</td>
</tr>
</tbody>
</table>

**Note:** The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline product.

### TABLE V.11—AVERAGE LCC SAVINGS RELATIVE TO THE BASE-CASE EFFICIENCY DISTRIBUTION FOR DEHUMIDIFIER PC5

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Life-cycle cost savings (2014$)</th>
<th>Percent of consumers that experience net cost (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average LCC savings*</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>479</td>
<td>10.8</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>386</td>
<td>43.4</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.

**b. Consumer Subgroup Analysis**

As described in section IV.I of this document, DOE estimated the impact of the considered TSLs on low-income households and senior-only households. Table V.12 through Table V.16 compare the average LCC savings at each efficiency level for the two consumer subgroups, along with the average LCC savings for the entire sample. In most cases, the average LCC savings and PBP for low-income households and senior-only households at the considered efficiency levels are not substantially different from the average for all households. Chapter 11 of the final rule TSD presents the complete LCC and PBP results for the two subgroups.

### TABLE V.12—DEHUMIDIFIER PC1 (>25.00 PINTS/DAY): COMPARISON OF IMPACTS FOR CONSUMER SUBGROUPS AND ALL HOUSEHOLDS

<table>
<thead>
<tr>
<th>TSL</th>
<th>Average life-cycle cost savings (2014$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-income households</td>
<td>Senior-only households</td>
</tr>
<tr>
<td>1</td>
<td>55</td>
<td>48</td>
</tr>
<tr>
<td>2,3</td>
<td>99</td>
<td>86</td>
</tr>
<tr>
<td>4</td>
<td>101</td>
<td>85</td>
</tr>
</tbody>
</table>

### TABLE V.13—DEHUMIDIFIER PC2 (25.01–50.00 PINTS/DAY): COMPARISON OF IMPACTS FOR CONSUMER SUBGROUPS AND ALL HOUSEHOLDS

<table>
<thead>
<tr>
<th>TSL</th>
<th>Average life-cycle cost savings (2014$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-income households</td>
<td>Senior-only households</td>
</tr>
<tr>
<td>1</td>
<td>149</td>
<td>127</td>
</tr>
<tr>
<td>2,3</td>
<td>112</td>
<td>97</td>
</tr>
<tr>
<td>4</td>
<td>178</td>
<td>151</td>
</tr>
</tbody>
</table>
c. Rebuttable Presumption Payback

As discussed in this preamble, EPCA provides a rebuttable presumption that an energy conservation standard is economically justified if the increased purchase cost for a product that meets the standard is less than three times the value of the first-year energy savings resulting from the standard. In calculating a rebuttable presumption PBP for the considered standard levels, DOE used discrete values and, as required by EPCA, based the energy use calculation on the DOE test procedure for dehumidifiers in appendix X1. In contrast, the PBPs presented in section V.B.1.a were calculated using distributions for input values, with energy use based on field studies and RECS data.

Table V.17 presents the rebuttable-presumption PBPs for the considered TSLs.68 While DOE examined the rebuttable-presumption PBPs for the considered TSLs, further considered whether the standard levels considered for the NOPR are economically justified through a more detailed analysis of the economic impacts of those levels pursuant to 42 U.S.C. 6295(o)(2)(B)(i). The results of that analysis serve as the basis for DOE to evaluate the economic justification for a potential standard level (thereby supporting or rebutting the results of any preliminary determination of economic justification).

68 The PBPs in Table V.17 differ from those shown in Tables V.2, V.4, V.6, V.8 and V.10 because the rebuttable PBPs are calculated with energy use based on the DOE test procedure, whereas the PBPs in the earlier tables are calculated with energy use based on field studies and RECS data.
2. Economic Impacts on Manufacturers

DOE performed an MIA to estimate the impact of amended energy conservation standards on manufacturers of dehumidifiers. The section below describes the expected impacts on manufacturers at each TSL. Chapter 12 of the final rule TSD explains the analysis in further detail.

a. Industry Cash Flow Analysis Results

The following tables illustrate the estimated financial impacts (represented by changes in INPV) of amended energy conservation standards on manufacturers of dehumidifiers, as well as the conversion costs that DOE estimates manufacturers would incur for each product class at each TSL. To evaluate the range of cash-flow impacts on the dehumidifier manufacturing industry, DOE used two different scenarios to model the range of anticipated market responses to amended energy conservation standards.

To assess the lower (less severe) end of the range of potential impacts, DOE modeled a preservation of gross margin percentage markup scenario, in which a flat markup of 1.45 (i.e., the baseline manufacturer markup) is applied across all efficiency levels. In this scenario, DOE assumed that a manufacturer’s absolute dollar markup would increase as production costs increase in the amended energy conservation standards case. Manufacturers have indicated that it is optimistic to assume that they would be able to maintain the same gross margin markup as their product offering while maintaining the same overall level of operating profit in absolute dollars as in the no-new-standards case. The two tables below show the range of potential INPV impacts for manufacturers of dehumidifiers. Table V.18 reflects the lower bound of impacts (higher profitability) and Table V.19 represents the upper bound of impacts (lower profitability).

Each scenario results in a unique set of cash flows and corresponding industry values at each TSL. In the following discussion, the INPV results refer to the sum of discounted cash flows through 2048, the difference in INPV between the no-new-standards case and each standards case, and the total industry conversion costs required for each standards case.

### TABLE V.18—MANUFACTURER IMPACT ANALYSIS UNDER THE PRESERVATION OF GROSS MARGIN PERCENTAGE MARKUP SCENARIO FOR ANALYSIS PERIOD [2016–2048]

<table>
<thead>
<tr>
<th>Units</th>
<th>No-new-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>2014$ Millions ....</td>
<td>179.5</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2014$ Millions ....</td>
<td>(3.0)</td>
</tr>
<tr>
<td>(%)</td>
<td>(1.7%)</td>
<td>(18.9%)</td>
</tr>
<tr>
<td>Free Cash Flow (2018)</td>
<td>2014$ Millions ....</td>
<td>15.0</td>
</tr>
<tr>
<td>Change in Free Cash Flow (2018)</td>
<td>(%)</td>
<td>(12.4%)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2014$ Millions ....</td>
<td>3.0</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2014$ Millions ....</td>
<td>2.1</td>
</tr>
<tr>
<td>Total Conversion Costs</td>
<td>2014$ Millions ....</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (−) values.

### TABLE V.19—MANUFACTURER IMPACT ANALYSIS UNDER THE PRESERVATION OF PER-UNIT OPERATING PROFIT MARKUP SCENARIO FOR ANALYSIS PERIOD [2016–2048]

<table>
<thead>
<tr>
<th>Units</th>
<th>No-new-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>2014$ Millions ....</td>
<td>179.5</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2014$ Millions ....</td>
<td>(3.6)</td>
</tr>
<tr>
<td>(%)</td>
<td>(2.0%)</td>
<td>(20.9%)</td>
</tr>
<tr>
<td>Free Cash Flow (2018)</td>
<td>2014$ Millions ....</td>
<td>15.0</td>
</tr>
<tr>
<td>Decrease in Free Cash Flow (2018)</td>
<td>(%)</td>
<td>(12.4%)</td>
</tr>
<tr>
<td>Product Conversion Costs</td>
<td>2014$ Millions ....</td>
<td>3.0</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2014$ Millions ....</td>
<td>2.1</td>
</tr>
<tr>
<td>Total Conversion Costs</td>
<td>2014$ Millions ....</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (−) values.

Beyond impacts on INPV, DOE includes a comparison of free cash flow between the no-new-standards case and the standards case at each TSL in the year before amended standards take effect to provide perspective on the short-run cash flow impacts in the discussion of the results below.

At TSL 1, DOE estimates the impact on INPV for manufacturers of dehumidifiers to range from −$3.6 million to −$3.0 million, or a change in INPV of −2.0 percent to −1.7 percent under the preservation of per-unit operating profit markup scenario and...
preservation of gross margin percentage markup scenario, respectively. At this TSL, industry free cash flow is estimated to decrease by approximately 12.4 percent to $13.2 million, compared to the no-new-standards-case value of $15.0 million in 2018, the year before the projected compliance date.

At TSL 1, the industry as a whole is expected to incur $3.0 million in product conversion costs attributed to upfront research, development, testing, and certification, as well as $2.1 million in investments in property, plant and equipment (PP&E) necessary to manufacture redesigned platforms. Industry conversion cost burden at TSL 1 would be felt by manufacturers of both lower-capacity and high-capacity portable dehumidifiers, although 83 percent of conversion costs relate to higher-capacity portable dehumidifier platform redesigns. At TSL 1, approximately 1 percent of portable platforms will require complete platform redesigns to reach the improved efficiency, which involve moving to a new case size to accommodate larger heat exchangers. These changes require upfront capital investments for new tooling to manufacturing production lines, among other changes. Additionally, it is assumed that manufacturers of high-capacity portable dehumidifiers, the majority of which are small business manufacturers, will have to outsource testing of their products to third-party testing facilities, contributing to greater product conversion costs. In contrast, the larger manufacturers of portable dehumidifiers are assumed to have in-house testing capabilities, which significantly reduce the cost of testing. DOE confirmed these assumptions regarding testing burdens during manufacturer interviews.

At TSL 2, DOE estimates the impact on INPV for dehumidifier manufacturers to range from $37.5 million to $34.0 million, or a change in INPV of 20.9 percent to 18.9 percent under the preservation of per-unit operating profit markup scenario and the preservation of gross margin percentage markup scenario, respectively. At this TSL, industry free cash flow is estimated to decrease by approximately 128.3 percent to $4.2 million, compared to the no-new-standards-case free cash flow of $15.0 million in 2018, the year before the projected compliance date.

At TSL 2, the industry as a whole is expected to incur $29.9 million in product conversion costs associated with upfront research, development, testing, and certification, as well as $22.6 million in investments in PP&E to manufacture products requiring platform redesigns. At TSL 2, the industry conversion cost burden will be felt by manufacturers of both low-capacity and high-capacity portable dehumidifiers, as approximately 50 percent of portable dehumidifier platforms will require complete platform redesigns. Platform redesigns at TSL 2 will include moving to a new case size to accommodate larger heat exchangers, and will necessitate upfront capital investments for new tooling. Because lower-capacity portable units represent approximately 98.5 percent of the market, conversion costs associated with this segment have a significant impact on total industry conversion costs for TSL 2.

At TSL 3, DOE estimates the impact on INPV for dehumidifier manufacturers to range from $42.4 million to $38.7 million, or a change in INPV of 23.6 percent to 21.6 percent under the preservation of per-unit operating profit markup scenario and the preservation of gross margin percentage markup scenario, respectively. At this TSL, industry free cash flow is estimated to decrease by approximately 144.9 percent to $6.7 million, compared to the no-new-standards-case free cash flow of $15.0 million in 2018, the year before the projected compliance date.

At TSL 3, the industry as a whole is expected to spend $35.4 million in product conversion costs associated with upfront research, development, testing, and certification, as well as $24.5 million in investments in PP&E to manufacture redesigned platforms. While conversion costs remain constant for manufacturers of portable dehumidifiers between TSLs 2 and 3, the conversion costs for manufacturers of whole-home dehumidifiers increase substantially at TSL 3, as nearly 80 percent of these products will require total platform redesigns. As with the portable dehumidifier market segment, platform redesigns for whole-home units will consist of moving products to a new case size to accommodate larger heat exchangers, and in turn will require capital investments in new tooling for larger cases. This upfront investment is in addition to higher R&D and testing expenditures. Despite increased conversion costs associated with the whole-home segment, because lower-capacity portable units represent approximately 98.5 percent of the market, conversion costs associated with this segment have a significant impact on total industry conversion costs for TSL 3.

At TSL 4, DOE estimates the impact on INPV of dehumidifier manufacturers to range from $72.7 million to $52.6 million, or a change in INPV of 40.5 percent to 29.3 percent the preservation of per-unit operating profit markup scenario and the preservation of gross margin percentage markup scenario, respectively. At this TSL, industry free cash flow is estimated to decrease by approximately 231.4 percent to $19.7 million, compared to the no-new-standards-case free cash flow of $15.0 million in 2018, the year before the projected compliance date.

At TSL 4, the industry as a whole is expected to spend $55.2 million in product conversion costs associated with upfront research, development, testing, and certification, as well as $40.5 million in investments in PP&E for platform redesigns. At TSL 4, approximately 63 percent of dehumidifier platforms will require complete redesigns in the form of larger chassis. Again, since lower-capacity portable units represent approximately 98.5 percent of the market, conversion costs associated with this segment have a significant impact on total industry conversion costs for TSL 4. 

b. Impacts on Direct Employment

DOE used the GRIM to estimate the domestic labor expenditures and number of domestic production workers in the no-new-standards case and at each TSL from 2016 to 2048. DOE used statistical data from the U.S. Census Bureau’s 2013 Annual Survey of Manufacturers, the results of the engineering analysis, and interviews with manufacturers to determine the inputs necessary to calculate industry-wide labor expenditures and domestic employment levels at each TSL. Labor expenditures for the manufacture of a product are a function of the labor intensity of the product, the sales volume, and an assumption that wages in real terms remain constant. The total labor expenditures in each year are calculated by multiplying the MPCs by the labor percentage of MPCs. DOE estimates that all whole-home dehumidifiers and 50 percent of high-capacity portable dehumidifiers are produced domestically. This represents approximately 1 percent of dehumidifiers sold in the United States.

The total labor expenditures in the GRIM were then converted to domestic production employment levels by dividing production labor expenditures by the annual payment per production worker (production worker hours times the labor rate found in the U.S. Census Bureau’s 2013 Annual Survey of Manufacturers). The production worker estimates in this section only cover workers up to the line-supervisor level who are directly involved in fabricating
and assembling a product within an original equipment manufacturer (OEM) facility. Workers performing services that are closely associated with production operations, such as materials handling tasks using forklifts, are also included as production labor. DOE’s estimates only account for production workers who manufacture the specific products covered by this rulemaking.

Because production employment expenditures are assumed to be a fixed percentage of cost of goods sold and the MPCs typically increase with more efficient products, labor tracks the increased prices in the GRIM. As efficiency of dehumidifiers increase, so does the complexity of the products, generally requiring more labor to produce. Based on industry feedback, DOE believes that manufacturers that use domestic production currently will continue to produce the same scope of covered products in domestic production facilities. DOE does not expect production to shift to lower labor cost countries. However, in public comments submitted in response to the NOPR and in manufacturer interviews, stakeholders provided feedback indicating that amended energy conservation standards could have a negative impact on domestic production employment, depending on the standard level.

Using the GRIM, DOE estimates that in the absence of amended energy conservation standards, there would be 88 domestic production workers in the dehumidifier industry. As noted previously, DOE estimates that 1 percent of dehumidifier units sold in the United States are manufactured domestically. Table V.20 shows the range of the impacts potential amended energy conservation standards on U.S. production workers of dehumidifiers. A complete description of the assumptions used to generate these upper and lower bounds can be found in chapter 12 of the final rule TSD.

<table>
<thead>
<tr>
<th>Change in Total Number of Domestic Production Workers in 2019</th>
<th>No-new-standards case*</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Total Number of Domestic Production Workers in 2019</td>
<td>........................</td>
<td>0 to 1</td>
<td>0 to 1</td>
<td>(44) to 2</td>
<td>(88) to 11</td>
</tr>
</tbody>
</table>

*No-new-standards case estimates 88 domestic production workers in the dehumidifier industry in 2019. ** Parentheses indicate negative values.

The upper end of the range estimates the maximum increase in the number of production workers in the dehumidifier industry after implementation of an amended energy conservation standard. It assumes that manufacturers would continue to produce the same scope of covered products within the United States and would require some additional labor to produce more efficient products.

The lower end of the range represents the maximum decrease in total number of U.S. production workers that could result from an amended energy conservation standard and is based on direct feedback from interested parties. Feedback from manufacturers during interviews indicated that some domestic small businesses in the dehumidifier industry (specifically in the high-capacity portable dehumidifier and whole-home dehumidifier segments) may be forced to reduce employment, shift production abroad, or exit the dehumidifier market as a result of amended energy conservation standards. This lower bound of direct employment impacts reflects the worst-case scenario of impacts.

This conclusion is independent of any conclusions regarding indirect employment impacts in the broader U.S. economy, which are documented in Chapter 16 of the TSD.

c. Impacts on Manufacturing Capacity

As noted previously, the majority of dehumidifiers sold in the United States are not produced domestically. However, in response to standard levels analyzed in the June 2015 NOPR, domestic manufacturers of high-capacity portable dehumidifiers and whole-home dehumidifiers commented that production of these products could shift to lower-cost countries or halt altogether as a result of amended energy conservation standards, depending on the level selected. This could lead to a permanently lower production capacity within the dehumidifier industry.

d. Impacts on Subgroups of Manufacturers

Small manufacturers, niche equipment manufacturers, and manufacturers exhibiting a cost structure substantially different from the industry average could be affected disproportionately. Using average cost assumptions to develop an industry cash-flow estimate is inadequate to assess differential impacts among manufacturer subgroups.

For dehumidifier equipment, DOE identified and evaluated the impact of amended energy conservation standards on one subgroup: Small manufacturers. The SBA defines a “small business” as having 1,250 employees or less for NAICS 333415 (“Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing”) or 1,500 employees or less for NAICS 335210 (“Small Electrical Appliance Manufacturing”). Based on this definition, DOE identified five manufacturers in the dehumidifier equipment industry that are small businesses.

For a discussion of the impacts on the small manufacturer subgroup, see the Regulatory Flexibility Analysis in section VII.B of this final rule and chapter 12 of the final rule TSD.

e. Cumulative Regulatory Burden

One aspect of assessing manufacturer burden involves looking at the cumulative impact of multiple DOE standards and the regulatory actions of other Federal agencies and States that affect the manufacturers of a covered product or equipment. DOE believes that a standard level is not economically justified if it contributes to an unacceptable cumulative regulatory burden. While any one regulation may not impose a significant burden on manufacturers, the combined effects of several existing or impending regulations may have serious consequences for some manufacturers, groups of manufacturers, or an entire industry. Multiple regulations affecting the same manufacturer can strain profits and lead companies to abandon product lines or markets with lower expected
future returns than competing products. In addition to DOE’s energy conservation regulations for dehumidifiers, several other existing and pending regulations apply to these products and other equipment produced by the same manufacturers. DOE looks at these regulations that could affect dehumidifier manufacturers that will take effect approximately 3 years before or after the 2019 compliance date of amended energy conservation standards for dehumidifiers. Additionally, DOE will evaluate its approach to assessing cumulative regulatory burden for use in future rulemakings to ensure that it is effectively capturing the overlapping impacts of its regulations. In particular, DOE will assess whether looking at rules where any portion of the compliance period potentially overlaps with the compliance period for the subject rulemaking would yield a more accurate reflection of cumulative regulatory burden. For example, DOE recognizes that if it were to undertake a rulemaking to amend the standards for room air conditioners pursuant to the 6-year look back requirement under 42 U.S.C. 6295(m), any future room air conditioner rule could have a cumulative impact on manufacturers of dehumidifiers during the compliance period for those dehumidifiers.

The compliance years and expected industry conversion costs of energy conservation standards that may also impact dehumidifier manufacturers are indicated in Table V.21. For each rule, the table also contains the number of affected dehumidifier original equipment manufacturers (OEMs). DOE excludes companies that import and relabel dehumidifiers from this count, as DOE’s analysis indicates that OEMs bear the majority of the economic burden for a given rule. Only 50 percent of the companies selling dehumidifiers in the United States are OEMs (12 of 24). None of the OEMs identified in this table are domestic in terms of ownership or manufacturing site.

### Table V.21—Other Federal Energy Conservation Standards Affecting Dehumidifier OEMs

<table>
<thead>
<tr>
<th>DOE Regulation</th>
<th>Number of manufacturers ***</th>
<th>Estimated INPV *** (No new standards case)</th>
<th>Estimated total industry conversion costs</th>
<th>Compliance date</th>
<th>Number of affected dehumidifier OEMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microwave Ovens, 78 FR 36316 (June 17, 2013)</td>
<td>12</td>
<td>1,386.5 Million (2011$)</td>
<td>43.1 Million (2011$)</td>
<td>2016</td>
<td>1</td>
</tr>
<tr>
<td>Ceiling Fans, 81 FR 1688, (January 13, 2016)</td>
<td>31</td>
<td>1,308.7 Million (2014$)</td>
<td>9.4 Million (2014$)</td>
<td>** 2019</td>
<td>1</td>
</tr>
<tr>
<td>Portable Air Conditioners Pre-publication NOPR issued on April 27, 2016.</td>
<td>29</td>
<td>725.5 Million (2014$)</td>
<td>302.8 Million (2014$)</td>
<td>** 2021</td>
<td>4</td>
</tr>
</tbody>
</table>

* The number of manufacturers listed in the final rule for the energy conservation standard that is contributing to cumulative regulatory burden.
** The dates listed are an approximation. The exact dates are pending final DOE action.
*** The industry net present value (INPV) is the sum of the discounted cash flows to the industry from the base year through the end of the analysis period of the rulemaking (typically 30 years).

In addition to other Federal energy conservation standards, manufacturers cited third-party certification programs (e.g., UL safety standards certification for dehumidifiers) as a source of cumulative regulatory burden for dehumidifier manufacturers. For more details, see chapter 12 of the final rule TSD.

3. National Impact Analysis
   a. Significance of Energy Savings
      To estimate the energy savings attributable to potential standards for dehumidifiers, DOE compared the energy consumption of those products under the base case to their anticipated energy consumption under each TSL.

### Table V.22—Dehumidifiers: Cumulative National Energy Savings

[Shipments in 2019–2048]

<table>
<thead>
<tr>
<th>Savings</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Energy Savings (quads)</td>
<td>0.07</td>
<td>0.29</td>
<td>0.30</td>
<td>0.79</td>
</tr>
<tr>
<td>FFC Energy Savings (quads)</td>
<td>0.07</td>
<td>0.30</td>
<td>0.31</td>
<td>0.82</td>
</tr>
</tbody>
</table>

OMB Circular A–4 69 requires agencies to present analytical results, including separate schedules of the monetized benefits and costs that show the type and timing of benefits and costs. Circular A–4 also directs agencies to consider the variability of key elements underlying the estimates of benefits and costs. For this rulemaking, DOE undertook a sensitivity analysis using 9, rather than 30, years of product shipments. The choice of a 9-year period is a proxy for the timeline in EPCA for the review of certain energy conservation standards and potential revision of, and compliance with, such revised standards.70 The review

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70 Under 42 U.S.C. 6295(m)(1), no later than 6 years after DOE issues a final rule establishing or amending an energy conservation standard, DOE must publish a notice of determination that...
timeframe established in EPCA is generally not synchronized with the product lifetime, product manufacturing cycles, or other factors specific to dehumidifiers. Thus, such results are presented for informational purposes only and are not indicative of any change in DOE’s analytical methodology. The NES sensitivity analysis results based on a 9-year analytical period are presented in Table V.23. The impacts are counted over the lifetime of dehumidifiers purchased in 2019–2027.

### Table V.23—Dehumidifiers: Cumulative National Energy Savings for Products Shipped in 2019–2027

<table>
<thead>
<tr>
<th>Savings</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Primary Energy Savings (quads)</td>
<td>0.02</td>
</tr>
<tr>
<td>FFC Energy Savings (quads)</td>
<td>0.02</td>
</tr>
</tbody>
</table>

b. Net Present Value of Consumer Costs and Benefits

DOE estimated the cumulative NPV of the total costs and savings for consumers that would result from the standard levels considered for dehumidifiers. In accordance with the OMB's guidelines on regulatory analysis, DOE calculated NPV using both a 7-percent and a 3-percent real discount rate.

Table V.24 shows the consumer NPV results for each TSL DOE considered for dehumidifiers. The impacts are counted over the lifetime of products purchased in 2019–2048.

### Table V.24—Dehumidifiers: Cumulative Net Present Value of Consumer Benefits for Products Shipped in 2019–2048

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Trial standard level (Billion 2014$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3 percent</td>
<td>0.61</td>
</tr>
<tr>
<td>7 percent</td>
<td>0.28</td>
</tr>
</tbody>
</table>

The NPV results based on the aforementioned 9-year analytical period are presented in Table V.25. The impacts are counted over the lifetime of products purchased in 2019–2027. As mentioned previously, such results are presented for informational purposes only and are not indicative of any change in DOE’s analytical methodology or decision criteria.

### Table V.25—Dehumidifiers: Cumulative Net Present Value of Consumer Benefits for Products Shipped in 2019–2027

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Trial standard level (Billion 2014$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3 percent</td>
<td>0.22</td>
</tr>
<tr>
<td>7 percent</td>
<td>0.14</td>
</tr>
</tbody>
</table>

The above results reflect the use of a default trend to estimate the change in price for dehumidifiers over the analysis period (see section IV.F.1 of this document). DOE also conducted a sensitivity analysis that considered one scenario with a lower rate of price decline than the reference case and one scenario with a higher rate of price decline than the reference case. The results of these alternative cases are presented in appendix 10C of the final rule TSD. In the high price decline case, the NPV of consumer benefits is higher than in the default case. In the low price decline case, the NPV of consumer benefits is lower than in the default case.

c. Indirect Impacts on Employment

DOE expects energy conservation standards for dehumidifiers to reduce energy bills for consumers of those products, with the resulting net savings being redirected to other forms of economic activity. These expected shifts in spending and economic activity could affect the demand for labor. As described in section IV.N of this document, DOE used an input/output model of the U.S. economy to estimate indirect employment impacts of the TSLs that DOE considered in this rulemaking. DOE understands that there are uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Therefore, DOE generated results for near-term timeframes (2019–2048), where these uncertainties are reduced.

(September 17, 2003) [Available at: http://www.whitehouse.gov/omb/circulars_a004_a-4/].
The results suggest that the adopted standards are likely to have a negligible impact on the net demand for labor in the economy. The net change in jobs is so small that it would be imperceptible in national labor statistics and might be offset by other, unanticipated effects on employment. Chapter 16 of the final rule TSD presents detailed results regarding anticipated indirect employment impacts.

4. Impact on Utility or Performance of Products

Based on testing conducted in support of this rule, discussed in section IV.C of this document, DOE has concluded that the standards adopted in this final rule would not reduce the utility or performance of the dehumidifiers under consideration in this rulemaking. Manufacturers of these products currently offer units that meet or exceed the adopted standards.

5. Impact of Any Lessening of Competition

As discussed in section e, the Attorney General of the United States (Attorney General) determines the impact, if any, of any lessening of competition likely to result from a proposed standard and to transmit such determination in writing to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. To assist the Attorney General in making such determination, DOE provided the Department of Justice (DOJ) with copies of the NOPR and the TSD for review. In its assessment letter responding to DOE, DOJ concluded that the proposed energy conservation standards for dehumidifiers are unlikely to have a significant adverse impact on competition. DOE is publishing the Attorney General’s assessment at the end of this final rule.

6. Need of the Nation To Conserve Energy

Enhanced energy efficiency, where economically justified, improves the nation’s energy security, strengthens the economy, and reduces the environmental impacts (costs) of energy production. Reduced electricity demand due to energy conservation standards is also likely to reduce the cost of maintaining the reliability of the electricity system, particularly during peak-load periods. As a measure of this reduced demand, chapter 15 in the final rule TSD presents the estimated reduction in generating capacity, relative to the no-new-standards case, for the TSLs that DOE considered in this rulemaking.

Energy conservation resulting from amended standards for dehumidifiers is expected to yield environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases. Table V.26 provides DOE’s estimate of cumulative emissions reductions expected to result from the TSLs considered in this rulemaking. The table includes both power sector emissions and upstream emissions. The emissions were calculated using the multipliers discussed in section IV.K. DOE reports annual emissions reductions for each TSL in chapter 13 of the final rule TSD.

### Table V.26—Cumulative Emissions Reduction for Dehumidifiers Shipped in 2019–2048

<table>
<thead>
<tr>
<th>Power Sector Emissions</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>4.0</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>2.4</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>4.4</td>
</tr>
<tr>
<td>Hg (toms)</td>
<td>0.01</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>0.4</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upstream Emissions</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>0.2</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>0.0</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>3.2</td>
</tr>
<tr>
<td>Hg (toms)</td>
<td>0.0</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>17.4</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total FFC Emissions</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>4.2</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>2.5</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>7.5</td>
</tr>
<tr>
<td>Hg (toms)</td>
<td>0.01</td>
</tr>
<tr>
<td>CH₄ (thousand tons CO₂eq)</td>
<td>498</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.05</td>
</tr>
<tr>
<td>CO₂eq (thousand tons CO₂eq)</td>
<td>13.7</td>
</tr>
</tbody>
</table>

*CO₂eq is the quantity of CO₂ that would have the same global warming potential (GWP).

As part of the analysis for this rule, DOE estimated monetary benefits likely to result from the reduced emissions of CO₂ and NOₓ that DOE estimated for each of the considered TSLs for dehumidifiers. As discussed in section IV.K of this document, for CO₂ DOE used the most recent values for the SCC developed by an interagency process. The four sets of SCC values for CO₂ emissions reductions in 2015 resulting from that process (expressed in 2014$) are represented by $12.2/metric ton (the average value from a distribution that uses a 5-percent discount rate), $40.0/
metric ton (the average value from a distribution that uses a 3-percent discount rate), $62.3/metric ton (the average value from a distribution that uses a 2.5-percent discount rate), and $117/metric ton (the 95th-percentile value from a distribution that uses a 3-percent discount rate). The values for later years are higher due to increasing damages (public health, economic and environmental) as the projected magnitude of climate change increases.

Table V.27 presents the global value of CO\textsubscript{2} emissions reductions at each TSL. For each of the four cases, DOE calculated a present value of the stream of annual values using the same discount rate as was used in the studies upon which the dollar-per-ton values are based. DOE calculated domestic values as a range from 7 percent to 23 percent of the global values; these results are presented in chapter 14 of the final rule TSD.

**TABLE V.27—ESTIMATES OF GLOBAL PRESENT VALUE OF CO\textsubscript{2} EMISSIONS REDUCTION FOR PRODUCTS SHIPPED IN 2019–2048**

<table>
<thead>
<tr>
<th>TSL</th>
<th>5% discount rate, average</th>
<th>3% discount rate, average</th>
<th>2.5% discount rate, average</th>
<th>3% discount rate, 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Sector Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>29.2</td>
<td>131.0</td>
<td>207.2</td>
<td>398.6</td>
</tr>
<tr>
<td>2</td>
<td>129.7</td>
<td>580.0</td>
<td>916.2</td>
<td>1,763</td>
</tr>
<tr>
<td>3</td>
<td>132.6</td>
<td>592.9</td>
<td>936.6</td>
<td>1,802</td>
</tr>
<tr>
<td>4</td>
<td>343.9</td>
<td>1,547</td>
<td>2,447</td>
<td>4,705</td>
</tr>
<tr>
<td>Upstream Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.6</td>
<td>7.1</td>
<td>11.3</td>
<td>21.7</td>
</tr>
<tr>
<td>2</td>
<td>7.0</td>
<td>31.4</td>
<td>49.7</td>
<td>95.6</td>
</tr>
<tr>
<td>3</td>
<td>7.1</td>
<td>32.1</td>
<td>50.8</td>
<td>97.7</td>
</tr>
<tr>
<td>4</td>
<td>18.5</td>
<td>84.2</td>
<td>133.4</td>
<td>256.3</td>
</tr>
<tr>
<td>Total FFC Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>30.8</td>
<td>138.2</td>
<td>218.5</td>
<td>420.3</td>
</tr>
<tr>
<td>2</td>
<td>136.7</td>
<td>611.4</td>
<td>965.9</td>
<td>1,859</td>
</tr>
<tr>
<td>3</td>
<td>139.7</td>
<td>625.0</td>
<td>987.4</td>
<td>1,900</td>
</tr>
<tr>
<td>4</td>
<td>382.4</td>
<td>1,631</td>
<td>2,580</td>
<td>4,961</td>
</tr>
</tbody>
</table>

*For each of the four cases, the corresponding SCC value for emissions in 2015 is $12.2, $40.0, $62.3, and $117 per metric ton (2014$). The values are for CO\textsubscript{2} only (i.e., not CO\textsubscript{2eq} of other greenhouse gases).

DOE is well aware that scientific and economic knowledge about the contribution of CO\textsubscript{2} and other GHG emissions to changes in the future global climate and the potential resulting damages to the world economy continues to evolve rapidly. Thus, any value placed on reduced CO\textsubscript{2} emissions in this rulemaking is subject to change. DOE, together with other Federal agencies, will continue to review various methodologies for estimating the monetary value of reductions in CO\textsubscript{2} and other GHG emissions. This ongoing review will consider the comments on this subject that are part of the public record for this and other rulemakings, as well as other methodological assumptions and issues. However, consistent with DOE’s legal obligations, and taking into account the uncertainty involved with this particular issue, DOE has included in this rule the most recent values and analyses resulting from the interagency review process.

DOE also estimated the cumulative monetary value of the economic benefits associated with NO\textsubscript{X} emissions reductions anticipated to result from the considered TSLs for dehumidifiers. The dollar-per-ton values that DOE used are discussed in section IV.L of this document. Table V.28 presents the cumulative present value for NO\textsubscript{X} emissions for each TSL calculated using 7-percent and 3-percent discount rates. This table presents values that use the low dollar-per-ton values, which reflect DOE’s primary estimate. Results that reflect the range of NO\textsubscript{X} dollar-per-ton values are presented in Table V.29.

**TABLE V.28—ESTIMATES OF PRESENT VALUE OF NO\textsubscript{X} EMISSIONS REDUCTION FOR DEHUMIDIFIERS SHIPPED IN 2019–2048**

<table>
<thead>
<tr>
<th>TSL</th>
<th>Million 2014$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3% discount rate</td>
</tr>
<tr>
<td>Upstream Emissions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6.2</td>
</tr>
<tr>
<td>2</td>
<td>27.7</td>
</tr>
<tr>
<td>3</td>
<td>28.3</td>
</tr>
<tr>
<td>4</td>
<td>73.6</td>
</tr>
<tr>
<td>Total FFC Emissions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>15.0</td>
</tr>
<tr>
<td>2</td>
<td>66.6</td>
</tr>
<tr>
<td>3</td>
<td>68.0</td>
</tr>
<tr>
<td>4</td>
<td>176.5</td>
</tr>
</tbody>
</table>

*Results are based on the low benefit-per-ton values.

7. Other Factors

The Secretary of Energy, in determining whether a standard is economically justified, may consider...
any other factors that the Secretary deems to be relevant. (42 U.S.C. 6295(o)(2)(B)(i)(VIII)) No other factors were considered in this analysis.

8. Summary of National Economic Impacts

The NPV of the monetized benefits associated with emissions reductions can be viewed as a complement to the NPV of the consumer savings calculated for each TSL considered in this rulemaking. Table V.29 presents the NPV values that result from adding the estimates of the potential economic benefits resulting from reduced CO₂ and NOₓ emissions in each of four valuation scenarios to the NPV of consumer savings calculated for each TSL considered in this rulemaking, at both a 7-percent and 3-percent discount rate. The CO₂ values used in the columns of each table correspond to the four sets of SCC values discussed above.

### TABLE V.29—NET PRESENT VALUE OF CONSUMER SAVINGS COMBINED WITH PRESENT VALUE OF MONETIZED BENEFITS FROM CO₂ AND NOₓ EMISSIONS REDUCTIONS

<table>
<thead>
<tr>
<th>TSL</th>
<th>Consumer NPV at 3% discount rate added with:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCC case $12.2/metric ton and 3% low NOₓ value</td>
</tr>
<tr>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>4</td>
<td>7.3</td>
</tr>
</tbody>
</table>

In considering the above results, two issues are relevant. First, the national operating cost savings are domestic U.S. monetary savings that occur as a result of market transactions, while the value of CO₂ reductions is based on a global value. Second, the assessments of operating cost savings and the SCC are performed with different methods that use different time frames for analysis. The national operating cost savings is measured for the lifetime of products shipped in 2019 to 2048. Because CO₂ emissions have a very long residence time in the atmosphere, the SCC values in future years reflect future climate-related impacts that continue beyond 2100.

### C. Conclusion

When considering standards, the new or amended energy conservation standards that DOE adopts for any type (or class) of covered product must be designed to achieve the maximum improvement in energy efficiency that the Secretary determines is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A)) In determining whether a standard is economically justified, the Secretary must determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering the seven statutory factors discussed previously. (42 U.S.C. 6295(o)(2)(B)(i)). The new or amended standard must also result in significant conservation of energy. (42 U.S.C. 6295(o)(3)(B))

In the June 2015 NOPR, DOE proposed energy conservation standards for dehumidifiers at TSL 3, as constructed for that analysis. The minimum IEFs corresponding to TSL 3 from the June 2015 NOPR are shown in Table V.30. 80 FR 31645, 31696 (June 3, 2015).

![Table V.30—NOPR Proposed Amended Energy Conservation Standards for Dehumidifiers](image-url)

Note: The SCC case values represent the global SCC in 2015, in 2014$, for each case.

In April 2016, Aprilaire encouraged DOE to analyze portable dehumidifiers and whole-home dehumidifiers as separate markets with separate regulations and test procedures and to suspend proposed regulations on the whole-home dehumidifier market. Aprilaire suggested that in lieu of proposing whole-home dehumidifier standards, that DOE use the Build America program to better understand the market and applications. (Aprilaire, No. 34 at pp. 1, 3) Further, Aprilaire commented that because whole-home
dehumidifiers are a subsystem of energy control in the home, regulating that market may have a detrimental effect on the overall goal of reducing energy use in the home. (Aprilaire, Public Meeting Transcript, No. 35 at pp. 94–95) In this final rule, DOE considered multiple TSLs representing both energy conservation standards at the baseline efficiency level and higher efficiency levels for whole-home dehumidifiers. Section V.C.1 of this document describes how DOE selected the energy conservation standards established in this final rule.

Therma-Stor recommended a single minimum efficiency level be established for all portable dehumidifiers and a single minimum efficiency level be established for whole-home dehumidifiers based upon the test procedure in appendix X1. (Therma-Stor, No. 38 at pp. 2–3) As discussed in section IV.A.1 of this document, DOE separated both portable dehumidifiers and whole-home dehumidifiers into multiple product classes to ensure that consumer utility is maintained under any amended energy conservation standards. Section IV.C.1 of this final rule explains the efficiency levels DOE analyzed for each of the product classes. In that discussion, DOE explains how different IEF values define each efficiency level for the different product classes. In constructing TSLs for this final rule, DOE selected efficiency levels for each individual product class.

Accordingly, DOE considered different minimum efficiency levels for the individual product classes in each TSL.

Therma-Stor commented that only two of its seven whole-home dehumidifier models exceed the proposed minimum efficiency level from the June 2015 NOPR. Therma-Stor cautioned that the proposed regulation would reduce the number of efficient high-capacity portable dehumidifier and whole-home dehumidifier choices available to consumers who would instead purchase one, or multiple, inefficient low-capacity portable dehumidifiers. (Therma-Stor, No. 38 at pp. 2–3) In this final rule analysis, DOE updated its estimates of manufacturer impacts at the different analyzed efficiency levels. (See section IV.J of this document.) DOE considered these impacts for each TSL when determining appropriate standards for dehumidifiers. Section V.C.1 of this document details the benefits and burdens of each TSL considered in this final rule.

Therma-Stor stated that the test procedure for whole-home dehumidifiers for Appendix X1 specifies an external static pressure which increases the necessary fan power beyond that specified for portable dehumidifiers. Therefore, Therma-Stor expressed concern that, although there are no whole-home dehumidifiers currently in the market that are more efficient than a similar-capacity portable dehumidifier, the proposed efficiency level for “large” whole-home dehumidifiers is 26 percent higher than the level proposed for high-capacity portable dehumidifiers. (Therma-Stor, No. 38 at pp. 2–3) Although whole-home dehumidifiers are tested with a ducted setup that imposes an external static pressure on the unit, which increases power consumption, the higher ambient test temperature increases overall dehumidification capacity compared to a portable dehumidifier. As a result, a whole-home dehumidifier would typically have a higher rated IEF than a portable dehumidifier with similar components.

ASA and the Joint Commenters supported the proposed levels for high-capacity portable dehumidifiers and whole-home dehumidifiers, while they urged DOE to consider adopting TSL 4 in the final rule for the two portable dehumidifier product classes with capacities less than or equal to 45 pints/day. (ASA, Public Meeting Transcript, No. 35 at pp. 9–10; Joint Commenters, No. 40 at pp. 1–4) The Joint Commenters stated that multiple market and policy changes will likely increase the demand for high-efficiency compressors for room air conditioners, which would increase the availability of high-efficiency compressors for dehumidifiers. The Joint Commenters commented that impacts on manufacturers would be substantially reduced by maintaining the proposed TSL 3 for high-capacity portable dehumidifiers and whole-home dehumidifiers while adopting the proposed TSL 4 for portable dehumidifiers with capacities ≥ 45 pints/day. They stated that adopting the proposed TSL 3 for high-capacity portable dehumidifiers and whole-home dehumidifiers would limit impacts on small domestic manufacturers and eliminate DOE’s concern regarding the availability of high-efficiency compressors for high-capacity portable dehumidifiers and whole-home dehumidifiers. (Joint Commenters, No. 40 at pp. 1, 3–4)

AHAM disagreed with adopting the proposed TSL 4 instead of the proposed TSL 3 for portable dehumidifiers less than 45 pints per day. AHAM noted that TSL 4 is the max-tech level for which no units are currently on the market, and stated that selecting TSL 4 may contribute to the potential unavailability of products at certain capacities across that product class. To meet TSL 4, AHAM suggested that manufacturers would have to incorporate the highest efficiency compressors, but few are available; therefore, several dehumidifier platforms could be unable to meet the max-tech IEF. (AHAM, No. 39 at p. 6)

DOE reviewed the comments submitted by ASAP, the Joint Commenters, and AHAM that directly addressed the proposed standards and TSLs analyzed in the June 2015 NOPR. In this final rule, DOE reassessed the benefits and burdens of the TSLs, including newly constructed TSLs for this final rule analysis, while considering all comments received, as detailed below.

For this final rule, DOE considered the impacts of amended standards for dehumidifiers at each TSL, beginning with the maximum technologically feasible level, to determine whether that level was economically justified. Where the max-tech level was not justified, DOE then considered the next most efficient level and undertook the same evaluation until it reached the highest efficiency level that is both technologically feasible and economically justified and saves a significant amount of energy.

To aid the reader as DOE discusses the benefits and/or burdens of each TSL, tables in this section present a summary of the results of DOE’s quantitative analysis for each TSL. In addition to the quantitative results presented in the tables, DOE also considers other burdens and benefits that affect economic justification. These include the impacts on identifiable subgroups of consumers who may be disproportionately affected by a national standard and impacts on employment.

DOE also notes that the economics literature provides a wide-ranging discussion of how consumers trade off upfront costs and energy savings in the absence of government intervention. Much of this literature attempts to explain why consumers appear to undervalue energy efficiency improvements. There is evidence that consumers undervalue future energy savings as a result of: (1) A lack of information; (2) a lack of sufficient salience of the long-term or aggregate benefits; (3) a lack of sufficient savings to warrant delaying or altering purchases; (4) excessive focus on the short term, in the form of inconsistent weighting of future energy cost savings relative to available returns on other investments; (5) computational or other difficulties with the evaluation of relevant tradeoffs; and (6) a divergence in incentives (for example,
between renters and owners, or builders and purchasers). Having less than perfect foresight and a high degree of uncertainty about the future, consumers may trade off these types of investments at a higher than expected rate between current consumption and uncertain future energy cost savings.

In DOE’s current regulatory analysis, potential changes in the benefits and costs of a regulation due to changes in consumer purchase decisions are included in two ways. First, if consumers forego the purchase of a product in the standards case, this decreases sales for product manufacturers, and the impact on manufacturers attributed to lost revenue is included in the MIA. Second, DOE accounts for energy savings attributable to lost revenue for product manufacturers, and the impact on manufacturers committed to developing a framework for estimating the benefits and costs of changes in consumer purchase decisions due to an energy conservation standard, DOE is committed to developing a framework that can support empirical quantitative tools for improved assessment of the consumer welfare impacts of appliance standards. DOE has posted a paper that discusses the issue of consumer welfare impacts of appliance energy conservation standards, and potential enhancements to the methodology by which these impacts are defined and estimated in the regulatory process.74 DOE welcomes comments on how to more fully assess the potential impact of energy conservation standards on consumer choice and how to quantify this impact in its regulatory analysis in future rulemakings.

1. Benefits and Burdens of TSLs Considered for Dehumidifier Standards

Table V.31 and Table V.32 summarize the quantitative impacts estimated for each TSL for dehumidifiers. The efficiency levels contained in each TSL are described in section V.A of this document.

### Table V.31—Dehumidifier Trial Standard Levels: National Impacts

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative FFC Energy Savings (quads)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.07</td>
<td>0.30</td>
<td>0.31</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>NPV of Customer Benefits (2014$ billion)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3% discount rate</td>
<td>0.61</td>
<td>2.71</td>
<td>2.77</td>
<td>6.74</td>
</tr>
<tr>
<td>7% discount rate</td>
<td>0.28</td>
<td>1.28</td>
<td>1.30</td>
<td>3.04</td>
</tr>
<tr>
<td>Cumulative FFC Emissions Reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>4.2</td>
<td>18.6</td>
<td>19.0</td>
<td>50.1</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>7.5</td>
<td>33.1</td>
<td>33.9</td>
<td>89.4</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.04</td>
<td>0.11</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.05</td>
<td>0.23</td>
<td>0.23</td>
<td>0.61</td>
</tr>
<tr>
<td>N₂O (thousand tons CO₂eq)</td>
<td>13.7</td>
<td>60.5</td>
<td>61.8</td>
<td>162.2</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>17.8</td>
<td>77.9</td>
<td>79.7</td>
<td>210.7</td>
</tr>
<tr>
<td>CH₄ (thousand tons CO₂eq)</td>
<td>498</td>
<td>2,182</td>
<td>2,231</td>
<td>5,900</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>2.5</td>
<td>11.0</td>
<td>11.3</td>
<td>29.5</td>
</tr>
<tr>
<td>Value of Emissions Reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂ (2014$ million)**</td>
<td>31 to 420</td>
<td>137 to 1,859</td>
<td>140 to 1,900</td>
<td>362 to 4,961</td>
</tr>
<tr>
<td>NOₓ—3% discount rate (2014$ million)</td>
<td>15.0 to 34.2</td>
<td>66.6 to 151.8</td>
<td>68.0 to 155.1</td>
<td>176.5 to 402.3</td>
</tr>
<tr>
<td>NOₓ—7% discount rate (2014$ million)</td>
<td>6.6 to 14.9</td>
<td>29.8 to 67.1</td>
<td>30.4 to 68.6</td>
<td>77.4 to 174.6</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (−) values.

** Range of the economic value of CO₂ emissions.

### Table V.32—Dehumidifier Trial Standard Levels: Manufacturer and Consumer Impacts

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry NPV (2014$ millions) (No-New- Standards INPV = 179.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.8 to 176.5</td>
<td>142.0 to 145.5</td>
<td>137.1 to 140.7</td>
<td>106.8 to 126.9</td>
<td></td>
</tr>
<tr>
<td>Industry NPV (% change)</td>
<td>(2.0%) to (1.7%)</td>
<td>(20.9%) to (18.9%)</td>
<td>(23.6%) to (21.6%)</td>
<td>(40.5%) to (29.3%)</td>
</tr>
</tbody>
</table>

TABLE V.32—DEHUMIDIFIER TRIAL STANDARD LEVELS: MANUFACTURER AND CONSUMER IMPACTS—Continued

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumer Average LCC Savings (2014$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC1 (&lt;25.00 pints/day)</td>
<td>60</td>
<td>107</td>
<td>107</td>
<td>110.</td>
</tr>
<tr>
<td>PC2 (25.01–50.00 pints/day)</td>
<td>157</td>
<td>119</td>
<td>119</td>
<td>101.</td>
</tr>
<tr>
<td>PC3 (&gt;50.00 pints/day)</td>
<td>17</td>
<td>142</td>
<td>142</td>
<td>96.</td>
</tr>
<tr>
<td>PC4 (&lt;8.0 ft³)</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>1.3.</td>
</tr>
<tr>
<td>PC5 (&lt;8.0 ft³)</td>
<td>8.2</td>
<td>4.5</td>
<td>4.5</td>
<td>7.2.</td>
</tr>
<tr>
<td><strong>Consumer Simple PBP (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC1 (&lt;25.00 pints/day)</td>
<td>0</td>
<td>0.1</td>
<td>0.1</td>
<td>11.5.</td>
</tr>
<tr>
<td>PC2 (25.01–50.00 pints/day)</td>
<td>0</td>
<td>0.7</td>
<td>0.7</td>
<td>5.1.</td>
</tr>
<tr>
<td>PC3 (&gt;50.00 pints/day)</td>
<td>44.9</td>
<td>28.7</td>
<td>28.7</td>
<td>54.3.</td>
</tr>
<tr>
<td>PC4 (&lt;8.0 ft³)</td>
<td>3.9</td>
<td>10.8</td>
<td>10.8</td>
<td>42.6.</td>
</tr>
<tr>
<td>PC5 (&lt;8.0 ft³)</td>
<td></td>
<td></td>
<td></td>
<td>43.4.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Consumers That Experience Net Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC1 (&lt;25.00 pints/day)</td>
</tr>
<tr>
<td>PC2 (25.01–50.00 pints/day)</td>
</tr>
<tr>
<td>PC3 (&gt;50.00 pints/day)</td>
</tr>
<tr>
<td>PC4 (&lt;8.0 ft³)</td>
</tr>
<tr>
<td>PC5 (&lt;8.0 ft³)</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (−) values.

DOE first considered TSL 4, which represents the max-tech efficiency levels. TSL 4 would save 0.82 quads of energy, an amount DOE considers significant. Under TSL 4, the NPV of consumer benefit would be $3.04 billion using a discount rate of 7 percent, and $6.74 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 4 are 50.1 Mt of CO₂, 89.4 thousand tons of NOₓ, 29.5 thousand tons of SO₂, 0.11 ton of Hg, 0.61 thousand tons of N₂O, and 210.7 thousand tons of CH₄. The estimated monetary value of the CO₂ emissions reductions at TSL 4 ranges from $362 million to $4,961 million.

At TSL 4, the average LCC impact is a savings of $110 for PC1, $191 for PC2, $96 for PC3, $242 for PC4, and $386 for PC5. The simple PBP is 1.3 years for PC1, 0.9 years for PC2, 7.2 years for PC3, 6.8 years for PC4, and 5.8 years for PC5. The fraction of consumers experiencing a net LCC cost is 11.5 percent for PC1, 5.1 percent for PC2, 54.3 percent for PC3, 42.6 percent for PC4, and 43.4 percent for PC5.

At TSL 4, the projected change in INPV ranges from a decrease of $72.7 million to a decrease of $526.6 million. If the high end of the range of impacts is reached, TSL 4 could result in a net loss of up to 40.5 percent in INPV for manufacturers. Products that meet the efficiency standards specified by this TSL are estimated to represent less than 2 percent of current annual shipments. As such, manufacturers would have to redesign nearly all products by the expected 2019 projected compliance date to meet demand. Redesigning all units to meet the current max-tech efficiency levels would require considerable capital and product conversion expenditures. At TSL 4, the capital conversion costs total as much as $39.1 million, 3.8 times the industry annual ordinary capital expenditure in 2018 (the year leading up to amended standards). DOE estimates that complete platform redesigns would cost the industry $55.2 million in product conversion costs. These conversion costs largely relate to the extensive research programs required to develop new products that meet the efficiency standards at TSL 4. These costs are equivalent to 10.9 times the industry annual budget for research and development. As such, the conversion costs associated with the changes in products and manufacturing facilities required at TSL 4 would require significant use of manufacturers’ financial reserves (manufacturer capital pools), impacting other areas of business that compete for these resources and significantly reducing INPV.

In addition, manufacturers could face a substantial impact on profitability at TSL 4. Because manufacturers are more likely to reduce their margins to maintain a price-competitive product at higher TSLs, especially in the lower-capacity portable dehumidifier segment, DOE expects that TSL 4 would yield impacts closer to the high end of the range of INPV impacts. If the high end of the range of impacts is reached, as DOE expects, TSL 4 could result in a net loss to manufacturers of 40.5 percent of INPV. Additionally, TSL 4 could result in a net loss to whole-home dehumidifier manufacturers of 174.7 percent of INPV, or cause some domestic manufacturers to exit the whole-home dehumidifier market altogether.

Beyond the direct financial impact on manufacturers, TSL 4 may also contribute to the potential unavailability of products at certain capacities across the five product classes. To meet TSL 4, all products would be required to incorporate the highest efficiency compressors; however, manufacturers indicated that few such compressors are available in the range of compressor capacities suitable for dehumidifiers, and it is unlikely that substantially more would become available if standards at TSL 4 were adopted. In addition, the specific compressor capacities available at any given time are driven largely by the markets for other products with higher shipments (e.g., room air conditioners), and thus dehumidifier manufacturers may be constrained in their design choices. Because DOE assumed manufacturers would optimize all components at TSL 4, including the use of high-efficiency compressors as well as larger heat exchangers and permanent-magnet blower motors, DOE expects that those dehumidifier platforms for which a suitable high efficiency compressor is not available would be unable to meet the max-tech efficiency levels associated with TSL 4. While this would likely not eliminate entire product classes from the market,
it has the potential to eliminate dehumidifiers of certain capacities within a given product class. The potential for this impact on manufacturers of high-capacity portable dehumidifiers and whole-home dehumidifiers is exacerbated by this segment’s low production volumes, which limits manufacturers’ ability to influence the availability of higher efficiency components from their vendors.

Therefore, the Secretary concludes that at TSL 4 for dehumidifiers, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, and the estimated monetary value of the CO₂ emissions reductions would be outweighed by the economic burden on some consumers, the potential impact on product availability, and the impacts on manufacturers, including significantly negative impacts on small domestic manufacturers of high-capacity portable and whole-home dehumidifiers. Consequently, the Secretary has concluded that TSL 4 is not economically justified.

DOE then considered TSL 3, which would save an estimated 0.31 quads of energy, an amount DOE considers significant. Under TSL 3, the NPV of consumer benefit would be $1.30 billion using a discount rate of 7 percent, and $2.77 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 3 are 19.0 Mt of CO₂, 33.9 thousand tons of NOₓ, 11.3 thousand tons of SO₂, 0.04 tons of Hg, 0.23 thousand tons of N₂O, and 77.9 thousand tons of CH₄. The estimated monetary value of the CO₂ emissions reductions at TSL 3 ranges from $140 million to $1,985 million.

At TSL 3, the average LCC impact is a savings of $107 for PC1, $119 for PC2, $142 for PC3, $242 for PC4, and $479 for PC5. The simple PBP is 0.5 years for PC1, 0.4 and PC2, 4.5 years for PC3, 1.9 years for PC4, and 2.8 years for PC5. The fraction of consumers experiencing a net LCC cost is 0.1 percent for PC1, 0.7 percent for PC1, 0.7 percent for PC2, 28.7 percent for PC3, 9.9 percent for PC3, and 10.8 percent for PC5.

At TSL 3, the projected change in INPV ranges from a decrease of $42.4 million to a decrease of $38.7 million. If the high end of the range of impacts is reached, TSL 3 could result in a net loss of up to 23.6 percent in INPV for manufacturers, with high disproportionate impacts to small, domestic manufacturers of whole-home and high-capacity portable dehumidifiers. The capital conversion costs required by whole-home dehumidifier manufacturers (which includes four small, domestic manufacturers and one larger foreign manufacturer) in order to comply with TSL 3 are estimated to be $1.8 million. 5.4 times the whole-home dehumidifier industry annual ordinary capital expenditure in 2018 (the year leading up to amended standards). DOE estimates that complete platform redesigns would cost the industry $5.5 million in product conversion costs, equivalent to 32.7 times the whole-home dehumidifier industry annual budget for research and development. As a result, TSL 3 could result in a net loss to whole-home dehumidifier industry of 101.4 percent of INPV or cause some domestic manufacturers to exit the whole-home dehumidifier market altogether. Additionally, the manufacturers with the greatest share of the whole-home dehumidifier market are small and domestic and also produce high-capacity portable dehumidifiers. Accordingly, these manufacturers will incur the added burden of compliance with EL 3 for their high-capacity portable dehumidifiers as well as with standards above the baseline for their whole-home dehumidifiers. In aggregate, as detailed in section VII.B of this document, at TSL 3, the typical small manufacturer may incur $2.3 million in capital and product conversion costs in order to maintain existing product lines for both portable and whole-home dehumidifiers. This equates to approximately 56.1 percent of the typical small manufacturer’s annual revenue and 945.1 percent of its annual operating profit. Although some portable dehumidifiers may require higher efficiency compressors, the efficiency levels specified at TSL 3 offer manufacturers multiple design pathways to meet the standard. This in turn would allow manufacturers to maintain product offerings should a high efficiency compressor be unavailable at a given compressor capacity. In addition, a wide variety of units are already available that meet the efficiency levels for portable dehumidifiers specified at TSL 3.

The Secretary concludes that at TSL 3 for dehumidifiers, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, and the estimated monetary value of the CO₂ emissions reductions would be outweighed by the significantly negative impacts on small domestic manufacturers of high-capacity portable and whole-home dehumidifiers. Consequently, the Secretary has concluded that TSL 3 is not economically justified.

DOE then considered TSL 2, which would save an estimated 0.30 quads of energy, an amount DOE considers significant. Under TSL 3, the NPV of consumer benefit would be $1.28 billion using a discount rate of 7 percent, and $2.71 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 2 are 18.6 Mt of CO₂, 33.1 thousand tons of NOₓ, 11.0 thousand tons of SO₂, 0.04 tons of Hg, 0.23 thousand tons of N₂O, and 77.9 thousand tons of CH₄. The estimated monetary value of the CO₂ emissions reductions at TSL 3 ranges from $137 million to $1,859 million.

At TSL 2, the average LCC impact is a savings of $107 for PC1, $119 for PC2, $142 for PC3, $242 for PC4, and $479 for PC5. The simple PBP is 0.5 years for PC1, 0.4 and PC2, 4.5 years for PC3, and zero years for PC4 and PC5. The fraction of consumers experiencing a net LCC cost is 0.1 percent for PC1, 0.7 percent for PC2, 28.7 percent for PC3, and zero percent for PC4 and PC5 because TSL 2 is set at the baseline efficiency level for PC4 and PC5.

At TSL 2, the projected change in INPV ranges from a decrease of $37.5 million to a decrease of $34.0 million. If the high end of the range of impacts is reached, TSL 2 could result in a net loss of up to 20.9 percent in INPV for manufacturers. In contrast to TSL 3 and TSL 4, TSL 2 would not result in disproportionate impacts to the whole-home dehumidifier industry because TSL 2 corresponds to the baseline efficiency level for the whole-home product classes. Products that meet the efficiency standards specified at this TSL level represent 39 percent of shipments of all dehumidifiers in 2018 (the year leading up to amended standards). In order to bring the remaining products into compliance with TSL 2, the portable dehumidifier industry may incur capital and product conversion costs of $22.6 million and $29.9 million, respectively. Although, at TSL 2, three out of the five small, domestic manufacturers will incur some costs associated with redesigning high-capacity portable products, only one of these five manufacturers limits its product offerings in the dehumidifier market to the high-capacity portable segment, with most of its products comprising commercial units that are not covered products under this rulemaking. The other two small, domestic manufacturers that produce high-capacity portable products also manufacture whole-home dehumidifiers, and their impacts at TSL 2 will be significantly lower than at TSL 3 and TSL 4. TSL 2 will result in
in little to no adverse impacts for whole-home dehumidifier manufacturing, including the two small, domestic manufacturers that focus exclusively on these dehumidifiers. For these reasons, TSL 2 will minimize disproportionate impacts to small, domestic dehumidifier manufacturers relative to TSL 3 and TSL 4.

Although some dehumidifiers may require higher efficiency compressors, the efficiency levels specified at TSL 2 offer manufacturers multiple design pathways to meet the standard. This allows manufacturers to maintain product offerings should a high efficiency compressor be unavailable at a given compressor capacity. In addition, units are already available that meet the efficiency levels specified at TSL 2.

The Secretary concludes that at TSL 2 for dehumidifiers, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, estimated monetary value of the CO₂ emissions reductions, and positive average LCC savings would outweigh the negative impacts on some consumers and on manufacturers, including the conversion costs that could result in a reduction in INPV for manufacturers of portable dehumidifiers.

After carefully considering the analysis and the benefits and burdens of TSL 2, the Secretary concludes that this TSL will offer the maximum improvement in energy efficiency that is technologically feasible and economically justified, and will result in significant conservation of energy without eliminating or making unavailable any product classes or portions of product classes. Therefore, DOE is establishing amended energy conservation standards for dehumidifiers at TSL 2, as indicated in Table V.33.

Table V.33—Amended Energy Conservation Standards for Dehumidifiers

<table>
<thead>
<tr>
<th>Portable dehumidifier product capacity (pints/day)</th>
<th>Minimum integrated energy factor (L/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.00 or less</td>
<td>1.30</td>
</tr>
<tr>
<td>25.01–50.00</td>
<td>1.60</td>
</tr>
<tr>
<td>50.01 or more</td>
<td>2.80</td>
</tr>
<tr>
<td>Whole-home dehumidifier product case volume (cubic feet)</td>
<td></td>
</tr>
<tr>
<td>8.0 or less</td>
<td>1.77</td>
</tr>
<tr>
<td>More than 8.0</td>
<td>2.41</td>
</tr>
</tbody>
</table>

2. Summary of Annualized Benefits and Costs of the Adopted Standards

The benefits and costs of the proposed standards can also be expressed in terms of annualized values. The annualized net benefit is the sum of: (1) The annualized national economic value of the benefits from operating products that meet the proposed standards (consisting primarily of operating cost savings from using less energy, minus increases in product purchase costs, which is another way of representing consumer NPV), and (2) the monetary value of the benefits of CO₂ and NOₓ emission reductions.75

Table V.34 shows the annualized values for dehumidifiers under TSL 3, expressed in 2014$. The results under the primary estimate are as follows. Using a 7-percent discount rate for benefits and costs other than CO₂ reductions, for which DOE used a 3-percent discount rate along with the SCC series corresponding to a value of $40.5/ton in 2015 (in 2014$), the estimated cost of the proposed standards for dehumidifiers is $11 million per year in increased equipment costs, while the estimated annualized benefits are $136 million per year in reduced equipment operating costs, $34 million per year in CO₂ reductions, and $2.9 million per year in reduced NOₓ emissions. In this case, the net benefit amounts to $163 million per year.

Using a 3-percent discount rate for all benefits and costs and the SCC series corresponding to a value of $40.5/ton in 2015 (in 2014$), the estimated cost of the proposed standards for dehumidifiers in today’s rule is $10 million per year in increased equipment costs, while the benefits are $162 million per year in reduced operating costs, $34 million per year in CO₂ reductions, and $3.7 million per year in reduced NOₓ emissions. In this case, the net benefit amounts to $189 million per year.

Table V.34—Annualized Benefits and Costs of Proposed Amended Standards (TSL 3) for Dehumidifiers Sold in 2019–2048

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Discount rate</th>
<th>Million 2014$/year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary estimate</td>
<td>Low net benefits estimate</td>
</tr>
<tr>
<td></td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>136</td>
<td>162</td>
</tr>
<tr>
<td>CO₂ Reduction at $12.2/t**</td>
<td>131</td>
<td>154</td>
</tr>
<tr>
<td>CO₂ Reduction at $40.0/t**</td>
<td>141</td>
<td>169</td>
</tr>
<tr>
<td>CO₂ Reduction at $62.3/t**</td>
<td>159</td>
<td>183</td>
</tr>
<tr>
<td>NOₓ Reduction †</td>
<td>163</td>
<td>189</td>
</tr>
</tbody>
</table>

75To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2014, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year’s shipments in the year in which the shipments occur (2020, 2030, etc.), and then discounted the present value from each year to 2014. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO₂ reductions, for which DOE used case-specific discount rates, as shown in Table V.22.

Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year that yields the same present value.
TABLE V.34—ANNUALIZED BENEFITS AND COSTS OF PROPOSED AMENDED STANDARDS (TSL 3) FOR DEHUMIDIFIERS SOLD IN 2019–2048—Continued

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Primary estimate*</th>
<th>Low net benefits estimate*</th>
<th>High net benefits estimate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3% plus CO₂ range ...</td>
<td>176 to 269</td>
<td>168 to 260</td>
<td>188 to 284</td>
</tr>
<tr>
<td>3% ...................</td>
<td>200</td>
<td>192</td>
<td>213</td>
</tr>
</tbody>
</table>

Costs

<table>
<thead>
<tr>
<th>Consumer Incremental Product Costs</th>
<th>7%</th>
<th>3%</th>
<th>7%</th>
<th>3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Total Net Benefits

<table>
<thead>
<tr>
<th>Total ††</th>
<th>7% plus CO₂ range ...</th>
<th>139 to 232</th>
<th>132 to 224</th>
<th>148 to 244</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>163</td>
<td>156</td>
<td>173</td>
<td></td>
</tr>
<tr>
<td>3% plus CO₂ range ...</td>
<td>165 to 259</td>
<td>157 to 248</td>
<td>178 to 274</td>
<td></td>
</tr>
<tr>
<td>3%</td>
<td>189</td>
<td>180</td>
<td>203</td>
<td></td>
</tr>
</tbody>
</table>

* This table presents the costs and benefits associated with dehumidifiers shipped in 2019–2048. These results include benefits to consumers which accrue after 2048 from the products purchased in 2019–2048. The costs account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule.

†† Total Benefits for both the 3% and 7% cases are derived using the series corresponding to average SCC with 3-percent discount rate.

VI. Certification Reporting and Enforcement Requirements

In the July 2015 Test Procedure Final Rule, DOE amended the sampling plan and certification reporting requirements for dehumidifiers in 10 CFR 429.36 to clarify how manufacturers must make representations of capacity, and for whole-home dehumidifiers, the case volume of a basic model. DOE also amended the certification reporting requirements to specify the product-specific information that must be reported for each basic model. 80 FR 45801, 45819 (July 31, 2015).

In this final rule, DOE further amends section 10 CFR 429.36(a) to provide rounding instructions for the reported IEF and to require that products capable of operating as both a portable and whole-home dehumidifier be rated and certified under both configurations, and section 10 CFR 429.36(b)(2) to detail the specific reporting requirements when testing according to appendix X and appendix X1.

In the July 2015 Test Procedure Final Rule, DOE amended the enforcement requirements for dehumidifiers in 10 CFR 429.134(f). Id. In this final rule, DOE amends the enforcement provisions to update the referenced efficiency metric to also include IEF.

VII. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

Section 1(b)(1) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), requires each agency to identify the problem that it intends to address, including, where applicable, the failures of private markets or public institutions that warrant new agency action, as well as to assess the significance of that problem. The problems that the adopted standards for dehumidifiers are intended to address are as follows:

(1) Insufficient information and the high costs of gathering and analyzing relevant information leads some consumers to miss opportunities to make cost-effective investments in energy efficiency.

(2) In some cases the benefits of more efficient equipment are not realized due to misaligned incentives between purchasers and users. An example of such a case is when the equipment purchase decision is made by a building contractor or building owner who does not pay the energy costs.

(3) There are external benefits resulting from improved energy efficiency of appliances that are not captured by the users of such equipment. These benefits include externalities related to public health, environmental protection and national energy security that are not reflected in energy prices, such as reduced emissions of air pollutants and greenhouse gases that impact human health and global warming. DOE attempts to qualify some of the external benefits through use of social cost of carbon values.

The Administrator of the Office of Information and Regulatory Affairs (OIRA) in the OMB has determined that the proposed regulatory action is a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, pursuant to section 6(a)(3)(B) of the Order, DOE has provided to OIRA: (i) The text of the draft regulatory action, together with a reasonably detailed description of the need for the regulatory action and an explanation of how the regulatory action will meet that need; and (ii) An assessment of the potential costs and benefits of the regulatory action, including an explanation of the manner in which the regulatory action is consistent with a statutory mandate. DOE has included these documents in the rulemaking record.
In addition, the Administrator of OIRA has determined that the proposed regulatory action is an “economically significant” regulatory action under section 3(f)(1) of Executive Order 12866. Accordingly, pursuant to section 6(a)(3)(C) of the Order, DOE has provided to OIRA an assessment, including the underlying analysis, of benefits and costs anticipated from the regulatory action, together with, to the extent feasible, a quantification of those costs; and an assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, and an explanation why the planned regulatory action is preferable to the identified potential alternatives. These assessments can be found in the technical support document for this rulemaking.

DOE has also reviewed this regulation pursuant to Executive Order 13563, issued on January 18, 2011. (76 FR 3281, Jan. 21, 2011) Executive Order 13563 is supplemental to and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. To the extent permitted by law, agencies are required by Executive Order 13563 to: (1) Propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); (2) tailor regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

DOE emphasizes as well that Executive Order 13563 requires agencies to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible. In its guidance, OIRA has emphasized that such techniques may include identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes. For the reasons stated in the preamble, DOE believes that this final rule is consistent with these principles, including the requirement that, to the extent permitted by law, benefits justify costs and that net benefits are maximized.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires preparation of a final regulatory flexibility analysis (FRFA) for any final rule where the agency was first required by law to publish a proposed rule for public comment. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” 67 FR 53461 (Aug. 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel’s Web site (http://energy.gov/office-general-counsel). DOE has prepared the following FRFA for the products that are the subject of this rulemaking.

1. Statement of the Need for, and Objectives of, the Rule

The need for, and objectives of this final rule are stated elsewhere in the preamble and not repeated here.

2. Significant Issues Raised by Public Comment

Significant issues raised by public comment in response to the initial regulatory flexibility analysis and the economic impacts of the rule are provided in section IV.J.3 and not repeated here. As discussed in section IV.J.3, based on those comments, DOE updated its analysis of manufacturer impacts, including small business impacts, for this final rule. The standard levels adopted in this final rule were selected based on updated engineering and economic analyses.

3. Response to Comments From the Small Business Administration’s Chief Counsel for Advocacy

The SBA’s Chief Counsel for Advocacy did not submit comments on this rulemaking.

4. Description and Estimated Number of Small Entities Regulated

a. Methodology for Estimating the Number of Small Entities

For the manufacturers of dehumidifiers, the SBA has set a size threshold, which defines those entities classified as “small businesses” for the purposes of the Regulatory Flexibility Act. DOE used the SBA’s small business size standards to determine whether any small entities would be subject to the requirements of the rule. See 13 CFR part 121. The size standards are listed by North American Industry Classification System (NAICS) code and industry description and are available at: www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf. Manufacturing of whole-home dehumidifiers is classified under NAICS codes 333415: Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing, whereas manufacturing of portable dehumidifiers is classified under 333510: Small Electrical Appliance Manufacturing. The SBA sets a threshold of 1,250 employees or less and 1,500 employees or less for an entity to be considered as a small business in these industry categories, respectively.

To estimate the number of companies that could be small business manufacturers of products covered by this rulemaking, DOE conducted a market survey using available public information to identify potential small manufacturers. DOE’s research included searches of public databases (e.g., DOE’s Compliance Certification Database,76 the SBA Database77), individual company Web sites, and market research tools (e.g., Hoovers Web site78) to create a list of companies that manufacture or sell products covered by this rulemaking. DOE also asked stakeholders and industry representatives if they were aware of any other small manufacturers during manufacturer interviews and at DOE public meetings. DOE reviewed publicly available data and contacted select companies on its list, as necessary, to determine whether they met the SBA’s definition of a small business manufacturer of covered dehumidifiers. DOE screened out companies that do not manufacture products covered by this rulemaking, do not meet the

76 See http://www.regulations.doe.gov/ certification-data/
77 See http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm
78 See http://www.hoovers.com/.
definition of a “small business,” or are foreign owned and operated.

DOE initially identified 25 manufacturers of dehumidifier products sold in the United States. DOE then determined that of the 25 companies, 20 were either large manufacturers, exclusively import products manufactured overseas, or are foreign owned and operated. DOE identified the remaining five manufacturers as domestic manufacturers that meet the SBA's definition of a “small business” and manufacture products covered by this rulemaking.

The five domestic small business manufacturers of dehumidifiers identified account for a small fraction of total industry shipments. In 2015, 98.5 percent of dehumidifiers sold in the United States were small portable units (belonging to product classes 1 and 2) and were made by large, diversified manufacturers. The remaining 1.5 percent of the market consists of high-capacity portable and whole-home dehumidifiers, which are primarily manufactured by small business manufacturers. It is estimated that small, domestic manufacturers account for 50 percent of high-capacity portable U.S. shipments and the overwhelming majority of whole-home dehumidifier U.S. shipments. The two small, domestic manufacturers that account for the greatest share of the combined high-capacity portable and whole-home market segments manufacture both high-capacity portable and whole-home products. Of the remaining small, domestic manufacturers, one produces only high-capacity portable dehumidifiers and two produce only whole-home dehumidifiers.

b. Manufacturer Participation

Before issuing this final rule, DOE attempted to contact all the small business manufacturers of dehumidifiers identified. Two of these small business manufacturers responded to DOE and consented to being interviewed as part of the manufacturing impact analysis. DOE also obtained information about small business impacts while interviewing large manufacturers.

c. Comparison of Large and Small Entities

Several factors may contribute to a disproportionate burden on small business manufacturers from amended energy conservation standards for dehumidifiers relative to their larger counterparts. One way in which small manufacturers could be at a disadvantage is that they may be disproportionately affected by product and capital conversion costs. Product redesign, testing, and certification costs tend to be fixed per basic model and do not scale with sales volume. Both large and small business manufacturers must make investments in R&D to redesign their products, but small businesses lack the sales volumes to sufficiently recoup these upfront investments without substantially marking up their products. Similarly, upfront capital investments in new manufacturing capital for platform redesigns, as well as depreciated manufacturing capital, can be spread across a lower volume of shipments for small business manufacturers.

In addition, because small business manufacturers typically have fewer engineers than large manufacturers, they must allocate a greater portion of their available human resources to meet an amended regulatory standard. Because engineers may need to spend more time redesigning and testing existing models as a result of the amended standard, they may have less time to develop new products.

Furthermore, smaller manufacturers may lack the purchasing power of larger manufacturers. For example, because fan motor suppliers give volume discounts to manufacturers based on the number of motors they purchase, larger manufacturers may have a pricing advantage because they make higher volume purchases. This purchasing power difference between high-volume and low-volume orders applies to other dehumidifier components as well, including compressors and heat exchangers. DOE expects that certain larger manufacturers of lower-capacity portable dehumidifiers may even manufacture heat exchangers in-house. Additionally, because small business manufacturers produce higher-capacity dehumidifiers, they typically require larger and/or custom-made components (e.g., larger compressors and heat exchangers), compared to the lower-capacity portable dehumidifier manufacturers that account for the majority of the dehumidifier market. Because of the low-volume nature of the high-capacity portable dehumidifier and whole-home dehumidifier market, certain technological improvements to components may be developed only for lower-capacity portable products, or with significant lag time for application in high-capacity portable dehumidifier products.

In terms of cumulative regulatory burden faced by small domestic dehumidifier manufacturers, the small manufacturers with the greatest dehumidifier market share are more specialized and concentrated in dehumidifier manufacturing and, thus, manufacture a smaller range of products than larger companies. The other products that some of the small manufacturers also produce include humidifiers, air purifiers and desiccant wheels. None of these are currently regulated by DOE.

However, one small manufacturer (with low market share among small dehumidifier manufacturers) also produces residential furnaces. This small manufacturer produces only whole-home dehumidifiers and would not be burdened by the whole-home standard level established in this document.

In terms of access to the capital required to cover the conversion costs associated with reaching the proposed standards, small business manufacturers would likely need to take on additional debt, whereas larger diversified manufacturers of small portable products would be better equipped to fund purchases with existing cash flow from operations. Additionally, since the recession of 2007 and 2008, small business lending has dropped substantially due to a combination of tightened lending standards, increasing collateral requirements and reduced focus on small business credit markets. Thus, small businesses generally have less access to capital than larger companies.

5. Description and Estimate of Compliance Requirements

DOE derived industry conversion costs using a top-down approach described in section IV.J.2.a. Using product platform counts by product class and manufacturer, DOE estimated the distribution of industry conversion costs between small manufacturers and large manufacturers. Using its count of manufacturers, DOE calculated capital conversion costs (Table VII.1) and product conversion costs (Table VII.2) for an average small manufacturer versus an average large manufacturer. To provide context on the size of the conversion costs relative to the size of the businesses, DOE presents the conversion costs relative to annual revenue and annual operating profit at each TSL for the average small manufacturer (Table VII.3) and the average large manufacturer (Table VII.4). The current annual revenue and annual operating profit estimates are derived from the GRIM’s industry revenue calculations and the market share breakdowns of small versus large manufacturers.
At the established standard level (TSL 2), DOE estimates total conversion costs associated with amended energy conservation standards for an average small manufacturer to be $1.01 million, which is approximately 24.9 percent of annual revenue and 419.1 percent of annual operating profit. This suggests that an average small manufacturer would need to reinvest roughly 139.7 percent of its operating profit per year over the conversion period to comply with standards. At this TSL, the standard level for whole-home dehumidifiers is the baseline. Accordingly three of the five small, domestic manufacturers may incur costs associated only with the high-capacity portable segment of their business.

The total conversion costs associated with new and amended energy conservation standards for an average large manufacturer is $2.79 million, which is approximately 0.8 percent of annual revenue and 13.1 percent of annual operating profit. This suggests that an average large manufacturer would need to reinvest roughly 4.4 percent of its operating profit per year over the 3-year conversion period.

6. Significant Alternatives to the Rule

The discussion in the previous section analyzes impacts on small businesses that would result from the adopted standards, represented by TSL 2. In reviewing alternatives to the adopted standards, DOE examined an energy conservation standard set at both higher and lower efficiency levels.

As discussed in section V. C., DOE’s analysis shows that TSL 3 achieves
approximately 3 percent higher energy savings than TSL 2. TSL 4 achieves approximately 173 percent higher savings than TSL 2. However, as discussed in section V.C., DOE rejected these TSLs in part due to the negative INPV results and substantial small business impacts. The estimated conversion costs for small business manufacturers are significantly higher at TSL 3 and TSL 4 than at TSL 2. To comply with TSL 3, the average small manufacturer must make $2.27 million in conversion cost investments, which is $1.26 million more than at TSL 2. At TSL 3, the projected change in INPV also ranges from a decrease of $42.4 million to a decrease of $38.7 million. If the high end of the range of impacts is reached, TSL 3 could result in a net loss of up to 23.6 percent in INPV for manufacturers, with high disproportionate impacts to whole-home dehumidifier manufacturers, the majority of which are small, domestic companies. The capital conversion costs required by whole-home dehumidifier manufacturers to comply with TSL 3 are estimated to be $1.6 million, 5.4 times the whole-home dehumidifier industry annual ordinary capital expenditure in 2018 (the year leading up to amended standards). DOE estimates that complete platform redesigns would cost the industry $5.5 million in product conversion costs, equivalent to 32.7 times the whole-home dehumidifier industry annual budget for research and development. As a result, TSL 3 could result in a net loss to whole-home dehumidifier manufacturers of 101.4 percent of INPV (compared to no impacts at TSL 2) or cause some domestic manufacturers to exit the whole-home dehumidifier market altogether. To comply with TSL 4, the average small manufacturer must make $3.15 million in conversion cost investments, which is $2.15 million more than at TSL 2. INPV losses and impacts to the industry, and particularly to small manufacturers, would be even more significant than at TSL 3. DOE’s analysis also shows that while TSL 1 would reduce the impacts on small business manufacturers ($0.62 million conversion costs for the typical small manufacturer), it would come at the expense of a reduction in energy savings. TSL 1 achieves 77-percent lower energy savings compared to the energy savings at TSL 2.

DOE has concluded that establishing standards at TSL 2 balances the benefits of the energy savings at TSL 2 with the potential costs. DOE placed on dehumidifier manufacturers, including small business manufacturers. As required by EPCA, DOE adopts in this final rule the energy conservation standards that achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. Accordingly, DOE is not adopting one of the other TSLs considered in the analysis, or the other policy alternatives examined as part of the regulatory impacts analysis and included in chapter 17 of the final rule TSD.

Additional compliance flexibilities may be available through other means. For example, individual manufacturers may petition for a waiver of the applicable test procedure. (See 10 CFR 431.401) Further, EPCA provides that a manufacturer whose annual gross revenue from all of its operations does not exceed $8 million may apply for an exemption from all or part of an energy conservation standard for a period not longer than 24 months after the effective date of a final rule establishing the standard. Additionally, Section 504 of the Department of Energy Organization Act, 42 U.S.C. 7194, provides authority for the Secretary to adjust a rule issued under EPCA in order to prevent “special hardship, inequity, or unfair distribution of burdens” that may be imposed on that manufacturer as a result of such rule. Manufacturers should refer to 10 CFR part 430, subpart E, and part 1003 for additional details.

C. Review Under the Paperwork Reduction Act

Manufacturers of dehumidifiers must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for dehumidifiers, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including dehumidifiers. See generally 10 CFR part 429. The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. Public reporting burden for the certification is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

Pursuant to the National Environmental Policy Act (NEPA) of 1969, DOE has determined that the rule fits within the category of actions included in Categorical Exclusion (CX) B5.1 and otherwise meets the requirements for application of a CX. See 10 CFR part 1021, App. B, B5.1(b); 1021.410(b) and App. B, (1)–(5). The rule fits within this category of actions because it is a rulemaking that establishes energy conservation standards for consumer products or industrial equipment, and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, DOE has made a CX determination for this rulemaking, and DOE does not need to prepare an Environmental Assessment or Environmental Impact Statement for this rule. DOE’s CX determination for this rule is available at http://energy.gov/nepa/categorical-exclusion-cx-determinations-cx.

E. Review Under Executive Order 13132

Executive Order 13132, “Federalism,” 64 FR 43255 (Aug. 10, 1999) imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and...
prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this final rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297) Therefore, no further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. 61 FR 4729 (Feb. 7, 1996). Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this final rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820. DOE’s policy statement is also available at http://energy.gov/sites/prod/files/gcprod/documents/umra_97.pdf.

DOE has concluded that this final rule does not require expenditures of $100 million or more in any one year on the private sector. The final rule is likely to result in expenditures of $100 million or more, but there is no requirement that mandates that result. Such expenditures may include: (1) Investment in research and development and in capital expenditures by dehumidifier manufacturers in the years between the final rule and the compliance date for the new standards, and (2) incremental additional expenditures by consumers to purchase higher-efficiency dehumidifiers, starting at the compliance date for the applicable standard.

Section 202 of UMRA authorizes a Federal agency to respond to the content requirements of UMRA in any other statement or analysis that accompanies the final rule. (2 U.S.C. 1532(c)). The content requirements of section 202(b) of UMRA relevant to a private sector mandate substantially overlap the economic analysis requirements that apply under section 325(a) of EPCA and Executive Order 12866. The SUPPLEMENTARY INFORMATION section of this document and chapter 17 of the TSD for this final rule respond to those requirements.

Under section 205 of UMRA, the Department is obligated to identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a written statement under section 202 is required. (2 U.S.C. 1535(a)) DOE is required to select from those alternatives the most cost-effective and least burdensome alternative that achieves the objectives of the rule unless DOE publishes an explanation for doing otherwise, or the selection of such an alternative is inconsistent with law. In accordance with the statutory provisions discussed in this document, this final rule establishes amended energy conservation standards for dehumidifiers that are designed to achieve the maximum improvement in energy efficiency that DOE has determined to be both technologically feasible and economically justified. A full discussion of the alternatives considered by DOE is presented in chapter 17 of the TSD for this final rule.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 505 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

Pursuant to Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights” 53 FR 8859 (March 18, 1988), DOE has determined that this rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516, note) provides for Federal agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB’s guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE’s guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this final rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

energy action” is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

DOE has concluded that this regulatory action, which sets forth amended energy conservation standards for dehumidifiers, is not a significant energy action because the standards are not likely to have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as such by the Administrator at OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects on this final rule.

L. Review Under the Information Quality Bulletin for Peer Review

On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review (the Bulletin). 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal Government, including influential scientific information related to agency regulatory actions. The purpose of the bulletin is to enhance the quality and credibility of the Government’s scientific information. Under the Bulletin, the energy conservation standards rulemaking analyses are “influential scientific information,” which the Bulletin defines as “scientific information the agency reasonably can determine will have, or does have, a clear and substantial impact on important public policies or private sector decisions.” Id at FR 2667.

In response to OMB’s Bulletin, DOE conducted formal in-progress peer reviews of the energy conservation standards development process and analyses and has prepared a Peer Review Report pertaining to the energy conservation standards rulemaking analyses. Generation of this report involved a rigorous, formal, and documented evaluation using objective criteria and qualified and independent reviewers to make a judgment as to the technical/scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of programs and/or projects. The “Energy Conservation Standards Rulemaking Peer Review Report” dated February 2007 has been disseminated and is available at the following Web site: www1.eere.energy.gov/buildings/appliance_standards/peer_review.html.

M. Congressional Notification

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is a “major rule” as defined by 5 U.S.C. 804(2).

VIII. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this final rule.

List of Subjects
10 CFR Part 429
Energy conservation, Household appliances, Imports.
10 CFR Part 430
Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Small businesses.

Issued in Washington, DC, on May 20, 2016.

David Friedman,
Principal Deputy Assistant Secretary, Energy Efficiency and Renewable Energy.

For the reasons set forth in the preamble, DOE amends parts 429 and 430 of chapter II of title 10 of the Code of Federal Regulations, as set forth below:

PART 429—CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

1. The authority citation for part 429 continues to read as follows:


2. Section 429.36 is amended by adding paragraphs (a)(5) and (6) and revising paragraph (b)(2) to read as follows:

§429.36 Dehumidifiers.

(a) * * *

(5) Round the value of energy factor or integrated energy factor for a basic model to two decimal places.

(6) Dehumidifiers distributed in commerce by the manufacturer with the ability to operate as both a portable and whole-home dehumidifier by means of installation or removal of an optional ducting kit, must be rated and certified under both configurations.

(b) * * *

(2) Pursuant to §429.12(b)(13), a certification report must include the following public product-specific information:

(i) For dehumidifiers tested in accordance with appendix X: The energy factor in liters per kilowatt hour (liters/kWh) and capacity in pints per day.

(ii) For dehumidifiers tested in accordance with appendix XI: The integrated energy factor in liters per kilowatt hour (liters/kWh), capacity in pints per day, and for whole-home dehumidifiers, case volume in cubic feet.

3. Section 429.134 is amended by revising paragraph (f) to read as follows:

§429.134 Product-specific enforcement provisions.

* * * * *

(f) Dehumidifiers—(1) Verification of capacity. The capacity will be measured pursuant to the test requirements of part 430 for each unit tested. The results of the measurement(s) will be averaged and compared to the value of capacity certified by the manufacturer for the basic model. The certified capacity will be considered valid only if the measurement is within five percent, or 1.00 pint per day, whichever is greater, of the certified capacity.

(i) If the certified capacity is found to be valid, the certified capacity will be used as the basis for determining the minimum energy factor or integrated energy factor allowed for the basic model.

(ii) If the certified capacity is found to be invalid, the average measured capacity of the units in the sample will be used as the basis for determining the minimum energy factor or integrated energy factor allowed for the basic model.

(2) Verification of whole-home dehumidifier case volume. The case volume will be measured pursuant to the test requirements of part 430 for each unit tested. The results of the measurement(s) will be averaged and compared to the value of case volume certified by the manufacturer for the basic model. The certified case volume will be considered valid only if the measurement is within two percent, or
0.2 cubic feet, whichever is greater, of the certified case volume.

(i) If the certified case volume is found to be valid, the certified case volume will be used as the basis for determining the minimum integrated energy factor allowed for the basic model.

(ii) If the certified case volume is found to be invalid, the average measured case volume of the units in the sample will be used as the basis for determining the minimum integrated energy factor allowed for the basic model.

* * * * *

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

4. The authority citation for part 430 continues to read as follows:


5. Section 430.32 is amended by adding paragraph (v)(3) to read as follows:

§ 430.32 Energy and water conservation standards and their effective dates.

(v) * * *

(3) Dehumidifiers manufactured on or after June 13, 2019, shall have an integrated energy efficiency ratio that meets or exceeds the following values:

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<thead>
<tr>
<th>Portable dehumidifier Product Capacity (pints/day)</th>
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<tbody>
<tr>
<td>Minimum integrated energy efficiency factor (liters/kWh)</td>
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<tr>
<td>25.00 or less ..........</td>
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<tr>
<td>25.01–50.00 ..........</td>
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<td>50.01 or more ..........</td>
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<tr>
<th>Whole-home dehumidifier product case volume (cubic feet)</th>
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<tr>
<td>Minimum integrated energy efficiency factor (liters/kWh)</td>
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<tr>
<td>8.0 or less ..........</td>
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<td>More than 8.0 ..........</td>
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[FR Doc. 2016–12881 Filed 6–10–16; 8:45 am]
BILLING CODE 6450–01–P
Part IV

Department of Energy

10 CFR Parts 429 and 430
Energy Conservation Program: Energy Conservation Standards for Portable Air Conditioners; Proposed Rule
DEPARTMENT OF ENERGY

10 CFR Parts 429 and 430


RIN 1904–AD02

Energy Conservation Program: Energy Conservation Standards for Portable Air Conditioners


ACTION: Notice of proposed rulemaking (NOPR) and announcement of public meeting.

SUMMARY: The Energy Policy and Conservation Act of 1975 (EPCA), as amended, sets forth various provisions designed to improve energy efficiency for consumer products and certain commercial and industrial equipment. In addition to specifying a list of covered residential products and commercial equipment, EPCA contains provisions that enable the Secretary of Energy to classify additional types of consumer products as covered products. The U.S. Department of Energy (DOE) has previously published a proposed determination of coverage to classify portable air conditioners (ACs) as covered consumer products under the applicable provisions in EPCA. In this document, DOE proposes energy conservation standards for portable ACs following its notice of final determination of coverage. This document also announces a public meeting to receive comment on these proposed standards and associated analyses and results.

DATES: Comments: DOE will accept comments, data, and information regarding this NOPR before and after the public meeting, but no later than August 12, 2016. See section VIII, “Public Participation,” for details.

Written comments regarding the likely competitive impact of the proposed standard should be sent to the Department of Justice contact listed in the ADDRESSES section before August 12, 2016. Meeting: DOE will hold a public meeting on Wednesday, July 20, 2016, from 9:00 a.m. to 4:00 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See section VIII, “Public Participation,” for webinar registration information, participant instructions, and information about the capabilities available to webinar participants.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 1E–245, 1000 Independence Avenue SW., Washington, DC 20585.

Instructions: Any comments submitted must identify the NOPR for Energy Conservation Standards for Portable Air Conditioners, and provide docket number EERE–2013–BT–STD–0033 and/or regulatory information number (RIN) number 1904–AD02. Comments may be submitted using any of the following methods:

2. Email: PortableAC2013STD0033@ee.doe.gov. Include the docket number and/or RIN in the subject line of the message. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section VIII of this document (“Public Participation”).

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to Office of Energy Efficiency and Renewable Energy through the methods listed above and by email to Chad_S_Whiteman@omb.eop.gov.

EPCA requires the Attorney General to provide DOE a written determination of whether the proposed standard is likely to lessen competition. The U.S. Department of Justice Antitrust Division invites input from market participants and other interested persons with views on the likely competitive impact of the proposed standard. Interested persons may contact the Division at energy.standards@usdoj.gov before July 13, 2016. Please indicate in the “Subject” line of your email the title and Docket Number of this rulemaking notice.

Docket: The docket, which includes Federal Register notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials, is available for review at www.regulations.gov. All documents in the docket are listed in the www.regulations.gov index. However, some documents listed in the index may not be publicly available, such as those containing information that is exempt from public disclosure.

A link to the docket Web page can be found at: https://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/79. This Web page will contain a link to the docket for this proposed rulemaking on the www.regulations.gov site. The www.regulations.gov Web page contains simple instructions on how to access all documents, including public comments, in the docket. See section VIII, “Public Participation,” for further information on how to submit comments through www.regulations.gov.

FOR FURTHER INFORMATION CONTACT:


For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586–2945 or by email: Brenda.Edwards@ee.doe.gov.

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I. Synopsis of the Proposed Rule

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA or the Act), Public Law 94–163 (42 U.S.C. 6291–6309, as codified), established the Energy Conservation Program for Consumer Products Other Than Automobiles. In addition to specifying a list of covered residential products and commercial equipment, EPCA contains provisions that enable the Secretary of Energy to classify additional types of consumer products as covered products. (42 U.S.C. 6292(a)(20)) In a final determination of coverage published in the Federal Register on April 18, 2016 (the “April 18, 2016 final coverage determination”), DOE classified portable ACs and dual-duct portable ACs as covered consumer products under EPCA. 81 FR 22514.

Pursuant to EPCA, any new or amended energy conservation standard must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A)) Furthermore, the new or amended standard must result in a significant conservation of energy. (42 U.S.C. 6295(o)(3)(B))

In accordance with these and other statutory provisions discussed in this proposed rule, DOE proposes new energy conservation standards for portable ACs. The proposed standards, which correspond to trial standard level (TSL) 2 (described in section V.A), are minimum allowable combined energy efficiency ratio (CEER) standards, which are expressed in British thermal units (Btu) per watt-hour (Wh), are shown in Table I.1. These proposed standards, if adopted, would apply to all single-duct portable ACs and dual-duct portable ACs that are manufactured in, or imported into, the United States starting on the date five years after the publication of the final rule for this rulemaking.1

1 For editorial reasons, upon codification in the U.S. Code, Part B was redesignated Part A.

2 All references to EPCA in this document refer to the statute as amended through the Energy Efficiency Improvement Act of 2015, Public Law 114–11 (Apr. 30, 2015).

3 For more information regarding portable ACs for which DOE is not proposing energy conservation standards in this NOPR, see section IV.A.1 and section IV.A.2 of this notice.

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Table I.1 Proposed Energy Conservation Standards for Portable Air Conditioners

<table>
<thead>
<tr>
<th>Portable Air Conditioner Product Class</th>
<th>Minimum CEER (Btu/Wh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-duct and dual-duct portable air conditioners</td>
<td>$1.14 \times \frac{SACC}{(2.7447 \times SACC^{0.6829})}$</td>
</tr>
</tbody>
</table>

Seasonally Adjusted Cooling Capacity (SACC) in Btu/h determined in accordance with Appendix CC.

A. Benefits and Costs to Consumers

Table I.2 presents DOE’s evaluation of the economic impacts of the proposed standards on consumers of portable ACs, as measured by the average life-cycle cost (LCC) savings and the payback period (PBP). The average LCC savings are positive and the PBP is less than the average lifetime for portable ACs, which is approximately 10 years (see section IV.F.6).

### Table I.2—Impacts of Proposed Energy Conservation Standards on Consumers of Portable Air Conditioners

<table>
<thead>
<tr>
<th>Consumer type</th>
<th>Average LCC savings (2014$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>144</td>
<td>2.2</td>
</tr>
<tr>
<td>Commercial</td>
<td>292</td>
<td>1.2</td>
</tr>
<tr>
<td>All</td>
<td>162</td>
<td>2.1</td>
</tr>
</tbody>
</table>

DOE’s analysis of the impacts of the proposed standards on consumers is described in section IV.F of this NOPR.

B. Impact on Manufacturers

The industry net present value (INPV) is the sum of the discounted cash flows to the industry from the base year through the end of the analysis period (2016 to 2050). Using a real discount rate of 6.60 percent, DOE estimates that the INPV for manufacturers of portable ACs is $725.5 million. Under the proposed standards, DOE expects that manufacturers may lose up to 30.6 percent of their INPV, which is approximately $221.7 million over the 35 years of the analysis period. DOE also recognizes there may be additional compliance burden for those manufacturers of portable ACs that also produce other appliances which are currently regulated by DOE. DOE has identified existing or pending Federal energy conservation standards for other appliance categories with compliance dates that will take effect 3 years before or after the anticipated compliance year in the absence of standards (see section IV.F.9). The simple PBP, which is designed to compare specific efficiency levels, is measured relative to the baseline model (see section IV.C.1.a).

2021 compliance date of the portable AC rule. This cumulative regulatory burden is described in more detail in section V.B.2.e of this notice. However, based on DOE’s interviews with the manufacturers of portable ACs, DOE does not expect significant impacts on domestic manufacturing capacity or loss of employment for the industry as a whole to result from the proposed standards for portable ACs.

DOE’s analysis of the impacts of the proposed standards on manufacturers is described in section IV.J of this proposed rule.

C. National Benefits and Costs

DOE’s analyses indicate that the proposed energy conservation standards for portable ACs would save a significant amount of energy. Relative to the case without new standards, the lifetime energy savings for portable ACs purchased in the 30-year period that begins in the anticipated year of compliance with the new standards (2021–2050) amount to 0.53 quadrillion Btu (quads). This represents a savings of 8.6 percent relative to the energy use of these products in the case without new standards (referred to as the “no-new-standards case”).

The cumulative net present value (NPV) of total consumer costs and savings of the proposed standards for portable ACs ranges from $2.15 billion (at a 7-percent discount rate) to $5.20 billion (at a 3-percent discount rate). This NPV expresses the estimated total value of future operating-cost savings minus the estimated increased product costs for portable ACs purchased in 2021-2050.

In addition, the proposed standards for portable ACs are projected to yield significant environmental benefits. DOE estimates that the proposed standards would result in cumulative emission reductions (over the same period as for energy savings) of 37.7 million metric tons (Mt) of carbon dioxide (CO₂), 20.2 thousand tons of sulfur dioxide (SO₂), 69.6 thousand tons of nitrogen oxides (NOₓ), 165.3 thousand tons of methane (CH₄), 0.4 thousand tons of nitrous oxide (N₂O), and 0.07 tons of mercury (Hg). The cumulative reduction in CO₂ standards. For more information on the FFC metric, see section IV.H.2.

4 The average LCC savings are measured relative to the efficiency distribution in the no-new-standards case, which depicts the market in the absence of standards (see section IV.F.9). The simple PBP, which is designed to compare specific efficiency levels, is measured relative to the baseline model (see section IV.C.1a).

5 The real discount rate is the weighted-average cost of capital derived from industry financials and modified based on feedback received during confidential interviews with manufacturers.

6 All monetary values in this section are expressed in 2014 dollars; discounted values are discounted to 2015 unless explicitly stated otherwise.

7 A quad is equal to 10¹⁵ British thermal units (Btu). The quantity refers to full-fuel-cycle (FFC) energy savings. FFC energy savings includes the energy consumed in extracting, processing, and transporting primary fuels (i.e., coal, natural gas, petroleum fuels), and, thus, presents a more complete picture of the impacts of energy efficiency improvements.

8 A metric ton is equivalent to 1.1 short tons. Results for emissions other than CO₂ are presented in short tons.

9 DOE calculated emissions reduction relative to the no-new-standards case, which reflects key assumptions in the Annual Energy Outlook 2015 (AEO 2015) Reference case. AEO 2015 generally represents current legislation environmental regulations for which implementing regulations were available as of October 31, 2014.
emissions through 2030 amounts to 6.7 Mt, which is the equivalent to the emissions resulting from the annual electricity use of over 900,000 homes.

The value of the CO₂ reductions is calculated using a range of values per metric ton of CO₂ (otherwise known as the “Social Cost of Carbon”, or SCC) developed by a Federal interagency working group. The derivation of the SCC values is discussed in section IV.L.

Using discount rates appropriate for each set of SCC values (see Table I.3), DOE estimates the present monetary value of the CO₂ emissions reduction (not including CO₂ equivalent emissions of other gases with global warming potential) is between $0.3 billion and $3.6 billion, with a value of $1.2 billion using the central SCC case represented by $40.0/t in 2015. DOE also estimates the present monetary value of the NOₓ emissions reduction to be $0.05 billion at a 7-percent discount rate and $0.12 billion at a 3-percent discount rate.

Table I.3 summarizes the national economic benefits and costs expected to result from the proposed standards for portable ACs. Table I.4 presents the impacts to manufacturers and consumers expected to result from these proposed standards.

**Table I.3—Summary of National Economic Benefits and Costs of Proposed Energy Conservation Standards for Portable Air Conditioners (TSL 2) 2021–2050**

<table>
<thead>
<tr>
<th>Category</th>
<th>Present values (billion 2014$)</th>
<th>Discount rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>2.4</td>
<td>7</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($12.2/t case)**</td>
<td>0.3</td>
<td>5</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($40.0/t case)**</td>
<td>1.2</td>
<td>3</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($62.3/t case)**</td>
<td>1.9</td>
<td>2.5</td>
</tr>
<tr>
<td>CO₂ Reduction Monetized Value ($117/t case)**</td>
<td>3.6</td>
<td>3</td>
</tr>
<tr>
<td>NOₓ Reduction Monetized Value †</td>
<td>0.05</td>
<td>7</td>
</tr>
<tr>
<td>Total Benefits ††</td>
<td>3.6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Incremental Installed Costs</td>
<td>0.27</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>0.51</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Net Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Including CO₂ and NOₓ Reduction Monetized Value ††</td>
<td>3.4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>6.5</td>
<td>3</td>
</tr>
</tbody>
</table>

* This table presents the costs and benefits associated with portable ACs shipped in 2021–2050. These results include benefits to consumers which accrue after 2050 from the products purchased in 2021–2050. The costs account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule.

** The CO₂ values represent global monetized values of the SCC in 2014$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5%, 3%, and 2.5% discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3% discount rate. The SCC time series incorporate an escalation factor. The value for NOₓ is the average of high and low values found in the literature.

† The $/ton values used for NOₓ are described in section IV.L.

†† Total Benefits for both the 3% and 7% cases are derived using the series corresponding to average SCC with 3-percent discount rate ($40.0/t case).

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11 DOE is currently investigating valuation of avoided SO₂ and Hg emissions.
The benefits and costs of the proposed standards, for portable ACs sold in 2021–2050, can also be expressed in terms of annualized values. The monetary values for the total annualized net benefits are the sum of: (1) The national economic value of the benefits in reduced operating costs, minus (2) the increase in product purchase prices and installation costs, plus (3) the value of the benefits of CO\textsubscript{2} and NO\textsubscript{X} emission reductions, all annualized.\(^\text{12}\)

Although the values of operating cost savings and CO\textsubscript{2} emission reductions are both important, two issues are relevant. First, the national operating savings are domestic U.S. consumer monetary savings that occur as a result of market transactions, whereas the value of CO\textsubscript{2} reductions is based on a global value. Second, the assessments of operating cost savings and CO\textsubscript{2} savings are performed with different methods that use different time frames for analysis. The national operating cost savings is measured for the lifetime of portable ACs shipped in 2021–2050. Because CO\textsubscript{2} emissions have a very long residence time in the atmosphere,\(^\text{13}\) the SCC values in future years reflect future CO\textsubscript{2}-emissions impacts that continue beyond 2100.

**TABLE I.5—ANNUALIZED BENEFITS AND COSTS OF PROPOSED ENERGY CONSERVATION STANDARDS FOR PORTABLE AIR CONDITIONERS (TSL 2) 2021–2050**

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Million 2014$/year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>7%</td>
</tr>
<tr>
<td>CO\textsubscript{2} Reduction Value ($12.2/t case)**</td>
<td>3%</td>
</tr>
<tr>
<td>CO\textsubscript{2} Reduction Value ($40.0/t case)**</td>
<td>3%</td>
</tr>
<tr>
<td>CO\textsubscript{2} Reduction Value ($62.3/t case)**</td>
<td>2.5%</td>
</tr>
<tr>
<td>CO\textsubscript{2} Reduction Value ($117/t case)**</td>
<td>3%</td>
</tr>
<tr>
<td>NO\textsubscript{X} Reduction Monetized Value†</td>
<td>7%</td>
</tr>
<tr>
<td>Total Benefits ††</td>
<td>3%</td>
</tr>
<tr>
<td>7% plus CO\textsubscript{2} range</td>
<td>300 to 492</td>
</tr>
<tr>
<td>7%</td>
<td>348</td>
</tr>
<tr>
<td>3% plus CO\textsubscript{2} range</td>
<td>366 to 558</td>
</tr>
<tr>
<td>3%</td>
<td>415</td>
</tr>
</tbody>
</table>

| **Costs** |                     |
| Consumer Incremental Installed Product Costs | 3% | 30 | 31 | 27. |
| 3% | 30 | 31 | 27. |

| **Net Benefits** |                     |
| Total †† | 7% plus CO\textsubscript{2} range | 269 to 462 | 106 to 196 | 304 to 510. |
| 7% | 318 | 139 | 357. |
| 1% plus CO\textsubscript{2} range | 396 to 526 | 135 to 225 | 385 to 590. |

\(^{12}\) To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2015, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year’s shipments in the year in which the shipments occur (e.g., 2020 or 2030), and then discounted the present value from each year to 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO\textsubscript{2} reductions, for which DOE used case-specific discount rates, as shown in Table I.3. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year that yields the same present value.  

\(^{13}\) The atmospheric lifetime of CO\textsubscript{2} is estimated of the order of 30–95 years. Jacobson, MZ (2005).
DOE’s analysis of the national impacts of the proposed standards is described in sections IV.H, IV.K and IV.L of this proposed rule.

D. Conclusion

DOE has tentatively concluded that the proposed standards represent the maximum improvement in energy efficiency that is technologically feasible and economically justified, and would result in the significant conservation of energy. DOE further notes that products achieving these standard efficiency levels are already commercially available for the products covered by this proposal. Based on the analyses described above, DOE has tentatively concluded that the benefits of the proposed standards to the Nation (energy savings, positive NPV of consumer benefits, consumer LCC savings, and emission reductions) would outweigh the burdens (loss of INPV for manufacturers and LCC increases for some consumers).

DOE also considered more stringent energy efficiency levels as potential standards, and is still considering them in this rulemaking. However, DOE has tentatively concluded that the potential burdens of the more-stringent energy efficiency levels would outweigh the projected benefits. Based on consideration of the public comments DOE receives in response to this proposed rule and related information collected and analyzed during the course of this rulemaking effort, DOE may adopt energy efficiency levels presented in this proposed rule that are either higher or lower than the proposed standards, or some combination of level(s) that incorporate the proposed standards in part.

II. Introduction

The following section briefly discusses the statutory authority underlying this proposed rule, as well as some of the relevant historical background related to the establishment of standards for portable ACs.

A. Authority


EPCA, as amended, grants DOE authority to prescribe an energy conservation standard for any type (or class) of covered products of a type specified in 42 U.S.C. 6292(a)(19) if the requirements of 42 U.S.C. 6295(o) and (p) are met and the Secretary determines that—

1. the average per household energy use within the United States by products of such type (or class) exceeded 150 kilowatt-hours (kWh) (or its Btu equivalent) for any 12-month period ending before such determination;
2. the aggregate household energy use within the United States by products of such type (or class) exceeded 4,200,000,000 kWh (or its Btu equivalent) for any such 12-month period;
3. substantial improvement in the energy efficiency of products of such type (or class) is technologically feasible; and
4. the application of a labeling rule under 42 U.S.C. 6294 to such type (or class) is not likely to be sufficient to induce manufacturers to produce, and consumers and other persons to purchase, covered products of such type (or class) which achieve the maximum energy efficiency which is technologically feasible and economically justified. (42 U.S.C. 6295(l)(1))

DOE has determined that portable ACs meet the four criteria outlined in 42 U.S.C. 6295(l)(1) to prescribe energy conservation standards for new covered products. Specifically, DOE has determined that the average per household energy use within the United States by portable ACs exceeded 150 kWh for a 12-month period ending before such determination (see chapter 7 of the NOPR technical support document (TSD)). DOE has also determined that the aggregate household energy use within the United States by portable ACs exceeded 4,200,000,000 kWh (or its Btu equivalent) for such a 12-month period (see chapter 10 of the NOPR TSD). Further, DOE has determined that substantial improvement in the energy efficiency of portable ACs is technologically feasible (see section IV.C of this NOPR and chapter 5 of the NOPR TSD), and has determined that the application of a labeling rule under 42 U.S.C. 6294 to portable ACs is not likely to be sufficient to induce manufacturers to
produce, and consumers and other persons to purchase, portable ACs that achieve the maximum energy efficiency which is technologically feasible and economically justified (see chapter 17 of the NOPR TSD).

Pursuant to EPCA, DOE’s energy conservation program consists essentially of four parts: (1) Testing, (2) labeling, (3) the establishment of Federal energy conservation standards, and (4) certification and enforcement procedures. The Federal Trade Commission (FTC) is primarily responsible for labeling, and DOE implements the remainder of the program. Subject to certain criteria and conditions, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of each covered product. (42 U.S.C. 6295(o)(3)(A) and (r)) Manufacturers of covered products must use the prescribed DOE test procedure as the basis for certifying to DOE that their products comply with the applicable energy conservation standard adopted under EPCA and when making representations to the public regarding the energy use or efficiency of those products. (42 U.S.C. 6293(c) and 6295(s)) Similarly, DOE must use these test procedures to determine whether the products comply with standards adopted pursuant to EPCA. (42 U.S.C. 6295(s)) The DOE test procedure for portable ACs was recently established in a Final Rule issued on April 26, 2016 (the “April 26, 2016 TP Final Rule”), and appears at title 10 of the Code of Federal Regulations (CFR) part 430, subpart B, appendix CC (appendix CC).

DOE must follow specific statutory criteria for prescribing new or amended standards for covered products, including portable ACs. Any new or amended standard for a covered product must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A)) Furthermore, DOE may not adopt any standard that would not result in the significant conservation of energy. (42 U.S.C. 6295(o)(3)) Moreover, DOE may not prescribe a standard: (1) For certain products, including portable ACs, if no test procedure has been established for the product, or (2) if DOE determines by rule that the proposed standard is not technologically feasible or economically justified. (42 U.S.C. 6295(o)(3)(A)–(B))

In deciding whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. (42 U.S.C. 6295(o)(2)(B)(i)) DOE must make this determination after receiving comments on the proposed standard, and by considering, to the greatest extent practicable, the following seven statutory factors:

1. The economic impact of the standard on manufacturers and consumers of the products subject to the standard;
2. The savings in operating costs throughout the estimated average life of the covered products in the type (or class) compared to any increase in the price, initial charges, or maintenance expenses for the covered products that are likely to result from the standard;
3. The total projected amount of energy (or as applicable, water) savings likely to result directly from the standard;
4. Any lessening of the utility or the performance of the covered products likely to result from the standard;
5. The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;
6. The need for national energy and water conservation; and
7. Other factors the Secretary of Energy (Secretary) considers relevant. (42 U.S.C. 6295(o)(2)(B)(i)(I)–(VII))

Further, EPCA, as codified, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the energy savings during the first year that the consumer will receive as a result of the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii))

EPCA states that the Secretary may not prescribe an amended or new standard if interested persons have established by a preponderance of the evidence that the standard is likely to result in the unavailability in the United States of any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States. (42 U.S.C. 6295(o)(4))

Additionally, EPCA specifies requirements when promulgating an energy conservation standard for a covered product that has two or more subcategories. DOE must specify a different standard level for a type or class of product that has the same function or intended use, if DOE determines or intended use, if DOE determines that a performance-related feature which other products within such type (or class) do not have and such feature justifies a higher or lower standard. (42 U.S.C. 6294(q)(1)) In determining whether a performance-related feature justifies a different standard for a group of products, DOE must consider such factors as the utility to the consumer of the feature and other factors DOE deems appropriate. Id. Any rule prescribing such a standard must include an explanation of the basis on which such higher or lower level was established. (42 U.S.C. 6295(q)(2))

Federal energy conservation requirements generally supersede State laws or regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6297(a)–(c)) DOE may, however, grant waivers of Federal preemption for particular State laws or regulations, in accordance with the procedures and other provisions set forth under 42 U.S.C. 6297(d).

Finally, pursuant to the amendments contained in the Energy Independence and Security Act of 2007 (EISA 2007), Public Law 110–140, any final rule for new or amended energy conservation standards promulgated after July 1, 2010, is required to address standby mode and off mode energy use. (42 U.S.C. 6295ggg(3)) Specifically, when DOE adopts a standard for a covered product after that date, it must, if justified by the criteria for adoption of standards under EPCA (42 U.S.C. 6295(d)), incorporate the standby mode and off mode energy use into a single standard, or, if that is not feasible, adopt a separate standard for such energy use for that product. (42 U.S.C. 6295ggg(3)–(B)) DOE’s recently established test procedures for portable ACs address standby mode and off mode energy use. In this rulemaking, DOE proposes to adopt a single energy conservation standard that addresses active, off, and standby modes.

B. Background

DOE has not previously conducted an energy conservation standards rulemaking for portable ACs. Consequently, there are currently no Federal energy conservation standards for portable ACs.

Under the authority established in EPCA, DOE published the April 18, 2016 final coverage determination that portable ACs qualify as a covered product because classifying products of such type as a covered product is necessary or appropriate to carry out the purposes of EPCA, and the average U.S. household energy use for portable ACs
is likely to exceed 100 kWh per year. 81 FR 22514 (April 18, 2016).

DOE published a notice of data availability (NODA) on May 9, 2014 (the May 2014 NODA), reviewing various industry test procedures for portable ACs and presenting results from its investigative testing. DOE requested comment and additional information regarding the results and potential methodologies. 79 FR 26639. Comments received on the May 2014 NODA helped DOE identify issues related to the provisional analyses, as well as informed the analysis for the test procedure rulemaking.

On February 27, 2015, DOE published an energy conservation standards notice of public meeting and notice of availability of preliminary TSD for portable ACs (February 2015 Preliminary Analysis). In the preliminary analysis, DOE conducted in-depth technical analyses in the following areas: (1) Engineering; (2) markups to determine product price; (3) energy use and cost of consumer ACs for the next 40 years; (4) payback period; and (5) national impacts. The preliminary TSD that presented the methodology and results of each of these analyses is available at http://www.regulations.gov/#!documentDetail;D=EERE-2013-BT-STD-0033-0007.

DOE also conducted, and included in the preliminary TSD, several other analyses that supported the major analyses or were expanded upon for this NOPR. These analyses included: (1) The market and technology assessment; (2) the screening analysis, which contributes to the engineering analysis; and (3) the shipments analysis, which contributes to the LCC and PBP analysis and national impact analysis (NIA). In addition to these analyses, DOE began preliminary work on the manufacturer impact analysis and identified the methods to be used for the consumer subgroup analysis, the emissions analysis, the employment impact analysis, the regulatory impact analysis, and the utility impact analysis. 80 FR 10628 (Feb. 27, 2015).

DOE held a public meeting on March 18, 2015, to discuss the analyses and solicit comments from interested parties regarding the preliminary analysis it conducted. The meeting covered the analytical framework, models, and tools that DOE uses to evaluate potential standards; the results of preliminary analyses performed by DOE for this product; the potential energy conservation standard levels derived from these analyses that DOE could consider for this product; and any other issues relevant to the development of energy conservation standards for portable ACs.

Interested parties discussed at the public meeting and followed up with written comments regarding the following major issues: Rulemaking schedule with respect to the test procedure availability and timing; covered product configurations; product classes and impacts on consumer utility; technology options; efficiency levels (ELs); incremental costs; sources of data; and cumulative regulatory burden.

Comments received in response to the February 2015 Preliminary Analysis helped DOE identify and resolve issues related to the preliminary analysis. After reviewing these comments, DOE gathered additional information, held further discussions with manufacturers, and completed and revised the various analyses described in the preliminary analysis. The results of these analyses are presented in this NOPR.

III. General Discussion

DOE developed this proposed rule after considering verbal and written comments, data, and information from interested parties that represent a variety of interests. The following discussion addresses issues raised by these commenters.

A. Product Classes and Scope of Coverage

When evaluating and establishing energy conservation standards, DOE divides covered products into product classes by the type of energy used or by capacity or other performance-related features that justify differing standards. In making a determination whether a performance-related feature justifies a different standard, DOE must consider such factors as the utility to the consumer of the feature and other factors DOE determines are appropriate. 42 U.S.C. 6295(q).

In the February 2015 Preliminary Analysis, DOE did not consider energy conservation standards for portable ACs other than single-duct or dual-duct portable ACs, as the test procedure proposed at that time did not include provisions for testing other portable ACs, and DOE did not separate portable ACs into multiple product classes following a determination that there is no unique utility associated with single-duct or dual-duct portable ACs.

In this NOPR, DOE maintains the proposals from the February 2015 Preliminary Analysis to consider standards for one product class for all single-duct and dual-duct portable ACs. Comments received relating to the scope of coverage and product classes are discussed in section IV.A of this proposed rule.

B. Test Procedure

DOE initiated a test procedure rulemaking by publishing the May 2014 NODA to request feedback on potential testing options. In the May 2014 NODA, DOE discussed various industry test procedures and presented results from its investigative testing that evaluated existing methodologies and alternate approaches adapted from these methodologies that could be incorporated in a future DOE test procedure, should DOE determine that portable ACs are covered products. 79 FR 26639 (May 9, 2014).

On February 25, 2015, DOE published a NOPR (hereinafter referred to as “February 2015 TP NOPR”) in which it proposed to establish test procedures for single-duct and dual-duct portable ACs. The proposed test procedures were based upon industry methods to determine energy consumption in active modes, off-cycle mode, standby modes, and off mode, with certain modifications to ensure the test procedures are repeatable and representative. 80 FR 10211.

On November 27, 2015, DOE published a supplemental notice of proposed rulemaking (SNOPR) (hereinafter referred to as “November 2015 TP SNOPR”), in which it proposed revisions to the test procedure proposed in the February 2015 TP NOPR, to improve repeatability, reduce test burden, and ensure the test procedure is representative of typical consumer usage. 80 FR 74020.

On April 26 2016, DOE issued the April 2016 TP Final Rule that established appendix CC. DOE based its analysis in this proposed rule on capacities and CEERs determined according to the appendix CC test procedure.

DOE received comments expressing concern about the timing of the portable AC test procedure rulemaking in relation to the February 2015 Preliminary Analysis and this NOPR. The Association of Home Appliance Manufacturers (AHAM) expressed concern that the preliminary analysis was developed in the absence of a final test procedure, which it expected would be published around the same time as this NOPR. AHAM stated that if a test procedure is not finalized in a sufficient period of time before a proposed rule is issued, interested parties will not have sufficient opportunity to evaluate design options and proposed standard levels.
AHAM commented that the industry is unable to determine and provide market representative performance data to DOE without a final test procedure, and that DOE’s test and teardown sample of units may not be suitable to inform appropriate baseline and higher efficiency levels representative of the majority of products currently on the market. However, AHAM believes that once the final test procedure is published, manufacturers would be more willing to test their products and determine performance according to the DOE portable AC test procedure.

Therefore, AHAM urged DOE to release the final test procedure before it continues with its standards analysis and manufacturer interviews. (AHAM, Public Meeting Transcript, No. 11 at pp. 9–11, 21–22, 57; AHAM, No. 16 at pp. 1–4)17 18 De’ Longhi Appliances s.r.l. (De’ Longhi) agreed that energy conservation standards can only be developed when a test procedure has been completely defined. (De’ Longhi, Public Meeting Transcript, No. 11 at p. 5; De’ Longhi, No. 12 at p. 1)

As described previously in this section, on April 26, 2016 DOE issued the April 26, 2016 TP Final Rule to establish the portable AC test procedure in appendix CC. April 2016 issued TP Final Rule. Manufacturers may use appendix CC to test their products and evaluate the standard levels proposed in this NOPR.

Other comments that DOE received from interested parties related to specific provisions of the portable AC test procedure were addressed in that rulemaking. For further information, please see the docket for test procedures for portable ACs: http://www.regulations.gov/#docketDetail?D=EERE-2014-BT-TP-0014. In this NOPR analysis, all presented product capacities and efficiencies are consistent with the appendix CC test procedures.

C. Technological Feasibility

1. General

In each energy conservation standards rulemaking, DOE conducts a screening analysis based on information gathered on all current technology options and prototype designs that could improve the efficiency of the products or equipment that are the subject of the rulemaking. As the first step in such an analysis, DOE develops a list of technology options for consideration in consultation with manufacturers, design engineers, and other interested parties. DOE then determines which of those means for improving efficiency are technologically feasible. DOE considers technologies incorporated in commercially available products, or in working prototypes to be technologically feasible. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(i).

After DOE has determined that particular technology options are technologically feasible, it further evaluates each technology option in light of the following additional screening criteria: (1) Practicability to manufacture, install, and service; (2) adverse impacts on product utility or availability; and (3) adverse impacts on health or safety. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(ii–iv). Additionally, it is DOE policy not to include in its analysis any proprietary technology that is a unique means for improving efficiency are technologically feasible. DOE considers technologies incorporated in commercially available products, or in working prototypes to be technologically feasible. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(i).

2. Maximum Technologically Feasible Levels

When DOE proposes to adopt a new or amended standard for a type or class of covered product, it must determine the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible for such product. (42 U.S.C. 6295(o)(3)(B)) Although the term “significant” is not defined in the

17 A notation in the form “AHAM, Public Meeting Transcript, No. 11 at pp. 9–11, 21–22, 57” identifies an oral comment that DOE received on March 18, 2015 during the Preliminary Analysis public meeting, was recorded in the public meeting transcript in the docket for this test procedure rulemaking (Docket No. EERE–2013–BT–STD–0033). This particular notation refers to a comment (1) made by the Association of Home Appliance Manufacturers (AHAM) during the public meeting; (2) recorded in document number 11, which is the public meeting transcript that is filed in the docket of this test procedure rulemaking; and (3) which appears on pages 9 through 11, 21 through 22, and 57 of document number 11.

18 A notation in the form “AHAM, No. 16 at pp. 1–4” identifies a written comment: (1) Made by AHAM; (2) recorded in document number 16 that is filed in the docket of the standards rulemaking (Docket No. EERE–2013–BT–TP–0033) and available for review at www.regulations.gov; and (3) which appears on pages 1 through 4 of document number 16.
Act, the U.S. Court of Appeals for the District of Columbia Circuit, in Natural Resources Defense Council v. Herrington, 768 F.2d 1355, 1373 (D.C. Cir. 1985), opined that Congress intended “significant” energy savings in the context of EPCA to be savings that were not “genuinely trivial.” The energy savings for all of the TSLs considered in this rulemaking, including the proposed standards (presented in section V.B.3.a), are nontrivial, and, therefore, DOE considers them “significant” within the meaning of section 325 of EPCA.

E. Economic Justification

1. Specific Criteria

As noted above, EPCA provides seven factors to be evaluated in determining whether a potential energy conservation standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(I)-(VII)) The following sections discuss how DOE has addressed each of those seven factors in this rulemaking.

a. Economic Impact on Manufacturers and Consumers

In determining the impacts of potential new standards on manufacturers, DOE conducts a manufacturer impact analysis (MIA), as discussed in section IV.J. DOE first uses an annual cash-flow approach to determine the quantitative impacts. This step includes both a short-term assessment—based on the cost and capital requirements during the period between when a regulation is issued and when entities must comply with the regulation—and a long-term assessment over a 30-year period. The industry-wide impacts analyzed include: (1) INPV, which values the industry on the basis of expected future cash flows; (2) cash flows by year; (3) changes in revenue and income; and (4) other measures of impact, as appropriate. Second, DOE analyzes and reports the impacts on different types of manufacturers, including impacts on small manufacturers. Third, DOE considers the impact of standards on domestic manufacturer employment and manufacturing capacity, as well as the potential for standards to result in plant closures and loss of capital investment. Finally, DOE takes into account cumulative impacts of various DOE regulations and other regulatory requirements on manufacturers.

For individual consumers, measures of economic impact include the changes in LCC and PBP associated with new or amended standards. These measures are discussed further in the following section. For consumers in the aggregate, DOE also calculates the national net present value of the consumer costs and benefits expected to result from particular standards. DOE also evaluates the impacts of potential standards on identifiable subgroups of consumers that may be affected disproportionately by a standard.

b. Savings in Operating Costs Compared To Increase in Price

EPCA requires DOE to consider the savings in operating costs throughout the estimated life of the covered product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the covered product that are likely to result from a standard. (42 U.S.C. 6295(o)(2)(B)(i)(III)) DOE conducts this comparison in its LCC and PBP analysis.

The LCC is the sum of the purchase price of a product (including its installation) and the operating expense (including energy, maintenance, and repair expenditures) discounted over the lifetime of the product. The LCC analysis requires a variety of inputs, such as product prices, product energy consumption, energy prices, maintenance and repair costs, product lifetime, and discount rates appropriate for consumers. To account for uncertainty and variability in specific inputs, such as product lifetime and discount rate, DOE uses a distribution of values, with probabilities attached to each value.

The PBP is the estimated amount of time (in years) it takes consumers to recover the increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost due to a more-stringent standard by the change in annual operating cost for the year that standards are assumed to take effect.

For its LCC and PBP analysis, DOE assumes that consumers will purchase the covered products in the first year of compliance with new standards. The LCC savings for the efficiency levels are calculated relative to the case that reflects projected market trends in the absence of standards. DOE’s LCC and PBP analysis is discussed in further detail in section IV.F.

c. Energy Savings

Although significant conservation of energy is a separate statutory requirement for adopting an energy conservation standard, EPCA requires DOE in determining the economic justification of a standard, to consider the total projected energy savings that are expected to result directly from the standard. (42 U.S.C. 6295(o)(2)(B)(i)(III)) As discussed in section III.D, DOE uses the NIA spreadsheet models to project national energy savings.

d. Lessening of Utility or Performance of Products

In evaluating design options and the impact of potential standard levels, DOE evaluates potential standards that would not lessen the utility or performance of the considered products. (42 U.S.C. 6295(o)(2)(B)(i)(IV)) Based on data available to DOE, the standards proposed in this proposed rule would not reduce the utility or performance of the products under consideration in this rulemaking. For more information on consumer utility and product performance of portable ACs, see section IV.A.2 and section IV.C of this proposed rule.

e. Impact of Any Lessening of Competition

EPCA directs DOE to consider the impact of any lessening of competition, as determined in writing by the Attorney General that is likely to result from a proposed standard. (42 U.S.C. 6295(o)(2)(B)(i)(V)) It also directs the Attorney General to determine the impact, if any, of any lessening of competition likely to result from a proposed standard and to transmit such determination to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. (42 U.S.C. 6295(o)(2)(B)(i)(iii))

To assist the Attorney General in making such determination, DOE will provide the Department of Justice (DOJ) with copies of the NOPR and NOPR TSD for review. DOE will consider DOJ’s comments on the proposed rule in preparing the final rule, and DOE will publish and respond to DOJ’s comments in that document. DOE invites comment from the public regarding the competitive impacts that are likely to result from this proposed rule. In addition, stakeholders may also provide comments separately to DOJ regarding these potential impacts. See the ADDRESSES section for information to send comments to DOJ.

f. Need for National Energy Conservation

DOE also considers the need for national energy conservation in determining whether a new or amended standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(VI)) The energy savings from the proposed standards are likely to provide improvements to the security and reliability of the nation’s
energy system. Reductions in the demand for electricity also may result in reduced costs for maintaining the reliability of the nation’s electricity system. DOE conducts a utility impact analysis to estimate how standards may affect the nation’s needed power generation capacity, as discussed in section IV.M.

The proposed standards also are likely to result in environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases (GHGs) associated with energy production and use. DOE conducts an emissions analysis to estimate how potential standards may affect these emissions, as discussed in section IV.K; the emissions impacts are reported in section V.B.3 of this proposed rule. DOE also estimates the economic value of emissions reductions resulting from the considered TSLS, as discussed in section IV.L.

g. Other Factors

EPCA allows the Secretary of Energy, in determining whether a standard is economically justified, to consider any other factors that the Secretary deems to be relevant. (42 U.S.C. 6295(o)(2)(B)(i)(VII)) To the extent interested parties submit any relevant information regarding economic justification that does not fit into the other categories described above, DOE could consider such information under “other factors.”

2. Rebuttable Presumption

As set forth in 42 U.S.C. 6295(o)(2)(B)(iii), EPCA creates a rebuttable presumption that an energy conservation standard is economically justified if the additional cost to the consumer of a product that meets the standard is less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable DOE test procedure. DOE’s LCC and PBP analyses generate values used to calculate the effects that proposed energy conservation standards would have on the payback period for consumers. These analyses include, but are not limited to, the 3-year payback period contemplated under the rebuttable-preservation test. In addition, DOE routinely conducts an economic analysis that considers the full range of impacts to consumers, manufacturers, the nation, and the environment, as required under 42 U.S.C. 6295(o)(2)(B)(i). The results of this analysis serve as the basis for DOE’s evaluation of the economic justification for a potential standard level (thereby supporting or rebutting the results of any preliminary determination of economic justification). The rebuttable presumption payback calculation is discussed in section IV.F.9 of this proposed rule.

IV. Methodology and Discussion

This section addresses the analyses DOE has performed for this rulemaking with regard to portable ACs. Separate subsections address each component of DOE’s analyses.

DOE used several analytical tools to estimate the impact of the standards proposed in this document. The first tool is a spreadsheet that calculates LCC savings and PBP of potential new energy conservation standards. The national impact analysis uses a second spreadsheet set that provides shipments forecasts and calculates national energy savings and net present value of total consumer costs and savings expected to result from potential standards. DOE uses the third spreadsheet tool, the Government Regulatory Impact Model (GRIM), to assess manufacturer impacts of potential standards. These three spreadsheet tools are available on the DOE Web site for this rulemaking: https://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx#ruleid/76. Additionally, DOE used output from the latest version of Energy Information Administration (EIA)’s Annual Energy Outlook (AEO), a widely known energy forecast for the United States, for the emissions and utility impact analyses.

A. Market and Technology Assessment

DOE develops information in the market and technology assessment that provides an overall picture of the market for the products concerned, including the purpose of the products, the industry structure, manufacturers, market characteristics, and technologies used in the products. This activity includes both quantitative and qualitative assessments, based primarily on publicly available information. The subjects addressed in the market and technology assessment for this rulemaking include: (1) A determination of the scope of the rulemaking and product classes; (2) manufacturers and industry structure; (3) existing efficiency programs; (4) shipments information; (5) market and industry trends; and (6) technologies that could improve the energy efficiency of portable ACs. The key findings of DOE’s market assessment are summarized below. See chapter 3 of the NOPR TSD for further discussion of the market and technology assessment.

1. Definition and Scope of Coverage

DOE conducted the February 2015 Preliminary Analysis based on the portable AC definition proposed in the February 2015 Test Procedure NOPR, which stated that a portable AC is an encased assembly, other than a “packaged terminal air conditioner,” “room air conditioner,” or “dehumidifier,” that is designed as a portable unit to deliver cooled, conditioned air to an enclosed space. A portable AC is powered by single-phase power and may rest on the floor or elevated surface. It includes a source of refrigeration and may include additional means for air circulation and heating. 80 FR 10212, 10215 (Feb. 25, 2015).

In the April 18, 2016 final coverage determination, DOE codified this definition at 10 CFR 430.2, with minor editorial revisions that do not modify the intent or scope of the definition:

A portable encased assembly, other than a “packaged terminal air conditioner,” “room air conditioner,” or “dehumidifier,” that delivers cooled, conditioned air to an enclosed space, and is powered by single-phase electric current. It includes a source of refrigeration and may include additional means for air circulation and heating. 81 FR 22514.

The Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SCGC), Southern California Edison (SCE), and San Diego Gas and Electric Company (SDG&E) (hereinafter the “California IOUs”), AHAM, and De’ Longhi supported the analysis of portable ACs for future energy conservation standards. (California IOUs, No. 15 at p. 1; AHAM, No. 16 at pp. 1–2; De’ Longhi, Public Meeting Transcript, No. 11 at p. 5; De’ Longhi, No. 12 at p. 1)

DENSO expressed concern about defining covered products on the basis of supply power, noting that some commercial/industrial portable ACs are powered by single-phase power. According to DENSO, commercial units may be differentiated from residential ones on the basis of more rugged construction and the tendency to be larger and heavier for a given cooling capacity. (DENSO, No. 13 at pp. 3–4)

DOE notes that the definition for “portable air conditioner” in 10 CFR 430.2 excludes units that could not be normally used as a consumer product. Therefore, a product that requires three-phase power, a requirement that is not appropriate for consumer products, is not covered under the definition of portable AC. Conversely, any product with single-phase power that otherwise meets the definition for a portable AC
would be considered by DOE to be such a covered product regardless of the manufacturer-intended application or installation location. DOE also recognized that certain portable ACs that exhaust condenser air within the conditioned space ("spot coolers") do not provide net cooling to the typical conditioned consumer space. In addition, spot coolers incorporate different design features and a wider variety of installation types and usage patterns than single-duct and dual-duct portable ACs. For these reasons, DOE did not identify a test procedure that would measure representative performance of spot coolers. DOE instead established a test procedure for single-duct and dual-duct portable ACs in its recent rulemaking that established Appendix CC (80 FR 10211, 10213, 10214–10215 (Feb. 25, 2015); April 26, 2016 issued TP Final Rule), and correspondingly is proposing standards only for single-duct and dual-duct portable ACs in this NOPR. DOE welcomes comment on this decision and its rationale for proposing standards for single-duct and dual-duct portable ACs.

2. Product Classes

When evaluating and establishing energy conservation standards, DOE divides covered products into product classes by the type of energy used or by capacity or other performance-related features that justify a different standard. In making a determination whether a performance-related feature justifies a different standard, DOE must consider such factors as the utility of the consumer of the feature and other factors DOE determines are appropriate. (42 U.S.C. 6295(q))

Portable ACs only recently became a covered product when DOE issued the April 18, 2016 final coverage determination, and therefore do not have previous energy conservation standards or product class divisions. 81 FR 22515

a. Preliminary Analysis Proposals

Following an evaluation of the portable AC market in preparation of the February 2015 Preliminary Analysis, DOE determined that there are three types of duct configurations that affect product performance: Single-duct, dual-duct, and spot cooler. DOE noted in the February 2015 Preliminary Analysis that the DOE test procedure proposed in the February 2015 Test Procedure NOPR did not include measures of spot cooler performance, and therefore as discussed previously, DOE did not consider standards for spot coolers. See chapter 3 of the preliminary TSD for more information.

DOE further evaluated if there was any consumer utility associated with the single-duct and dual-duct configurations under consideration. As detailed in chapter 3 of the preliminary TSD, DOE investigated installation locations and noise levels, and found that duct configuration had no impact on either of these key consumer utility variables. Therefore, DOE determined in the February 2015 Preliminary Analysis that a single product class is appropriate for portable ACs.

b. Comments and Responses

Spot Coolers

DENSO supported the exclusion of spot coolers from potential energy conservation standards. It commented that its spot coolers, which may also be operated with optional adapters to configure them as single-duct or dual-duct portable ACs, are typically installed in commercial applications such as a warehouses, auto repair shops, or similar businesses, and are not appropriate for a typical retail commercial establishment or residential application. DENSO believes that these units should therefore be exempt from the rulemaking, particularly due to the low market volume compared to other currently covered products. According to DENSO, annual shipments of spot coolers are approximately 15,000 units, or about 1.6 percent of the DOE-estimated portable AC market. DENSO further commented that there is little differentiation in energy efficiency ratio (EER) across all spot coolers on the market with capacities ranging from 12,000 to 60,000 Btu/hr. (DENSO, No. 13 at pp. 1, 5, 9) DENSO expressed concern regarding the features that DOE proposed to distinguish commercial and industrial portable ACs from residential portable ACs. According to DENSO, it is presumed to be mutually agreed that units powered from a three-phase power source are commercial/industrial units, but there are some units powered by single-phase power which are clearly commercial/industrial products. (DENSO, No. 13 at pp. 3–4)

The California IOUs urged DOE to include spot coolers in the energy conservation standards rulemaking analyses and to adopt active mode test procedures for spot coolers utilizing existing industry test procedures such as ANSI/ASHRAE Standard 128–2011. The California IOUs noted that 321 of the 427 spot cooler models in the California Energy Commission (CEC) Appliance Efficiency Database have cooling capacities below 14,000 Btu/hr and as low as 4,000 Btu/hr. Assuming this distribution is an indicator of widespread market availability of products below 14,000 Btu/hr, the California IOUs urged DOE to adopt test procedures and performance standards for spot coolers. (California IOUs, No. 15 at p. 2)

While the portable AC definition excludes products with a 3-phase power supply, DOE agrees with DENSO that certain spot coolers that operate with a single-phase power supply would meet the portable AC definition. Because spot coolers with a single-phase power supply could be used as a consumer product, DOE is maintaining the approach in the February 2015 Preliminary Analysis in which such spot coolers would be included as covered products. As discussed in section IV.A.1, however, DOE has established a test procedure for single-duct and dual-duct portable ACs at this time and is proposing energy conservation standards only for these portable ACs in this NOPR. DOE further notes that, upon review of the spot cooler entries in the CEC Appliance Efficiency Database, it concludes that a number of listed products would meet DOE’s definitions of single-duct or dual-duct portable ACs.

Single Product Class

The Appliance Standards Awareness Project (ASAP), Alliance to Save Energy (ASE), American Council for an Energy-Efficient Economy (ACEEE), National Consumer Union (CU), and Northwest Energy Efficiency Alliance (NEEA) (hereinafter the "Joint Commenters") and the California IOUs agreed with DOE that there is no unique consumer utility associated with duct configuration and support establishing a single product class for portable ACs. The California IOUs noted that the negative pressure within a room created by a single-duct portable AC can lead to more infiltration air from outside the conditioned space, which can result in lower efficiencies than for dual-duct units. The California IOUs, therefore, asserted that adopting performance standards for a single product class that includes both single-duct and dual-duct portable ACs would incentivize manufacturers to produce higher efficiency units. (ASAP, Public Meeting Transcript, No. 11 at p. 17; Joint Commenters, No. 14 at p. 1; California IOUs, No. 15 at pp. 1–2)

AHAM and De’Longhi commented that duct configuration warrants...
separate product classes. They believe that single-duct portable ACs offer unique consumer utility in terms of smaller size and slimmer profiles, greater portability and versatility, and easier installation. AHAM stated that portability and size are a key issue for consumers, and that consumers indicate to manufacturers that they prefer slimmer designs. According to AHAM, maintaining smaller unit sizes can impact a manufacturer’s ability to improve efficiency because of limitations on air flow, which in turn impact performance. AHAM further commented that if manufacturers are required to improve efficiency while maintaining smaller, more portable units, then noise would increase, thereby impacting consumer utility. AHAM further stated that single- and dual-duct portable ACs may have different applications. For example, dual-duct units are more often used in commercial applications, such as computer server rooms. AHAM suggested that without separate product classes, single-duct portable ACs would likely be eliminated from the market.

DOE reviewed the comments and, with the input from manufacturer interviews and additional research, further analyzed the differences between single-duct and dual-duct portable ACs. DOE recognizes that the additional duct for dual-duct units results in shipping packages that are slightly larger than for single-duct units, with a corresponding impact on shipping costs and consumer portability prior to unpacking. However, the size differences do not significantly impact product availability or consumer utility during operation. Additionally, DOE found that window mounting brackets are typically the same size, regardless of whether they are configured for one or two ducts. And therefore a mounting bracket for two ducts would not reduce consumer utility. Further, DOE estimates from its engineering analysis that a dual-duct portable AC would be less than 5 pounds heavier than a comparable single-duct unit with the same capacity, and with wheels on all units, portability of a dual-duct unit is not reduced when relocating the unit within the home. DOE also determined that many portable AC profiles and chassis sizes are a function of the heat exchanger dimensions rather than the number of ducts. The potential standards that DOE is contemplating would impose no restrictions on what side of the unit a duct should be located, and therefore manufacturers are free to determine the form factor of their portable ACs to suit customer preferences. Noise is a concern for consumers when operating all portable ACs, but DOE did not find a substantive difference in noise levels between the two duct configurations. DOE believes that insulation and case sealing to reduce infiltration air would offset any additional noise associated with the increased fan power of a dual-duct portable AC. DOE received feedback from manufacturers during interviews indicating that their customers are not typically aware of any functional difference between single-duct and dual-duct units, and that consumer preference hinges primarily on the aesthetics of the product, rated cooling capacity, and purchase price. Additionally, DOE is not aware of any significant difference between the typical applications of single-duct and dual-duct portable ACs. Therefore, DOE has found no unique consumer utility associated with the number of ducts for portable ACs that would warrant a division of single-duct and dual-duct units into separate product classes. Furthermore, as described in section IV.C, testing according to the test procedure in appendix CC results in no significant performance differences between single-duct and dual-duct portable ACs. Therefore, due to the lack of consumer utility differences and lack of energy efficiency differentiation, DOE has determined that separate product classes for single-duct and dual-duct portable ACs are not warranted.

The definitions established in the April 26, 2016 TP Final Rule for single- and dual-duct portable ACs describe the various duct configurations based on differences in air flow patterns. DOE further established, in the April 26, 2016 TP Final Rule, that single-duct and dual-duct portable ACs distributed in commerce with multiple duct configuration options must be tested in each applicable configuration and the performance in each tested configuration must comply with any applicable energy conservation standards. April 26, 2016 issued TP Final Rule. This NOPR analysis was performed in accordance with appendix CC established by the issued April 2016 TP Final Rule.

c. NOPR Proposals

In summary, DOE proposes to maintain the February 2015 Preliminary Analysis approach, in which only single-duct and dual-duct portable ACs would be considered, and would be classified as one product class, for the purposes of energy conservation standards. For portable ACs that can be optionally configured in both single- and dual-duct configurations, DOE further proposes that operation with both duct configurations be certified under any future portable AC energy conservation standards.

3. Technology Options

In the preliminary market analysis and technology assessment, DOE identified 16 technology options in four different categories that would be expected to improve the efficiency of portable ACs, as shown in the following Table IV.1:

<table>
<thead>
<tr>
<th>TABLE IV.1—TECHNOLOGY OPTIONS FOR PORTABLE AIR CONDITIONERS—PRELIMINARY ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Heat-Transfer Surface Area:</td>
</tr>
<tr>
<td>1. Increased frontal coil area.</td>
</tr>
<tr>
<td>2. Increased depth of coil (add tube rows).</td>
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<tr>
<td>3. Increased fin density.</td>
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<tr>
<td>4. Add subcooler to condenser coil.</td>
</tr>
<tr>
<td>Increased Heat-Transfer Coefficients:</td>
</tr>
<tr>
<td>5. Improved fin design.</td>
</tr>
<tr>
<td>6. Improved tube design.</td>
</tr>
<tr>
<td>7. Spray condensate onto condenser coil.</td>
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<tr>
<td>Component Improvements:</td>
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<tr>
<td>9. Improved compressor efficiency.</td>
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<tr>
<td>10. Improved blower/fan efficiency.</td>
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<tr>
<td>11. Low-standby-power electronic controls.</td>
</tr>
<tr>
<td>12. Ducting insulation.</td>
</tr>
<tr>
<td>13. Improved duct connections.</td>
</tr>
<tr>
<td>Part-Load Technology Improvements:</td>
</tr>
<tr>
<td>15. Variable-speed compressors.</td>
</tr>
<tr>
<td>16. Thermostatic or electronic expansion valves.</td>
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</tbody>
</table>

AHAM commented that the Significant New Alternatives Policy (SNAP) final rule, published by the Environmental Protection Agency (EPA) on April 10, 2015, approved the use of propane (R–290) and R–32 for portable ACs. 80 FR 19454. AHAM asserted that these refrigerants would result in capacity and efficiency improvements, compared with the common refrigerants currently in use. AHAM suggested that DOE consult with manufacturers regarding their plans to use these refrigerants in future designs and determine the associated performance improvements. AHAM, No. 16 at p. 9 DOE observes that propane refrigerant is widely used for portable ACs manufactured and sold internationally, and that R–32 is being introduced in some markets outside the United States for portable and room ACs, albeit primarily because it has a low global warming potential (GWP). Based on this product availability and discussions with manufacturers, DOE agrees that
DOE also notes that a potential means of improving portable AC efficiencies, air flow optimization, was not included as a technology option in the February 2015 Preliminary Analysis. DOE did, however, consider optimized air flow in the engineering analysis in both the February 2015 Preliminary Analysis and has addressed this technology further in this NOPR. Accordingly, DOE has included it as a technology option in the technology assessment. Therefore, in addition to the technology options considered in the preliminary analysis, DOE additionally considered alternative refrigerants and air flow optimization when conducting this NOPR analysis, as shown in Table IV.2.

Table IV.2—Technology Options for Portable Air Conditioners—NOPR Analysis

<table>
<thead>
<tr>
<th>Technology Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increased frontal coil area</td>
</tr>
<tr>
<td>2. Increased depth of coil (add tube rows)</td>
</tr>
<tr>
<td>3. Increased fin density</td>
</tr>
<tr>
<td>4. Add subcooler to condenser coil</td>
</tr>
<tr>
<td>5. Improved fin design</td>
</tr>
<tr>
<td>6. Improved tube design</td>
</tr>
<tr>
<td>7. Spray condensate onto condenser coil</td>
</tr>
<tr>
<td>8. Microchannel heat exchangers</td>
</tr>
<tr>
<td>9. Improved compressor efficiency</td>
</tr>
<tr>
<td>10. Improved blower/fan efficiency</td>
</tr>
<tr>
<td>11. Low-standby-power electronic controls</td>
</tr>
<tr>
<td>12. Ducting insulation</td>
</tr>
<tr>
<td>13. Improved duct connections</td>
</tr>
<tr>
<td>14. Case insulation</td>
</tr>
<tr>
<td>15. Variable-speed compressors</td>
</tr>
<tr>
<td>16. Thermostatic or electronic expansion valves</td>
</tr>
<tr>
<td>17. Propane and R–32</td>
</tr>
<tr>
<td>18. Air flow Optimization</td>
</tr>
</tbody>
</table>

After identifying all potential technology options for improving the efficiency of portable ACs, DOE performed a screening analysis (see section IV.B of this proposed rule and chapter 4 of the NOPR TSD) to determine which technologies merited further consideration in the engineering analysis.

B. Screening Analysis

DOE uses the following four screening criteria to determine which technology options are suitable for further consideration in an energy conservation standards rulemaking:

1. Technological feasibility.

   Technologies that are not incorporated in commercial products or in working prototypes will not be considered further.

2. Practicability to manufacture, install, and service.

   If it is determined that mass production and reliable installation and servicing of a technology in commercial products could not be achieved on the scale necessary to serve the relevant market at the time of the projected compliance date of the standard, then that technology will not be considered further.

3. Impacts on product utility or product availability.

   If it is determined that a technology would have significant adverse impact on the utility of the product to significant subgroups of consumers or would result in the unavailability of any covered product type with performance characteristics (including reliability), features, sizes, capacities, and volumes that are generally available in the United States at the time, it will not be considered further.

4. Adverse impacts on health or safety.

   If it is determined that a technology would have significant adverse impacts on health or safety, it will not be considered further.

(10 CFR part 430, subpart C, appendix A, 5(b))

In sum, if DOE determines that a technology, or a combination of technologies, fails to meet one or more of the above four criteria, it will be excluded from further consideration in the engineering analysis. The reasons for eliminating any technology are discussed below.

The subsequent sections include comments from interested parties pertinent to the screening criteria, DOE’s evaluation of each technology option against the screening analysis criteria, and whether DOE determined that a technology option should be excluded (“screened out”) based on the screening criteria.

1. Screened-Out Technologies

   Ducting Insulation

   In the February 2015 Preliminary Analysis, DOE identified duct insulation as a potential means for improving portable AC efficiency, as less heat from the condenser air would be transferred through the duct wall and would instead be transferred out of the conditioned space. During interviews, manufacturers indicated that they have considered insulated ducts to improve performance but have not identified any insulated ducts that are collapsible for packaging and shipping. No portable AC in DOE’s teardown sample for the engineering analysis included insulated ducts. In the absence of a collapsible design, such an insulated duct would need to be packaged for shipment in its fully expanded configuration, significantly increasing the package size. Because of this significantly increased packaging size for non-collapsible insulated ducts and unavailability on the market of collapsible designs, DOE determined that insulated ducts are not technologically feasible, are impractical to manufacture and install, and would impact consumer utility. Therefore, DOE screened out insulated ducts as a design option for portable ACs in the February 2015 Preliminary Analysis. DOE received no feedback on this tentative proposal and maintains this approach for the NOPR analysis.

Alternative Refrigerants

The SNAP rule limits the maximum allowable charge of alternative refrigerants in portable ACs to 300 grams for R–290 (propane), 2.45 kilograms for R–32, and 330 grams for R–441A. The SNAP rule limits were consistent with those included for portable room ACs in Underwriter’s Laboratories (UL) Standard 484, “Standard for Room Air Conditioners” (UL 484), eighth edition. However, the most recent version of UL 484, the ninth edition, reduces the allowable amount of flammable refrigerant (e.g., propane and R–441A) to less than 40 percent of the SNAP limits. Manufacturers informed DOE that the new UL charge limits for portable ACs are not feasible for providing the necessary minimum cooling capacity, and therefore it would not be feasible to manufacture a portable AC with an alternative refrigerant for the U.S. market while complying with the UL safety standard. DOE reviewed propane refrigerant charges for portable ACs available internationally and found a typical charge of 300 grams. DOE also investigated other similar AC products that utilize propane refrigerant and found that the minimum charge for capacities in a range expected for portable ACs was 265 grams, which is still above the maximum allowable propane charge for portable ACs in the ninth edition of UL 484. Therefore, although portable ACs are currently available internationally with amounts of flammable refrigerant acceptable under the SNAP rule, manufacturers are unable to sell those products in the U.S.
Increased Heat-Transfer Surface Area

AHAM and DENSO stated that larger heat exchangers, fans with higher air flow rates, and larger ducting components would increase efficiency, but size and noise would limit the extent those design options could be implemented. They further commented that increasing the frontal coil area, depth of the coil, and fin density would increase the cost sizes, due to larger heat exchangers or fans. In addition, AHAM and DENSO believe that increased fin density may cause reliability and safety concerns because it would result in increased dust and dirt accumulation. (AHAM, No. 16 at p. 8; DENSO, No. 13 at p. 6) DOE agrees that increased heat exchanger areas may require an increase in enclosure size. For that reason, the heat exchanger changes that DOE considered in the February 2015 Preliminary Analysis were limited to a 10-percent increase at the highest efficiency level. In this NOPR analysis, DOE considered further heat exchanger area increases, up to 20 percent of the existing heat exchanger area for the units in DOE’s test sample, discussed in section IV.C.1.b and in chapter 5 of the NOPR TSD. DOE observed in its test sample that heat exchanger areas varied significantly from unit to unit. Additionally, DOE observed a significant range in heat exchanger area among the units in its test sample. The range in observed heat exchanger area suggests that manufacturers have more latitude to increase heat exchanger areas for a substantial number of units than DOE had estimated in the February 2015 Preliminary Analysis. Based on the range of observed heat exchanger areas in its test sample and the strong correlation between heat exchanger area and cooling capacity, DOE determined that a 20-percent increase in area is a more appropriate limit. See chapter 5 of the NOPR TSD for additional details regarding the 20-percent threshold. DOE considered all subsequent component and chassis size increases related to this heat exchanger size increase. Accordingly, while there may be some increase in product sizes with increased heat exchanger area, DOE did not eliminate this technology option from further consideration because consumer utility could be maintained. DOE did not screen out increased fin density due to reliability concerns from dirt or dust accumulation because these issues could potentially be prevented with better inlet air filtering. However, increased fin density is not a design option that DOE assumed manufacturers would pursue to reach higher efficiencies because, as discussed further in chapter 5 of the NOPR TSD, other design options are more effective in achieving efficiency improvements.

Improved Blower/Fan Efficiency

DENSO expressed concern that improved blower motor efficiency would require an electronically commutated motor (ECM), which, according to DENSO, would add substantial cost and control complexity. (DENSO, Public Meeting Transcript, No. 11 at pp. 34–35; DENSO, No. 13 at p. 7) As discussed in chapter 3 of the NOPR TSD, DOE considered blower motor efficiency improvements associated with substituting an ECM, with efficiencies as high as 80 percent, for the typical permanent split capacitor (PSC) motor with efficiencies ranging from 60 to 65 percent. Although an ECM is more expensive than a PSC motor, this is not a criteria for screening out a particular technology option. Therefore, DOE has retained this technology option in its NOPR analysis. DOE has factored the incremental cost associated with the ECM and its controls into the engineering analysis (see section IV.C of this NOPR and chapter 5 of the NOPR TSD).

Variable-Speed Compressors

AHAM observed that any efficiency improvement due to variable-speed compressors would not be captured under the proposed test procedure because portable ACs would be tested at the maximum fan speed and therefore commented that DOE should not consider variable-speed compressors in its analysis for proposed standards. (AHAM, No. 16 at p. 8) DOE notes that variable-speed compressors offer the highest efficiencies available in the capacity range appropriate for portable ACs whether operating at single or variable speeds. Because this technology option meets the screening criteria set forth in 10 CFR part 430, subpart C, appendix A, 4, DOE has retained it for consideration in the engineering analysis for this NOPR.

3. Remaining Technologies

Through a review of each technology, DOE tentatively concludes that all of the identified technologies, with the exception of insulated ducts and alternative refrigerants, as discussed in section IV.B.1, met all four screening criteria to be examined further as design options in DOE’s NOPR analysis, as shown in Table IV.3. For additional details, see chapter 4 of the NOPR TSD.

TABLE IV.3—REMAINING DESIGN OPTIONS FOR PORTABLE AIR CONDITIONERS

| Increased Heat-Transfer Surface Area: |
| 1. Increased frontal coil area. |
| 2. Increased depth of coil (add tube rows). |
| 3. Increased fin density. |
| 4. Add subcooler to condenser coil. |
| Increased Heat-Transfer Coefficients: |
| 5. Improved fin design. |
| 6. Improved tube design. |
| 7. Spray condensate onto condenser coil. |

Component Improvements:
TABLE IV.3—REMAINING DESIGN OPTIONS FOR PORTABLE AIR CONDITIONERS—Continued

- 10. Improved blower/fan efficiency.
- 12. Improved duct connections.

Part-Load Technology Improvements:
- 15. Thermostatic or electronic expansion valves.
 Reduced infiltration Air:

C. Engineering Analysis

In the engineering analysis DOE establishes the relationship between the manufacturer production cost (MPC) and improved portable AC efficiency. This relationship serves as the basis for cost-benefit calculations for individual consumers, manufacturers, and the Nation. DOE typically structures the engineering analysis using one of three approaches: (1) Design option; (2) efficiency level; or (3) reverse engineering (or cost assessment). The design-option approach involves adding the estimated cost and associated efficiency of various efficiency-improving design changes to the baseline to model different levels of efficiency. The efficiency-level approach uses estimates of costs and efficiencies of products available on the market at distinct efficiency levels to develop the cost-efficiency relationship. The reverse-engineering approach involves testing products for efficiency and determining cost from a detailed bill of materials (BOM) derived from reverse engineering representative products.

In the preliminary engineering analysis, DOE used a hybrid approach of the design-option and reverse-engineering approaches described above. This approach involved physically disassembling commercially available products, reviewing publicly available cost information, and modeling equipment cost. From this information, DOE estimated the MPCs for a range of products available at that time on the market. DOE then considered the steps manufacturers would likely take to improve product efficiencies. In its analysis, DOE determined that manufacturers would likely rely on certain design options to reach higher efficiencies. From this information, DOE estimated the cost and efficiency impacts of incorporating specific design options at each efficiency level.

For this NOPR, DOE followed the same general approach as for the preliminary engineering analysis, but modified the analysis based on the newly established appendix CC test procedure, comments from interested parties, and the most current available information. This section provides more detail on how DOE selected the efficiency levels used for its analysis and developed the MPC at each level. Chapter 5 of the NOPR TSD contains further description of the engineering analysis.

1. Efficiency Levels

a. Baseline Efficiency Levels

A baseline unit typically just meets current energy conservation standards and provides basic consumer utility. Because there are no existing energy conservation standards for portable ACs, DOE observed whether units tested with lower efficiencies incorporated similar design options or features, and considered these features when defining a baseline configuration. To determine energy savings that will result from a new energy conservation standard, DOE compares energy use at each of the higher efficiency levels to the energy consumption of the baseline unit. Similarly, to determine the changes in price to the consumer that will result from an energy conservation standard, DOE compares the price of a unit at each higher efficiency level to the price of a unit at the baseline.

DOE noted in chapter 5 of the preliminary analysis TSD that the airflow pattern through a portable AC has a significant effect on measured cooling capacity and energy efficiency ratio. For units that draw air from the conditioned space over the condenser and then exhaust it outside of the conditioned space, an equivalent amount of infiltration air must enter the conditioned space due to the net negative pressure differential that is created between the conditioned and unconditioned spaces. Because the test conditions proposed in the February 2015 Test Procedure NOPR (the current proposal at the time of the preliminary analysis) specify that infiltration air would be at a higher temperature than the conditioned air, the infiltration air offsets a portion of the cooling provided by the portable AC. The greater the amount of infiltration air, the lower the overall cooling capacity will be. Based on the measured condenser exhaust air flow rates and the corresponding calculated magnitudes of the infiltration air heating effect, DOE determined in the February 2015 Preliminary Analysis that single-duct units (i.e., units that draw all of the condenser intake air from within the conditioned space and exhaust it to the unconditioned space via a duct) would represent the baseline efficiency level for portable ACs.

After the February 2015 Preliminary Analysis, DOE established the portable AC test procedure in appendix CC, which incorporates two cooling mode test conditions and weighting factors to determine overall performance. Because the additional test condition is at a lower outdoor temperature and has a significantly larger weighting factor than the original test condition, the impact of infiltration air on overall performance is greatly reduced. Therefore, the approach of considering a baseline unit to be a single-duct portable AC with typical system components is no longer valid for this rulemaking. DOE instead pursued an alternate analysis approach in this NOPR, which utilized the results from all units in DOE’s test sample, including 24 portable ACs (one test sample was tested in both a single-duct and dual-duct configuration) covering a range of configurations, product capacities, and efficiency as tested according the DOE test procedure in appendix CC.

DOE developed a relationship between cooling mode power and seasonally adjusted cooling capacity (SACC), which is a measure of cooling capacity that weights the performance at each of the cooling mode test conditions in appendix CC, using a best fit curve. DOE then used this relationship to develop an equation to determine nominal CEER for a given SACC based on the results of DOE’s testing according to the test procedure in appendix CC, shown below.

\[
\text{Nominal CEER} = \frac{\text{SACC}}{(2.7447 \times \text{SACC}^{0.6829})}
\]

DOE assessed the relative efficiency of each unit in the test sample by comparing the measured CEER from testing to the nominal CEER as defined by the equation above (DOE will refer to this ratio of actual CEER to nominal...
CEER as the performance ratio (PR) for a given unit). DOE proposes to define baseline performance as a PR of 0.72, which is based on the minimum PR observed for units in the test sample. Additional details on the baseline units may be found in chapter 5 of the NOPR. DOE invites comment on the baseline performance level proposal and the determination based on the minimum PR observed in DOE’s test sample.

b. Higher Energy Efficiency Levels

Preliminary Analysis Proposal

For the February 2015 Preliminary Analysis, DOE developed incremental efficiency levels based on the design options manufacturers would likely use to improve portable AC efficiency. Recognizing that the presence of infiltration air has a large impact on unit performance, DOE expected that when improving efficiencies beyond the baseline, manufacturers would first make improvements to incrementally reduce the amount of infiltration air. While certain technology options identified in Table IV.1 of this NOPR and discussed in chapter 3 of the preliminary analysis TSD meet all the screening criteria and may produce energy savings in certain real-world situations, DOE did not further consider them in the preliminary analysis because specific efficiency gains were either not clearly defined or the DOE test procedure would not capture those potential improvements. Thus, DOE did not expect manufacturers to rely on these features to meet higher efficiency levels. Such technology options included: (1) Adding a subcooler or condenser coil, (2) increasing the heat transfer coefficients, (3) improving duct connections, (4) improving case insulation, and (5) implementing part-load technologies. Further discussion of these technology options and the reasons why DOE tentatively concluded that they would be unlikely to be implemented to improve efficiency can be found in chapter 5 of the preliminary analysis TSD.

The first efficiency level beyond the baseline in the February 2015 Preliminary Analysis, Efficiency Level 1 (EL 1), represented the first improvement a manufacturer would make for a single-duct unit. This efficiency level assumed manufacturers would convert single-duct units to a dual-duct configuration, although the units would still have infiltration air flow equal to half of the total air flow over the condenser (i.e., half of the condenser air flow is from the conditioned space, and the other half is from the unconditioned space via the condenser inlet duct). This amount of infiltration air flow was approximately equal to the average value observed for the dual-duct units in DOE’s test sample.

Efficiency Level 2 (EL 2) in the February 2015 Preliminary Analysis represented dual-duct units with infiltration air flow reduced to 25 percent of the total condenser air flow. Efficiency Level 3 (EL 3) represented a dual-duct unit that is perfectly sealed with no infiltration air, such that 100 percent of the condenser air flow is drawn from outside the conditioned space. DOE noted in the preliminary analysis that it did not observe units with zero infiltration air in its test sample, but included such a configuration in the analysis because DOE tentatively concluded it is technically feasible and would result in a significant increase in efficiency.

Efficiency Level 4 (EL 4) in the February 2015 Preliminary Analysis corresponded to the max-tech level as determined by DOE. This level combined the ideal dual-duct air flow configuration described for EL 3 with additional design option changes to improve efficiency. Although DOE did not observe any portable ACs in its sample with these additional design options, DOE regarded each of them as options that manufacturers would likely consider incorporating to achieve the highest possible efficiencies. At EL 4, units would incorporate more efficient compressors and blower motors, larger heat exchangers, and low-standby-power electronic controls. Similar to EL 3, DOE’s test sample did not include any portable ACs incorporating all of the design options associated with EL 4, but DOE estimated the potential performance improvements for products incorporating these design changes based on available information and modeling described in chapter 5 of the preliminary analysis TSD.

From this data, DOE derived relationships between cooling capacity22 and cooling mode energy efficiency ratio, EERcm, at each of the efficiency levels. DOE presented the following general relationship in the February 2015 Preliminary Analysis, based on observed trends at each efficiency level:

\[
EER_{cm} = \frac{\text{Cooling Capacity}}{(A \times \text{Cooling Capacity} + B)}
\]

Table IV.4 below provides the coefficients A, in Wh/Btu, and B, in watts (W), for each analyzed efficiency level in the February 2015 Preliminary Analysis that would be used to determine EERcm in Btu/Wh. Figure IV–1 plots each efficiency level curve for cooling capacities from 0 to 10,000 Btu/h. DOE noted that the cooling capacity and EERcm were based upon how products would be expected to perform under the test procedure proposed in the February 2015 TP/NOPR, and thus the range of values for each metric in DOE’s analysis did not necessarily correspond to manufacturer-advertised ratings or data in the CEC Appliance Efficiency Database.

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22 DOE notes that the cooling capacity analyzed in the preliminary analysis is equal to the adjusted cooling capacity (ACC) as proposed in the February 2015 Test Procedure NOPR.
Comments and Responses

1. Efficiency Versus Capacity Relationship

In response to the February 2015 Preliminary Analysis, DOE received multiple comments regarding its proposal to define efficiency levels as a function of cooling capacity.

The Joint Commenters, California IOUs, and AHAM agreed that DOE’s test data showed a relationship between capacity and efficiency for units in the test sample when measured by the proposed DOE test procedure. However, these commenters did not agree that there is an inherent relationship between capacity and efficiency for all portable ACs, variously citing the following reasons:

(1) Both metrics are sensitive to infiltration air and other heating effects;
(2) other product features or configurations may contribute to efficiency, including improved air flow and compressor or blower motor efficiency;
(3) the observed trend between efficiency and capacity is specific only to DOE’s test sample and is not representative of the market in its entirety; and
(4) this trend is atypical of heating and cooling equipment, which typically show a general decline in efficiency with increased cooling capacity.

The California IOUs stated that portable ACs with lower capacities may be capable of increasing EER via design options that do not affect capacity, so that lower standard levels for these units may fail to capture technologically feasible energy savings. The Joint Commenters noted that while the current standards for dehumidifiers (refrigeration-based products similar to portable ACs with comparable capacities) are higher for units with higher capacities, the difference in required efficiency for small-capacity and large-capacity dehumidifiers is significantly less than the range of efficiencies within each proposed portable AC efficiency level curve. According to the Joint Commenters, the availability of dehumidifiers with capacities as low as 25 pints/day that meet the current ENERGY STAR specification (which specifies the same energy factor for all dehumidifiers with capacities up to 75 pints/day) also suggests that there may not be an inherent relationship between capacity and efficiency for portable ACs. Accordingly, the Joint Commenters and the California IOUs urged DOE to consider portable AC standards that would require the same minimum efficiency level for all units. DENSO recommended that DOE estimate the trends in room AC efficiency as a function of capacity because the engineering analysis in the February 2015 Preliminary Analysis was based in part on room ACs. (ASAP, Public Meeting Transcript, No. 11 at pp. 17-18, 40; Joint Commenters, No. 14 at pp. 2-4; California IOUs, No. 15 at pp. 2-3; AHAM, No. 16 at p. 5; DENSO, No. 13 at p. 5)

DOE’s test sample included 24 portable ACs covering a range of configurations and product capacities. Although this sample represents only a portion of the portable AC market, DOE observed little substantive variation in the design and construction of these units and expects that all units available on the market use similar technologies. Therefore, DOE expects that the results from this test sample likely reflect typical performance of the overall portable AC market.

Although DOE expected that manufacturers would rely on air flow optimization to reach higher efficiency levels as part of the February 2015 Preliminary Analysis, DOE agrees that certain design options would increase efficiency at a relatively constant capacity. However, for the preliminary analysis, DOE estimated that air flow optimization was the most cost-effective pathway for manufacturers to move to higher efficiency levels. In this NOPR analysis, DOE based its analysis on the portable AC test procedure in appendix CC. Under this test procedure, air flow optimization does not have a significant impact on efficiency. Accordingly, DOE has revised its engineering analysis to reflect primarily a component-based approach to achieving higher efficiencies.

DOE notes that although room ACs have similar components as portable ACs, the efficiency versus capacity trends for room ACs do not necessarily apply to portable ACs due to the
significant chassis size constraints on room ACs. Therefore, each product must be analyzed separately due to unique consumer use, installation, and component configuration. Similarly, although dehumidifiers and portable ACs utilize many of the same internal components, the configuration of these components significantly impacts the resulting functionality and delivered benefit to consumers. Dehumidifiers are arranged in a configuration to optimize latent heat transfer or removal of condensate, while portable ACs are configured to provide sensible cooling, with latent heat removal as a secondary function. Further, the two products are tested with different test procedures that produce incomparable capacity and efficiency metrics. Therefore, although they share many components, dehumidifier trends in efficiency versus capacity do not necessarily inherently apply to portable ACs.

DENSO commented that efficiency levels should be based on inherent product characteristics and not on performance related to installation. DENSO stated this would be consistent with packaged central ACs, which are typically installed as ducted units but are tested unducted, with the rating based on unit performance with a modest allowance for ducting. (DENSO, No. 13 at p. 4) The efficiency levels developed for this NOPR analysis are based on testing in accordance with the DOE test procedure for portable ACs in appendix CC. The DOE test procedure, which incorporates industry standards, establishes a repeatable test setup and method to determine representative and repeatable measure of portable AC performance that is comparable among single-duct and dual-duct configurations. DOE further notes that packaged central ACs differ from portable ACs in that the duct exhausting the hot condenser air is outside the conditioned space, and it is only the cooler evaporator ducts that interface with the conditioned space. Therefore, the impacts of duct heat transfer to the conditioned space would be significantly different for portable ACs than for packaged central ACs, and the general approach for testing packaged central ACs is not applicable to portable ACs.

2. Efficiency Level Equations

Several commenters expressed concern about the distillation of DOE’s data points into discrete efficiency levels. The Joint Commenters stated that modeled EER<sub>cm</sub> values do not all fall along the efficiency level curves. For example, they commented that units in DOE’s sample with cooling capacities at EL 4 ranging from about 3,500 to 9,500 Btu/h achieve modeled EER<sub>cm</sub> values as high as approximately 7 Btu/Wh, but, the EL 4 curve does not exceed 6.5 Btu/Wh for cooling capacities up to 10,000 Btu/h. The Joint Commenters asserted, therefore, that it is inappropriate to use average values in determining the efficiency levels, particularly the max-tech EL 4. (ASAP, Public Meeting Transcript, No. 11 at pp. 48–49; Joint Commenters, No. 14 at pp. 4–5) DENSO suggested that the R-squared value for the curve fits may be low, and therefore the equations may not represent the data accurately. (DENSO, Public Meeting Transcript, No. 11 at pp. 43–45)

DOE notes that because these units are currently no energy conservation standards for portable ACs, the limited data that are available are not necessarily measured on a consistent basis. DOE therefore conducted testing and modeling to characterize the performance of portable ACs on the market. For the February 2015 Preliminary Analysis, DOE’s modeling of air flow optimization resulted in a range of product efficiencies. To minimize potential impacts of outliers or error in the modeling, DOE used best-fit curves to characterize the efficiency versus capacity trends for each corresponding design option. For the NOPR analysis, DOE determined efficiency levels based on the range of observed and modeled performance according to appendix CC for units in its test sample. The baseline efficiency level represents the lowest observed efficiency and the max-tech efficiency level represents the highest modeled efficiency. Accordingly, the efficiency levels for the NOPR analysis span the range of observed and modeled data and no longer rely on best-fit trends for a set of data points at a given efficiency level.

The Joint Commenters encouraged DOE to ensure that units with negative cooling capacities would not be able to meet potential efficiency standards. They noted that at negative cooling capacities, the EER<sub>cm</sub> values for all efficiency levels above the baseline are lower than the baseline values, and the units tested by DOE that have negative cooling capacities have EER<sub>cm</sub> values that are higher than all of the efficiency levels evaluated. (ASAP, Public Meeting Transcript, No. 11 at pp. 46–48; Joint Commenters, No. 14 at pp. 7–8) The data presented in the February 2015 Preliminary Analysis showed the potential for negative efficiencies and cooling capacities. However, the preliminary analysis was based on the test procedure proposed in the February 2015 TP NOPR. The newly established test procedure in appendix CC incorporates a lower-temperature outdoor condition and weights performance under this condition heavily in the final performance calculations. As a result, DOE does not expect any negative SACC or CEER results, and is not proposing standards that would account for these negative values.

3. Design Approaches for Higher Efficiency Levels

AHAM and De’ Longhi expressed concern about basing higher efficiency levels on reduced or zero infiltration air, pointing out that DOE did not find any portable ACs with zero infiltration air. De’ Longhi suggested that completely sealed dual-duct portable ACs should not be considered as an efficiency level because these units are hypothetical and only included in the analysis based on their technical feasibility. (AHAM, No. 16 at p. 4; De’ Longhi, No. 12 at pp. 2–3, 5–6; De’ Longhi, Public Meeting Transcript, No. 11 at pp. 6, 38, 42)

As discussed previously in section IV.C.1.a of this NOPR, DOE revised its analysis for this NOPR, including updated efficiency levels based on the newly established test procedure in appendix CC. Under testing according to appendix CC, air flow optimization that would lead to zero infiltration air is no longer associated with improved efficiencies.

The Joint Commenters stated that, in general, portable ACs with higher cooling capacities typically employ higher-capacity compressors, larger heat exchangers, and more powerful fans than units with lower cooling capacities. The Joint Commenters objected to DOE not including these design options at higher capacities. They also noted that units in DOE’s test sample may include various design features that impact efficiency, some of which may not be captured in DOE’s modeling of design options. For example, they referred to DOE’s finding in the February 2015 TP NOPR that uninsulated ducts and leaks in duct connections contributed 460 to 1,300 Btu/h in its test sample, which correlated to percentages of uninsulated cooling capacity ranging from 18 to 199 percent, 80 FR 10212, 10227 (Feb. 25, 2015). The Joint Commenters asserted that these data suggest that some current
designs are more effective than others at minimizing duct heat transfer and leakage. (ASAP, Public Meeting Transcript, No. 11 at pp. 48–49; Joint Commenters, No. 14 at pp. 4–5)

The California IOUs recommended that DOE consider product component improvements, including increased heat exchanger area, improved compressor efficiency, improved blower motor efficiency, and low-standby-power electronic controls for all efficiency levels and not just the max-tech EL 4. Because DOE’s analysis did not show a significant increase in capacity when moving from EL 3 to EL 4, the California IOUs believe that these component improvements may increase EER\(_{\text{com}}\) without affecting product capacity. By not limiting these component improvements to the max-tech level, DOE would ensure that these technology options would be considered for potential standards. (California IOUs, No. 15 at p. 3) In the February 2015 Preliminary Analysis, DOE expected that when improving efficiency levels beyond the single-duct baseline, manufacturers would first make improvements to incrementally reduce the amount of infiltration air. Those changes would likely be made prior to component changes, such as more efficient compressors or blower motors or larger heat exchangers, due to their lower cost and significant improvement in capacity and efficiency. Although DOE no longer considered duct configuration and air flow optimization in the development of efficiency levels, DOE maintained the component improvement approach for this NOPR analysis, wherein increasing heat exchanger area, compressor efficiency, and blower motor efficiency all result in improved portable AC efficiencies. The estimated MPCs associated with these changes at each efficiency level are discussed in section IV.C.2 of this proposed rule. DOE also notes that, depending upon their current product designs, manufacturers may choose to achieve higher efficiencies using combinations of component improvements that may vary from the expected component improvements for the units in DOE’s test sample.

The Joint Commenters questioned DOE’s approach to use an industry average for the max-tech efficiency level (EL 4). ASAP and AHAM were concerned about DOE’s use of modeling to determine the max-tech efficiency level, which is higher than the efficiencies observed in the limited test sample. (Joint Commenters, No. 14 at pp. 4–5; ASAP, Public Meeting Transcript, No. 11 at pp. 49–50; AHAM, No. 16 at p. 3) Although DOE used an average-performance approach to define each efficiency level in the February 2015 Preliminary Analysis, DOE has revised its efficiency level construction in this NOPR. DOE based the NOPR analysis efficiency levels on the performance of units in its test sample. The baseline level is established by the least efficient unit in the test sample. EL 2 corresponds to the maximum available efficiency that can be achieved across a range of capacities, EL 3 represents an incremental improvement above EL 2 and is the single most efficient unit in DOE’s test sample, and EL 4, the max-tech level, is a theoretical level representing the maximum modeled efficiency after applying additional component improvements to EL 3. EL 1 represents an intermediate gap-fill level within the range of tested efficiencies.

De’ Longhi commented that increased heat exchanger sizes at EL 4 may significantly impact portability, in terms of both larger product dimensions and heavier weight. (De’ Longhi, No. 12 at p. 3) DOE limited its preliminary analysis to a 10-percent increase in heat exchanger size, the maximum heat exchanger size increase that it deemed acceptable without impacting consumer utility. However, for this NOPR analysis, DOE has increased the maximum heat exchanger size increases to 20 percent. As described in chapter 5 of the NOPR TSD, DOE observed in its test sample that heat exchanger areas varied significantly from unit to unit. DOE determined the relationship between SACC and heat exchanger area, and observed that the heat exchangers areas for units in the test sample ranged from approximately 20 percent below to 20 percent above the average trend. The range in observed heat exchanger areas suggests that manufacturers have an opportunity to increase heat exchanger areas beyond what DOE had estimated for the February 2015 Preliminary Analysis. Based on the range of observed heat exchanger areas in its test sample and the strong correlation between heat exchanger area and cooling capacity, DOE determined that a 20-percent increase in heat exchanger area is a more appropriate limit. DOE does not expect this increase in heat exchanger size, and the resulting increase in case size, to impact product portability, in part because all single-duct and dual-duct portable ACs that DOE identified incorporate wheels. DOE is not aware of any significant changes in a consumer’s ability to move, install, or store the product if the case dimensions were to change to accommodate a 20-percent larger heat exchanger.

The Joint Commenters encouraged DOE to consider room AC efficiencies in evaluating efficiency levels for portable ACs. They noted that the current CEER standards for room ACs are 1.7 to 2.3 times higher than the max-tech EER\(_{\text{cm}}\) values at EL 4 that DOE proposed for portable ACs for a similar range of cooling capacities, and that the difference in calculating CEER and EER\(_{\text{cm}}\) are not substantive. Similarly, the Joint Commenters noted that the CEER values for room ACs in the ENERGY STAR 4.0 specification are 1.9 to 2.5 times higher than the max-tech portable AC EER\(_{\text{cm}}\) values. They noted that the primary difference between room ACs and portable ACs is that room ACs do not use ducts. However, they do not believe that this difference fully explains the gap in performance between the two types of cooling equipment. The Joint Commenters also noted that the difference between the two products may be due to DOE’s use of average values in determining each efficiency level. Therefore, they encourage DOE to consider the efficiency levels of room ACs in evaluating the achievable efficiency of portable ACs and to investigate whether the achievable efficiency levels of portable ACs may be higher than the EL 4 in the preliminary analysis. (Joint Commenters, No. 14 at pp. 5–6) De’ Longhi stated that data from room ACs are not relevant for this analysis. (De’ Longhi, No. 12 at p. 3)

Although room ACs and portable ACs incorporate similar components, the DOE room AC test procedure (10 CFR part 430, subpart B, appendix F) differs substantively from that in appendix CC for portable ACs. Notably, portable ACs are tested under two different outdoor conditions while room ACs only use a single condition. Additionally, the impacts of infiltration air and duct heat transfer affect portable AC cooling capacity and CEER, but are not applicable to room ACs. Therefore, the two product types would not necessarily be able to achieve the same efficiency for a given cooling capacity. Each product must be independently to determine appropriate efficiency levels for potential standards based on the design options and their subsequent impacts on capacity and efficiency as determined by the relevant test procedures.

The Joint Commenters and California IOUs encouraged DOE to consider additional component efficiency improvements beyond those considered at EL 4. The Joint Commenters further stated that additional heat exchanger increases would be feasible, and that DOE failed to incorporate
microchannel heat exchangers (found to increase coefficient of performance (COP) by 6 to 10 percent, as discussed in chapter 3 of the preliminary analysis TSD) and permanent magnet motors in the preliminary engineering analysis. These commenters also noted that the design options incorporated in the 2011 final rule for room ACS, including increased heat transfer surface area, microchannel heat exchangers, improved compressor and fan motor efficiency, and standby power reductions, resulted in a 24 to 33 percent increase in CEER relative to the baseline. The Joint Commenters note that for portable ACS, the max-tech EL 4 represents an increase in EER\textsubscript{cm} of only about 10 percent over the EER\textsubscript{cm} at EL 3. They believe that because portable ACSs are not currently subject to energy conservation standards, greater improvements in efficiency, similar to those from the 2011 room AC final rule, would be expected from component efficiency improvements. (Joint Commenters, No. 14 at pp. 6–7; California IOUs, No. 15 at p. 3)

DOE noted in the February 2015 Preliminary Analysis that manufacturers do not currently implement microchannel designs in existing heat exchangers, and there is limited data on the potential efficiency improvements for portable ACSs. DOE therefore did not consider that design option in the preliminary engineering analysis. DOE emphasizes that efficiency and capacity gains associated with specific design options for other related products do not necessarily translate to portable ACS due to variations in installation and typical consumer usage that are reflected in their respective test procedures. DOE incorporated the other mentioned design options, improved compressor and fan motor efficiency and standby power reductions, in its preliminary analysis at EL 4.

NOPR Proposal

For the NOPR analysis, DOE updated the efficiency levels to reflect performance based on the newly established DOE test procedure for portable ACS in appendix CC, which was modified from the test procedure proposal that was the basis of the February 2015 Preliminary Analysis. Appendix CC includes a second cooling mode outdoor test condition for dual-duct units and infiltration air condition for both single-duct and dual-duct units, modifying the CEER metric for both single-duct and dual-duct units to address performance at the two cooling mode test conditions. Appendix CC also no longer includes provisions from the test procedure NOPR for measuring case heat transfer, which substantively affected this NOPR analysis. Issued April 2016 TP Final Rule.

As discussed in the February 2015 Preliminary Analysis, although the initial test procedure proposal included a CEER metric that combined energy use in cooling mode with that in heating mode and various low-power modes, the preliminary analysis was conducted using EER\textsubscript{cm} as the basis for energy conservation standards instead of CEER. DOE analyzed EER\textsubscript{cm} because cooling is the primary function for portable ACSs, and DOE expected that manufacturers would likely focus on improving efficiency in this mode to achieve higher CEERs. Because the test procedure established in appendix CC does not include a heating mode test and includes a second cooling mode test condition, the CEER metric as codified combines the performance at both cooling mode test conditions with energy use in the low-power modes.

Accordingly, DOE utilized CEER as the basis for its proposed portable AC energy conservation standards in this NOPR. DOE also based the NOPR analysis on the SACC measured in appendix CC, a weighted combination of the adjusted cooling capacities at the two cooling mode test conditions.

The two cooling mode test conditions in appendix CC are weighted based on the percentage of annual hours for each test condition, on average, for geographical locations that correspond to expected portable AC ownership. The majority (80 percent) of the total hours were estimated to relate to the lower of the two outdoor temperatures, 83 degrees Fahrenheit (°F) dry-bulb. Because at this lower outdoor temperature, there is only a 3 °F dry-bulb temperature differential and subsequent 0.38 Btu per pounds of dry air enthalpy differential between the indoor and outdoor air, the potential impact of infiltration air heating effects on the overall CEER metric is substantially reduced. For this reason, DOE now finds no significant relationship between duct configuration or air flow optimization and improved efficiency, and therefore alternatively considered component efficiency improvements as the primary means to increase CEER. Accordingly, in this NOPR DOE has defined its efficiency levels, other than the max-tech, based on the performance observed in its test sample, independent of duct configuration or level of air flow optimization.

As discussed previously in section IV.C.1.a, DOE characterized and compared performance among all portable ACSs in its test sample and determined a relationship between SACC and a general representation of expected CEER as follows:

\[
\text{Nominal CEER} = \frac{SACC}{(2.7447 \times SACC^{0.6029})}
\]

As discussed in section IV.C.1.a, DOE assessed individual unit performance relative to this CEER relationship and identified a baseline efficiency level at PR = 0.72, with PR defined as the ratio of actual CEER to nominal CEER.

For EL 2, DOE determined the PR that corresponded to the maximum available efficiency across a full range of capacities (1.14), and then selected an intermediate efficiency level for EL 1 based on a PR between the baseline and EL 2 (0.94). For EL 3, DOE identified the PR for the single highest efficiency unit observed in its test sample (1.31).

Due to the variations in performance among units in DOE’s test sample, DOE conducted additional performance modeling to augment its test data when estimating efficiency and manufacturing costs at each efficiency level. DOE numerically modeled component improvements for each of the 21 out of 24 test units for which detailed component information were available to estimate potential efficiency improvements to existing product configurations. The component improvements were performed in three steps for each unit.

The first incremental improvement for each unit included a 10 percent increase in heat exchanger frontal area and raising the compressor energy efficiency ratio (EER) to 10.5 Btu/Wh, the maximum compressor efficiency identified at the time of the February 2015 Preliminary Analysis.

The second incremental component efficiency improvement step for each unit included a 15 percent increase in heat exchanger frontal area from the original test unit and a 10 percent improvement in compressor efficiency to an EER of 11.1 Btu/Wh, which DOE identified as the
maximum efficiency for currently available single-speed R-410A rotary compressors of the type typically found in portable ACs and other similar products. As with the 10-percent heat exchanger area increase, DOE expects that a chassis size and weight increase would be necessary to fit a 15-percent increased heat exchanger, but believes portability and consumer utility would not be significantly impacted.

DOE included all available design options in the third efficiency improvement step for each unit, including a 20-percent increase in heat exchanger frontal area from the original test unit, more efficient ECM blower motor(s), and a variable-speed compressor with an EER of 13.7 Btu/Wh. DOE believes that a 20-percent increase in heat exchanger size is the maximum allowable increase for consumer utility and portability to be retained. DOE also improved standby controls efficiency in this final step, adjusting the standby power for each test unit to the minimum observed standby power of 0.46 W in its test sample. With these design options modeled for units in its test sample, DOE found that the single, theoretical maximum-achievable efficiency among all modeled units corresponded to a PR of 1.75, which DOE defined as EL 4.

Table IV.5 summarizes the specific improvements DOE made to model the performance of higher efficiency design options applied to each test unit.

<table>
<thead>
<tr>
<th>Heat exchanger area (% increase)</th>
<th>Compressor EER (Btu/Wh)</th>
<th>Blower motor (type)</th>
<th>Standby (watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10.5 (single-speed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>11.1 (single-speed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>13.7 (variable-speed)</td>
<td>ECM (variable-speed)</td>
<td>0.46</td>
</tr>
</tbody>
</table>

*No blower motor or standby power changes were applied to the first two incremental steps.*

Table IV.5 does not necessarily represent the design options associated with each efficiency level beyond the baseline. Baseline through EL 3 are defined by the range of test data, while EL 4 is defined by the maximum theoretical PR after modeling all design options listed in Table IV.5. In this NOPR, DOE analyzed efficiency levels based on test samples and modeled performance according to the following equation and the PR values listed in Table IV.6:

\[
\text{Minimum CEER} = PR \times \frac{SACC}{(2.7447 \times SACC^{0.6829})}
\]

**Table IV.6—PORTABLE AIR CONDITIONER EFFICIENCY LEVELS AND PERFORMANCE RATIOS—NOPR ANALYSIS**

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Efficiency level description</th>
<th>Performance ratio (PR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Minimum Observed</td>
<td>0.72</td>
</tr>
<tr>
<td>EL 1</td>
<td>Intermediate Level</td>
<td>0.94</td>
</tr>
<tr>
<td>EL 2</td>
<td>Maximum Available for All Capacities</td>
<td>1.14</td>
</tr>
<tr>
<td>EL 3</td>
<td>Maximum Observed</td>
<td>1.31</td>
</tr>
<tr>
<td>EL 4</td>
<td>Max-Tech (Maximum of Modeled Component Improvements)</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Figure IV–2 plots each efficiency level curve for SACCs from 50 to 10,000 Btu/h, based on the nominal CEER curve scaled by the PR assigned to each efficiency level.
Additional details on the selection of efficiency levels may be found in chapter 5 of the NOPR TSD.

2. Manufacturer Production Cost Estimates

Based on product teardowns and cost modeling conducted in the preliminary analysis, DOE developed overall cost-efficiency relationships for each considered efficiency level. DOE selected products covering the range of efficiencies available on the market for the teardown analysis. During the teardown process, DOE created detailed BOMs that included all components and processes used to manufacture the products. DOE used the BOMs from the teardowns as an input to a cost model, which calculated the MPC for products covering the range of efficiencies available on the market. The MPC accounts for labor, material, overhead, and depreciation costs that a manufacturer would incur in producing a specific portable AC.

For the preliminary analysis, DOE estimated that the costs for these products reflected the costs for typical units at their respective efficiency levels, consistent with the efficiency-level approach. DOE then used the design-option approach to apply the technology options it determined manufacturers were most likely to incorporate, air flow optimization and improved component efficiencies, to evaluate the necessary changes to each unit in DOE’s teardown sample and the associated capacity and efficiency changes at each efficiency level. DOE constructed cost-efficiency curves for each unit and then averaged the costs for all units at each efficiency level to determine the industry-representative incremental MPC. Table IV.7 shows the incremental MPCs developed in the preliminary analysis for each product class at each of the analyzed efficiency levels compared to the baseline MPC. For the preliminary analysis, EL 1 through EL 3 represented changes to the air flow to reduce or eliminate infiltration air by means of a dual-duct configuration. The small incremental costs at these efficiency levels represented the cost for an additional duct and larger blower motor. At EL 4, the incremental MPC was significantly higher due to higher-cost design options incorporated at this level, including larger heat exchangers (and the additional cost of a larger case and other internal component adjustments) and more efficient compressors and blower motors. The incremental MPCs were presented in 2013 dollars (2013$), which reflected the year in which the preliminary analysis teardowns and modeling were performed.

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Incremental MPC (2013$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
</tr>
<tr>
<td>EL1</td>
<td>4.09</td>
</tr>
<tr>
<td>EL2</td>
<td>4.67</td>
</tr>
<tr>
<td>EL3</td>
<td>5.26</td>
</tr>
<tr>
<td>EL4</td>
<td>47.76</td>
</tr>
</tbody>
</table>

Chapter 5 of the preliminary analysis TSD contains additional details on the analysis conducted in support of developing these MPC estimates.

DOE received several comments from interested parties on the MPC estimates developed for the preliminary analysis. AHAM commented that it would attempt to provide DOE with MPC data. (AHAM No. 16 at p. 8) DOE did not receive any manufacturer cost information from AHAM for consideration in the NOPR analysis. DENSO questioned what capacity was used to determine the incremental costs, since an incremental efficiency improvement at lower capacities would entail different MPCs than the same efficiency improvement at higher capacities. (DENSO, Public Meeting Transcript, No. 11 at p. 52) The incremental costs presented in the preliminary analysis were an average across all of the units in DOE’s test.
sample. The sample included units covering the range of available capacities, and therefore the incremental MPCs reflected the average of all costs associated with units of varying capacities. Additional information can be found in chapter 5 of the preliminary TSD.

For the NOPR analysis, DOE updated the incremental MPC estimates from the preliminary analysis based on the changes to the efficiency levels detailed above in section IV.C.1, and also based on feedback from interested parties and on information gathered in additional manufacturer interviews. When assigning costs to efficiency levels in this analysis, DOE considered all units that performed between two efficiency levels as representative of the lower of the two efficiency levels. DOE determined an average baseline MPC based on the units in DOE’s test sample with a CEER below EL 1 (PR = 0.94). Six units in the test sample tested below EL 1. DOE expects the average MPCs from these units to reflect the baseline for the overall portable AC market because the average capacity of these units was within approximately 200 Btu/hr of the overall average capacity for the entire test sample.

DOE subsequently determined the costs for all other torn-down and modeled units, and determined the average costs associated with each incremental component efficiency improvement when moving between efficiency levels. In addition to the costs associated with the improved components themselves, DOE also considered the increased costs associated with other related product changes, such as increasing case sizes to accommodate larger heat exchangers.

Although DOE’s test and modeled data resulted in a range of PRs from 0.72 to 1.75, DOE observed that not all units in its test sample were capable of reaching higher PRs with the identified design option changes. For example, the modeled max-tech PR represents a unit in the test sample that had a high PR as a starting point (near EL 3). Modeling increased heat exchanger sizes and a more efficient compressor in this unit resulted in a higher modeled PR than could be achieved theoretically by applying the same design options to baseline units. For these units that start at lower PRs, DOE expects that manufacturers would have to undertake a complete product redesign and optimization to reach higher PRs, rather than just apply the identified design options. As a result, manufacturers of these units would incur higher MPCs to reach the higher efficiency levels and also significant conversion costs associated with updating their product lines. These conversion costs are discussed further in sections IV.J and V.B.2 of this proposed rule and chapter 12 of the NOPR TSD.

With this approach, DOE found that only three units in the teardown sample would be capable of reaching EL 3 without significant product redesign (i.e., the one unit that tested at EL 3 and two units that could theoretically achieve EL 3 with highest efficiency single-speed compressors and increasing the heat exchanger area no more than 20 percent). At EL 4 (max-tech), DOE expects all products to require redesigns. EL 4 represents the maximum modeled efficiency with a 20-percent increase in heat exchanger area and the most efficient variable-speed compressor. DOE expects that manufacturers would undertake a product redesign when switching from a single-speed to a variable-speed compressor. Additionally, DOE notes that the ability of a product to reach EL 3 or EL 4 would be dependent on the availability of the most efficient components. However, compressor availability for portable ACs is largely driven by the room AC industry, so the most efficient single-speed and variable-speed compressors may not be available over the entire range of capacities necessary for all portable AC product capacities. As a result, moving to EL 3 or EL 4 may necessitate manufacturers to remove certain portable AC cooling capacities from the market.

Products that would require a redesign to reach a certain efficiency level with the identified design options would subsequently incur additional incremental MPCs to achieve any improvement beyond that efficiency. Although DOE does not expect manufacturers to actually implement the associated design changes for the reasons discussed below, DOE included them for completeness to estimate MPCs representative of the full capacity range at all efficiency levels. To estimate increased material costs after manufacturers undertake a product redesign, DOE allowed the heat exchanger area to increase beyond the 20-percent limit where necessary, resulting in higher costs for the heat exchangers and associated case changes. Similarly, DOE modeled compressors with efficiencies higher than those that it is aware of on the market to simulate the increased component costs after a product redesign (i.e., DOE used the price premium associated with more efficient compressors to estimate the additional associated with other component changes that would be made in a product redesign). While DOE’s estimates related to product redesigns resulted in increased MPCs at the higher efficiency levels, the more significant financial impact of a redesign would be associated with the conversion costs incurred by manufacturers, as described in sections IV.J and V.B.2 of this NOPR and in chapter 12 of the NOPR TSD.

DOE calculated all MPCs in 2014$, the most recent year for which full-year data was available at the time of this NOPR analysis. Table IV.8 presents the updated MPC estimates DOE developed for this NOPR.

### Table IV.8—Portable Air Conditioner Incremental Manufacturer Production Costs (2014$)—NOPR Analysis

<table>
<thead>
<tr>
<th>Efficiency level</th>
<th>Incremental MPC (2014$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>0</td>
</tr>
<tr>
<td>EL1</td>
<td>$29.78</td>
</tr>
<tr>
<td>EL2</td>
<td>45.13</td>
</tr>
<tr>
<td>EL3</td>
<td>60.35</td>
</tr>
<tr>
<td>EL4</td>
<td>108.99</td>
</tr>
</tbody>
</table>

Additional details on the development of the incremental cost estimates may be found in chapter 5 of the NOPR TSD.

### D. Markups Analysis

The markups analysis develops appropriate markups (e.g., retailer markups, distributor markups, contractor markups) in the distribution chain and sales taxes to convert the manufacturer selling price (MSP) estimates derived in the engineering analysis to consumer prices, which are then used in the LCC and PBP analysis and in the MIA. At each step in the distribution channel, companies mark up the price of the product to cover business costs and profit margin. For portable ACs, the main parties in the distribution chain are manufacturers, retailers, and consumers.

The manufacturer markup converts MPC to MSP. DOE developed an average manufacturer markup by examining the annual Securities and Exchange Commission (SEC) 10–K reports filed by publicly traded manufacturers primarily engaged in appliance manufacturing and whose combined product range includes portable ACs.

For retailers, DOE developed separate markups for baseline products (baseline markups) and for the incremental cost of more-efficient products (incremental markups). Incremental markups are coefficients that relate the change in the MSP of higher-efficiency models to the change in the retailer sales price. DOE relied on economic data from the U.S.
Census Bureau to estimate average baseline and incremental markups. AHAM objected to DOE’s reliance on the concept of incremental markups, stating that this theory has been disproved and it is in contradiction to empirical evidence. (AHAM, No. 16 at p. 8) In an attachment to AHAM’s comment, Shorey Consulting, Inc. stated that (1) DOE requires a strong form of economic theory, since it is saying that something will happen solely because theory says it should; and (2) an a priori resort to economic theory without clear empirical support is highly problematic. Shorey Consulting interviewed a sample of local/regional and national appliance retailers and reported that, with very few exceptions, they reacted to the DOE concept that percentage margins will be lower in a post-standards situation with incredulity. It concluded that DOE needs to abandon the incremental margin approach and revert to the average margin approach that corresponds to actual industry practice. (AHAM, No. 16 at pp. A–10–11) DOE disputes that the theory behind the concept of incremental markups has been disproved. The concept is based on a simple notion: An increase in profitability, which is implied by keeping a fixed markup when the product price goes up, is not likely to be viable over time in a business that is reasonably competitive. DOE agrees that empirical data on markup practices would be desirable, but such information is closely held and difficult to obtain.

Regarding the interviews with appliance retailers, it is difficult for DOE to evaluate the characterization of the responses without knowing what questions were posed to the retailers. DOE’s analysis necessarily considers a very simplified version of the world of appliance retailing: Namely, a situation in which nothing changes except for those changes in appliance offerings that occur in response to new standards. DOE implicitly asks: Assuming the product cost increases while the other costs remain constant (no change in labor, material and operating costs), are retailers still able to keep the same markup over time as before? DOE recognizes that retailers are likely to seek to maintain the same markup on appliances if the price they pay goes up as a result of appliance standards, but DOE believes that over time adjustment is likely to occur due to competitive pressures. Other retailers may find that they can gain sales by reducing the markup and maintaining the same per-unit operating profit. The incremental markup approach embodies the same perspective as the “preservation of per-unit operating profit markup scenario” used in the MIA (see section IV.J of this document).

In summary, DOE acknowledges that its approach to estimating retailer markup practices after new standards take effect is an approximation of real-world practices that are both complex and varying with business conditions. However, DOE continues to believe that its assumption that standards do not facilitate a sustainable increase in profitability is reasonable. DOE welcomes information that could support improvement in its methodology.

Chapter 6 of the NOPR TSD provides details on DOE’s development of markups for portable ACs.

E. Energy Use Analysis

The purpose of the energy use analysis is to determine the annual energy consumption of portable ACs at different efficiencies in representative U.S. homes.24 The energy use analysis estimates the range of energy use of portable ACs in the field (i.e., as they are actually used by consumers). The energy use analysis provides the basis for other analyses DOE performed, particularly assessments of the energy savings and the savings in consumer operating costs that could result from adoption of amended or new standards. DOE determined a range of annual energy use consumption of portable ACs as a function of the unit’s annual operating hours to meet the cooling demand, which depends on the efficiency of the unit, power (watts) of three modes of operation (cooling, fan, and standby), and the percentage of time in each mode.

EIA’s Residential Energy Consumption Survey (RECS) provides information on whether households use a room AC. Because portable ACs and room ACs often serve a similar function,25 DOE developed a sample of households that use room ACs from RECS 2009, which is the latest available RECS.26 DOE selected the subset of

24 DOE estimated that 12 percent of portable ACs are used in used retail or office buildings, and it also estimated energy use by these consumers. The coefficient is equivalent to the market distribution of residential and commercial installations of residential room AC products.

25 It is assumed that portable ACs may perform supplemental cooling to a particular space, but that the cooling loads between room ACs and portable ACs are similar. For example, a portable AC may be used to provide cooling to a single room in place of a central AC to cool an entire home. For the purposes of estimating energy use, DOE assumed that portable ACs are operated under similar cooling loads as room ACs, given their similar cooling capacities.


27 RECS household use criteria: (1) At least one room AC was present in the household; (2) The energy consumption of the room AC was greater than 14,000 Btu/hr (a cooling capacity comparable to portable ACs as measured by industry test methods); and (4) The room being cooled measured no more than 1,000 square feet.

28 To account for increased building efficiency at the time that the proposed standard would take effect, DOE used the 2021 building shell index factor of 0.97 for space cooling in all residences from the EIA’s Annual Energy Outlook. (Energy Information Administration. Annual Energy Outlook 2014 with Projections to 2040. April 2014.)


Commenting on the preliminary TSD, AHAM asserted that DOE’s energy use analysis is based on insufficient and inaccurate data. AHAM noted that consumers use portable ACs and room ACs differently, including the time of year and frequency of use. AHAM expressed concern that DOE is reliant on RECS data that are appropriate for room ACs, but do not include data specific to portable ACs. (AHAM, No. 16 at pp. 5–6) DENSO also questioned the accuracy of DOE’s energy use assumptions. (DENSO, No. 13 at p. 8) DOE believes that portable ACs are used similarly to room ACs and assumes that in some residential and commercial scenarios, portable ACs may perform supplemental cooling to central ACs. DOE has based the NOPR energy use analysis on room AC usage data as DOE believes such data is the closest proxy available. To account for any potential differences between consumer use of portable ACs and room ACs, DOE also conducted a sensitivity analysis which assumes lower annual hours of use for portable ACs in comparison to room ACs. Specifically, in this sensitivity analysis for use differences between products, DOE scaled the room AC cooling mode hours of use by 50 percent while maintaining the assumption that portable ACs are used during the same time of year as room ACs, since the use of both types of cooling equipment is likely to be consistent seasonally. The results of this sensitivity analysis estimate half the energy bill savings relative to the primary estimate. More details are presented in appendix 8F and appendix 10E of the NOPR TSD. DOE welcomes any specific data on portable ACs that could inform further analysis on consumer use.

DENSO commented that room AC operating hours are not representative of industrial portable AC (I–PAC) operating hours. DOE is not analyzing industrial products (including I–PACS) in this rulemaking. OceanAire inquired whether DOE’s estimate for “commercial” referred to portable ACs in commercial settings or commercial units. (DENSO, No. 13 at pp. 7–8; OceanAire, Public Meeting Transcript, No. 11 at p. 62) The proposed rule applies to single-duct and dual-duct portable ACs that meet the definitions in 10 CFR 430.2, and DOE considered such units that operate in light commercial settings, such as food service, office and retail buildings.

Chapter 7 of the NOPR TSD provides details on DOE’s energy use analysis for portable ACs.

F. Life-Cycle Cost and Payback Period Analysis

DOE conducted LCC and PBP analyses to evaluate the economic impacts on individual consumers of potential energy conservation standards for portable ACs. The effect of new or amended energy conservation standards on individual consumers usually involves a reduction in operating cost and an increase in purchase cost. DOE used the following metrics to measure consumer impacts:

- The LCC (life-cycle cost) is the total consumer expense of an appliance or product over the life of that product, consisting of total installed cost (manufacturer selling price, distribution chain markups, sales tax, and installation costs) plus operating costs (expenses for energy use, maintenance, and repair). To compute the operating costs, DOE discounts future operating costs to the time of purchase and sums them over the lifetime of the product.
- The PBP (payback period) is the estimated amount of time (in years) it takes consumers to recover the increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost at higher efficiency levels by the change in annual operating cost for the year that the new standard is assumed to take effect.

For a given efficiency level, DOE calculates LCC savings as the change in LCC in a standards case relative to the LCC in the no-new-standards case, which reflects the estimated efficiency distribution of portable ACs in the absence of new or amended energy conservation standards. In contrast, the PBP for a given efficiency level is measured relative to the baseline product.

For each considered efficiency level in each product class, DOE calculated the LCC and PBP for a nationally representative set of housing units and commercial buildings that use portable ACs. DOE used the EIA’s 2009 RECS to develop household samples for portable ACs based on households that use room ACs. DOE also used the EIA’s 2003 CBECS to develop a sample of commercial buildings that use portable ACs, again based on buildings that use room ACs. For each sample household or commercial building, DOE determined the energy consumption for the portable ACs and the appropriate electricity price. By developing a representative sample of households, the analysis captured the variability in energy consumption and energy prices associated with the use of portable ACs.

Inputs to the calculation of total installed cost include the cost of the product—which includes MPCs, manufacturer markups, retailer and distributor markups, and sales taxes—and installation costs. Note in the case of portable ACs, DOE assumed that installation costs would not change with efficiency. So the difference of installation cost between the baseline and higher efficiency levels is then $0. Inputs to the calculation of operating expenses include annual energy consumption, energy prices, and price projections, repair and maintenance costs, product lifetimes, and discount rates. DOE created distributions of values for product lifetime and discount rates with probabilities attached to each value, to account for their uncertainty and variability. Sales tax and electricity prices are tied to the geographic locations of purchasers drawn from the residential and commercial samples.

The model DOE uses to calculate the LCC and PBP relies on a Monte Carlo simulation to incorporate uncertainty and variability into the analysis. The Monte Carlo simulation randomly samples input values from the probability distributions and portable AC user samples. The model calculated the LCC and PBP for products at each efficiency level for 10,000 housing units or commercial buildings per simulation run.

DOE calculated the LCC and PBP for all consumers as if each were to purchase a new product in the expected year of compliance with new standards. Any new standards would apply to portable ACs manufactured 5 years after the date on which any new standard is published. (42 U.S.C. 6295(1)(2)) At this time, DOE estimates publication of a final rule in 2016. Therefore, for purposes of its analysis, DOE used 2021 as the first year of compliance with any new standards.

Table IV.9 summarizes the approach and data DOE used to derive inputs to the LCC and PBP calculations. The subsections that follow provide further discussion. For energy use, RECS and CBECS were used for number of hours
of use. A field metering report provided information regarding the fan-mode of portable ACs.\textsuperscript{31} Details of the spreadsheet model, and of all the inputs to the LCC and PBP analyses, are contained in chapter 8 of the NOPR TSD and its appendices.

\begin{table}[h]
\centering
\begin{tabular}{|l|l|}
\hline
\textbf{Inputs} & \textbf{Source/method} \\
\hline
Product Cost & Derived by multiplying MPCs by manufacturer and retailer markups and sales tax, as appropriate. Producer Price Index (PPI) series for small household electronics fit to an exponential model. \\
Installation Costs & Assumed no installation costs with baseline unit and no cost with efficiency level. \\
Annual Energy Use & Power in each mode multiplied by the hours per year in each mode. Average number of hours based on 2009 RECS, 2003 CBECS, and field metering data. \\
Energy Prices & Electricity: Based on 2014 average and marginal electricity price data from the Edison Electric Institute. Variability: Marginal electricity prices vary by season, U.S. region, and baseline electricity consumption level. \\
Energy Price Trends & Based on AEO 2015 price forecasts. Trends are dependent on census divisions. \\
Repair and Maintenance Costs & Assumed no change with efficiency level. \\
Product Lifetime & Weibull distribution using parameters from room ACs. \\
Discount Rates & Approach involves identifying all possible debt or asset classes that might be used to purchase the considered appliances, or might be affected indirectly. Primary data source was the Federal Reserve Board’s Survey of Consumer Finances. \\
Compliance Date & 2021. \\
\hline
\end{tabular}
\caption{Summary of Inputs and Methods for the LCC and PBP Analysis} \label{table: inputs}
\end{table}

1. Product Cost

To calculate consumer product costs, DOE multiplied the MPCs developed in the engineering analysis by the markups described above (along with sales taxes). DOE used different markups for baseline products and higher-efficiency products, because DOE applies an incremental markup to the increase in MSP associated with higher-efficiency products.

Economic literature and historical data suggest that the real costs of many products may trend downward over time according to “learning” or “experience” curves. Experience curve analysis implicitly includes factors such as efficiencies in labor, capital investment, automation, materials prices, distribution, and economies of scale at an industry-wide level.\textsuperscript{32} DOE used the most representative Producer Price Index (PPI) series for portable ACs to fit to an exponential model to develop an experience curve. DOE obtained historical PPI data for “small electric household appliances, except fans” from the Labor Department’s Bureau of Labor Statistics (BLS) for 1983 to 2014.\textsuperscript{33} Although this PPI series encompasses more than portable ACs, no PPI data specific to portable ACs were available. The PPI data reflect nominal prices, adjusted for changes in product quality. DOE calculated an inflation-adjusted (deflated) price index by dividing the PPI series by the Gross Domestic Product Chained Price Index.

2. Installation Cost

Installation cost includes labor, overhead, and any miscellaneous materials and parts needed to install the product. Available evidence indicated that no installation costs would be incurred for baseline installation or be impacted with increased efficiency levels.

3. Annual Energy Consumption

For each sampled household and building, DOE determined the energy consumption for a portable AC at different efficiency levels using the approach described in section IV.E of this proposed rule.

4. Energy Prices

DOE used average prices (for baseline products) and marginal prices (for higher-efficiency products) which vary by season, region, and baseline electricity consumption level for the LCC. DOE estimated these prices using data published with the Edison Electric Institute (EEI) Typical Bills and Average Rates reports for summer and winter 2014.\textsuperscript{34} For the residential sector each report provides, for most of the major investor-owned utilities (IOUs) in the country, the total bill assuming household consumption levels of 500, 750, and 1,000 kWh for the billing period. For the commercial sector the report provides typical bills for several combinations of monthly electricity peak demand and total consumption.

For both the residential and commercial sectors, DOE defined the average price as the ratio of the total bill to the total electricity consumption. For the residential sector, DOE used the EEI data to also define a marginal price as the ratio of the change in the bill to the change in energy consumption. For the commercial sector, marginal prices cannot be estimated directly from the EEI data, so DOE used a different approach, as described in chapter 8 of the NOPR TSD.

Regionally weighted-average values for each type of price were calculated for the nine census divisions and four large states (CA, FL, NY and TX). Each EEI utility in a division was assigned a weight based on the number of consumers it serves. Consumer counts were taken from the most recent EIA Form 861 data (2012).\textsuperscript{35} DOE adjusted these regional weighted-average prices to account for systematic differences between IOUs and publicly-owned utilities, as the latter are not included in the EEI data set.

DOE assigned seasonal average and marginal prices to each household or commercial building in the LCC sample based on its location and its baseline monthly electricity consumption for an


average summer or winter month. For a detailed discussion of the development of electricity prices, see appendix 8F of the NOPR TSD.

To estimate future prices, DOE used the projected annual changes in average residential and commercial electricity prices in the Reference case projection in AEO 2015. The AEO price trends do not distinguish between marginal and average prices, so DOE used the same trends for both. DOE reviewed the EEI data for the years 2007 to 2014 and determined that there is no systematic difference in the trends for marginal vs. average prices in the data.

5. Maintenance and Repair Costs

Repair costs are associated with repairing or replacing product components that have failed in an appliance. Maintenance costs are associated with maintaining the operation of the product. Based on available data and low product purchase prices, DOE concluded that repair frequencies are low and do not increase for higher-capacity or higher-efficiency units. DOE assumed a zero cost for all efficiency levels.

6. Product Lifetime

The product lifetime is the age at which the product is retired from service. Given similar mechanical components and uses, DOE considered that the lifetime distribution of portable ACs is the same as that of room ACs, as estimated for the 2011 direct final rule. 76 FR 22454 (April 21, 2011). The average lifetime is 10 years. Chapter 8 of the NOPR TSD provides details on DOE’s development of lifetimes for portable ACs.

DENSO noted that DOE had limited data regarding portable AC lifetimes and stated that since portable ACs are used less frequently than room ACs, the lifetime should reflect the usage difference. (DENSO, No. 13 at p. 7) DOE acknowledges that lower usage of portable ACs compared to room ACs could lead to longer lifetimes for portable ACs. However given limited supporting data, DOE is concerned that using a longer lifetime could bias upwards the LCC savings from higher efficiency. Therefore, for this analysis, DOE continued to use room AC lifetime as a proxy for portable AC lifetime.

7. Discount Rates

In the calculation of LCC, DOE applies discount rates appropriate to households to estimate the present value of future operating costs. DOE estimated a distribution of residential and commercial discount rates for portable ACs based on consumer financing costs and opportunity cost of funds related to appliance energy cost savings and maintenance costs.

To establish residential discount rates for the LCC analysis, DOE identified all relevant household debt or asset classes to approximate a consumer’s opportunity cost of funds related to appliance energy cost savings. DOE estimated the average percentage shares of the various types of debt and equity by household income group using data from the Federal Reserve Board’s Survey of Consumer Finances (SCF) for 1995, 1998, 2001, 2004, 2007, and 2010. Using the SCF and other sources, DOE developed a distribution of rates for each type of debt and asset by income group to represent the rates that may apply in the year in which new standards would take effect. DOE assigned each sample household a specific discount rate drawn from one of the distributions. The average rate across all types of household debt and equity and income groups, weighted by the shares of each type, is 4.63 percent. See chapter 8 of the NOPR TSD for further details on the development of consumer discount rates.

To establish commercial discount rates for the LCC analysis, DOE estimated the cost of capital for companies that purchase a portable AC. The weighted average cost of capital is commonly used to estimate the present value of cash flows to be derived from a typical company project or investment. Most companies use both debt and equity capital to fund investments, so their cost of capital is the weighted average of the cost to the firm of equity and debt financing as estimated from financial data for publicly traded firms in the sectors that purchase computers. For this analysis, DOE used Damodaran online as the source of information about company debt and equity financing. The average rate across all types of companies, weighted by the shares of each type, is 4.9 percent. See chapter 8 of the NOPR TSD for further details on the development of commercial discount rates.

8. Efficiency Distribution in the No-New-Standards Case

To accurately estimate the share of consumers that would be affected by a potential energy conservation standard at a particular efficiency level, DOE’s LCC analysis considered the projected distribution (market shares) of product efficiencies in the no-new-standards case (i.e., the case without amended or new energy conservation standards). For the preliminary analysis, to estimate the efficiency distribution of portable ACs, DOE summed the number of portable AC models available from online retailers to obtain the percentages of single-duct and dual-duct models. The single-duct models were allocated to the baseline efficiency level. The dual-duct models were split between EL 1 and EL 2. For the NOPR analysis, DOE estimated the no-new-standards case based on 24 portable AC units tested in development of the engineering analysis (chapter 5 of this NOPR TSD). DOE assumed that the efficiency distribution of units tested is representative of the market as a whole.

Commenting on the preliminary analysis, De’ Longhi wondered how efficiency distribution was tied to product duct configuration. (De’ Longhi, No. 11 at p. 73) Based on the engineering analysis, DOE found that gains in efficiency were achieved by utilizing more efficient components in existing test units. DOE used product component characteristics to estimate the current efficiency distribution of portable ACs on the market. As discussed above, DOE based EL 1, EL2, and EL 3 on the performance observed in its test sample. Therefore, DOE estimated a share of 29 percent at the baseline, 50 percent for EL 1, 21 percent for EL 2, and no share at EL 3. EL 3 represents the maximum performance observed in DOE’s test sample; however, the test unit representing EL 3 performed significantly better than the next most efficient units, and does not represent the maximum available across a full range of capacities that would comprise a significant portion of the market. Accordingly, DOE has not assigned any market share to this efficiency level. The estimated market shares for the no-new-standards case for portable ACs and the average EER and CEER values for each efficiency level are shown in Table IV.10. See chapter 8 of the NOPR TSD for further information on the derivation of the efficiency distributions.


37 Federal Reserve Board time-series data, Cost of Savings Index data, annual returns on the Standard and Poor’s. See the reference section of chapter 8 of the NOPR TSD for on-line data locations.

9. Payback Period Analysis

The PBP is the amount of time it takes the consumer to recover the additional installed cost of more-efficient products, compared to baseline products, through energy cost savings. PBPs are expressed in years. PBPs that exceed the life of the product mean that the increased total installed cost is not recovered in reduced operating expenses.

The inputs to the PBP calculation for each efficiency level are the change in total installed cost of the product and the change in the first-year annual operating expenditures relative to the baseline. The PBP calculation uses the same inputs as the LCC analysis, except that discount rates are not applied.

As noted above, EPCA, as amended, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the first year’s energy savings resulting from the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii)) For each considered efficiency level, DOE determined the value of the first year’s energy savings by calculating the energy savings in accordance with the applicable DOE test procedure, and multiplying those savings by the average energy price forecast for the year in which compliance with the new standards would be required.

G. Shipments Analysis

DOE uses forecasts of annual product shipments to calculate the national impacts of potential new energy conservation standards on energy use, NPV, and future manufacturer cash flows. The shipments model takes an accounting approach, tracking the vintage of units in the stock. Stock accounting uses product shipments as inputs to estimate the age distribution of in-service product stocks for all years. The age distribution of in-service product stocks is a key input to calculations of both the NES and NPV, because operating costs for any year depend on the age distribution of the stock.

In the preliminary analysis for portable ACs, DOE used a model with two market segments to estimate shipments of portable ACs: Replacement of existing products and first-time owners. AHAM stated that DOE’s assumption that portable ACs account for approximately ten percent of the total shipments of room air conditioners is not accurate. Based on AHAM room AC shipment data for 2012–2014, the percentage assumed in the preliminary analysis for portable ACs is not consistent and, therefore, room AC shipments do not appear to be an accurate proxy for portable AC shipments. (AHAM, No. 16 at p. 7)

DENSO also objected to DOE’s use of room AC shipments to derive portable AC shipments. (DENSO, No. 13 at p. 9)

Subsequent to the preliminary analysis, DOE received data on portable AC shipments in 2014 from manufacturer interviews, so it was not necessary to use room AC shipments data as a proxy for portable AC shipments for the NOPR analysis. DOE also used information obtained in manufacturer interviews which suggested that the average annual growth in portable AC shipments between 2004 and 2013 was 30 percent. To estimate historical shipments prior to 2004, DOE interpolated between 1985 (the date that portable ACs were introduced to the residential market) and 2004.

To project future shipments, DOE estimated a saturation rate to project shipments of portable ACs. DOE assumed that the portable AC saturation rate would be no greater than half the current room AC saturation rate (based on RECS 2009) by the end of the analysis period, i.e., 2050. For each year of the projection period, the saturation rate of portable ACs was determined from a combination of the total stock of the product and total housing stock. The total stock of portable ACs was based on product lifetime and the survival function developed in the LCC analysis. DOE used total housing stock from AEO 2015. Based on this revised approach, DOE estimated that the shipments of portable ACs would increase from 1.32 million in 2014 to 1.67 million in 2050 at an annual growth rate of 0.65 percent.

For the NOPR analysis, DOE applied price and efficiency elasticity parameters to estimate the effect of new standards on portable AC shipments. DOE estimated the price and efficiency elasticity parameters from a regression analysis of incorporated shipments, purchase price, and efficiency data specific to several residential appliances during 1989–2009. Based on evidence that the price elasticity of demand is significantly different over the short run and long run for other consumer goods (i.e., automobiles), DOE assumed that these elasticities decline over time. DOE estimated shipments in each standards case using the price and efficiency elasticity along with the change in the product price and operating costs between a standards case and the no-new-standards case.

For details on the shipments analysis, see chapter 9 of the NOPR TSD for further information.

H. National Impact Analysis

The NIA assesses the NES and the national NPV from a national perspective of total consumer costs and savings that would be expected to result from new or amended standards at specific efficiency levels. DOE calculates the NES and NPV based on projections of annual product shipments, along with the annual energy consumption and total installed cost data from the energy use and LCC analyses. For the present analysis, DOE forecasted the energy savings, operating cost savings, product costs, and NPV of consumer benefits over the lifetime of portable ACs sold from 2021 through 2050.

DOE evaluates the impacts of new or amended standards by comparing a case without such standards with standards-case projections. The no-new-standards case characterizes energy use and consumer costs for each product class in the absence of new energy conservation standards.
standards. For this projection, DOE considers historical trends in efficiency and various forces that are likely to affect the mix of efficiencies over time. DOE compares the no-new-standards case with projections characterizing the market if DOE adopted new or amended standards at specific energy efficiency levels (i.e., the TSLs or standards cases). For the standards cases, DOE considers how a given standard would likely affect the market shares of products with efficiencies greater than the standard.

DOE uses a spreadsheet model to calculate the energy savings and the national consumer costs and savings from each TSL. Interested parties can review DOE’s analyses by changing various input quantities on the Input and Summary worksheet within the spreadsheet https://

**TABLE IV.11—SUMMARY OF INPUTS AND METHODS FOR THE NATIONAL IMPACT ANALYSIS**

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipments</td>
<td>Annual shipments from shipments model. 2021.</td>
</tr>
<tr>
<td>Compliance Date of Standard</td>
<td></td>
</tr>
<tr>
<td>Efficiency Trends</td>
<td>No-new-standards case: Annual increase in efficiency of 0.25 percent between 2021 and 2050. Standards cases: Roll-up plus shift scenario.</td>
</tr>
<tr>
<td>Annual Energy Consumption per Unit</td>
<td>Annual weighted-average values are a function of energy use at each TSL.</td>
</tr>
<tr>
<td>Total Installed Cost per Unit</td>
<td>Annual weighted-average values are a function of cost at each TSL.</td>
</tr>
<tr>
<td>Annual Energy Cost per Unit</td>
<td>Incorporates projection of future product prices based on historical data.</td>
</tr>
<tr>
<td>Repair and Maintenance Cost per Unit</td>
<td>Annual weighted-average values as a function of the annual energy consumption per unit and energy prices.</td>
</tr>
<tr>
<td>Energy Prices</td>
<td>Annual values do not change with efficiency level.</td>
</tr>
<tr>
<td>Energy Price Trend</td>
<td>Average and marginal electricity prices for residential and commercial sectors from life-cycle cost and payback period analysis.</td>
</tr>
<tr>
<td>Energy Site-to-Primary and FFC Conversion</td>
<td>AEO 2015 forecasts (to 2040) and extrapolation through 2050 for residential and commercial sectors</td>
</tr>
<tr>
<td>Discount Rate</td>
<td>AEO 2015.</td>
</tr>
<tr>
<td>Present Year</td>
<td>Three and seven percent. 2015.</td>
</tr>
</tbody>
</table>

1. **Product Efficiency Trends**

A key component of the NIA is the trend in energy efficiency projected for the forecast period. To project the trend in efficiency for portable ACs over the entire shipments projection period, DOE used as a starting point the shipments-weighted cooling energy efficiency ratio (SWEER<sub>sw</sub>) estimated for 2021 in the LCC analysis and assumed an annual increase in efficiency equal to the increase estimated for room AC in the 2011 direct final rule: 0.25 percent between 2021 and 2050. 76 FR 22454 (April 21, 2011). For the standards cases, DOE used a “roll-up” scenario to establish the shipments-weighted average energy efficiency for 2021. Using this approach, product energy efficiencies in the no-new-standards case that do not meet the standard level under consideration would “roll up” to meet the new standard level. Product energy efficiencies in the no-new-standards case that exceed the standard level under consideration would not be affected. For years after 2021, DOE developed SWEER<sub>sw</sub> growth trends for each standard level that maintained, throughout the analysis period (2021–2050), the same difference in per-unit average cost as was determined between the no-new-standards case and each standards case in 2021. The approach is further described in chapter 10 of the NOPR TSD.

2. **National Energy Savings**

The NES analysis involves a comparison of national energy consumption of the considered products in each potential standards case (TSL) with consumption in the case with no-new or new energy conservation standards. DOE calculated the national energy consumption by multiplying the number of units (stock) of each product (by vintage or age) by the unit energy consumption (also by vintage). DOE calculated annual NES based on the difference in national energy consumption for the no-new-standards case and for each higher efficiency standard case. DOE estimated energy consumption and savings based on site energy and converted the electricity consumption and savings to primary energy (i.e., the energy consumed by power plants to generate site electricity) using annual conversion factors derived from AEO 2015. Cumulative energy savings are the sum of the NES for each year over the timeframe of the analysis.

In 2011, in response to the recommendations of a committee on “Point-of-Use and Full-Fuel-Cycle Measurement Approaches to Energy Efficiency Standards” appointed by the National Academy of Sciences, DOE announced its intention to use FFC measures of energy use and GHG and other emissions in the NIA and emissions analyses included in future energy conservation standards rulemakings. 76 FR 51281 (August 18, 2011). After evaluating the approaches discussed in the August 18, 2011 notice, DOE published a statement of amended policy in which DOE explained its determination that EIA’s National Energy Modeling System (NEMS) is the most appropriate tool for its FFC analysis and its intention to use NEMS for that purpose. 77 FR 49701 (August 17, 2012). NEMS is a public domain, multi-sector, partial equilibrium model of the U.S. energy sector 41 that EIA uses to prepare its AEO. The approach used for deriving FFC measures of energy use and emissions is described in appendix 10B of the NOPR TSD.

3. **Net Present Value Analysis**

The inputs for determining the NPV of the total costs and benefits experienced by consumers are: (1) Total annual installed cost; (2) total annual

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savings in operating costs; and (3) a
discount factor to calculate the present
value of costs and savings. DOE
calculates net savings each year as the
difference between the no-new-
standards case and each standards case
in terms of total savings in operating
costs versus total increases in installed
costs. DOE calculates operating cost
savings over the lifetime of each product
shipped during the forecast period.

As discussed in section IV. F.1 of this
proposed rule, DOE developed portable
AC price trends based on historical PPI
data. DOE applied the same trends to
to forecast prices at each considered
efficiency level. By 2050, which is the
end date of the forecast period, the
average portable AC price is projected
to drop 51 percent relative to 2013. DOE’s
projection of product prices is described
in appendix 10C of the NOPR TSD.

To evaluate the effect of uncertainty
regarding the price trend estimates, DOE
investigated the impact of different
product price forecasts on the consumer
NPV for the considered TSLs for
portable ACs. In addition to the default
price trend, DOE considered two
product price sensitivity cases: (1) A
high price decline case based on the
AEO 2015 deflator for “furniture and
appliances”; and (2) a low price decline
case based on BLS’ inflation-adjusted
PPI for small electric household
appliances spanning 1998–2014. The
derivation of these price trends and the
results of these sensitivity cases are
described in appendix 10C of the NOPR
TSD.

The operating cost savings are energy
cost savings, which are calculated using
the estimated energy savings in each
year and the projected price of the
appropriate form of energy. To estimate
energy prices in future years, DOE
multiplied the average regional
electricity prices by the forecast of
annual national-average residential
and commercial electricity price changes in
the Reference case from AEO 2015,
which has an end year of 2040. To
estimate price trends after 2040, DOE
used the average annual rate of change
in prices from 2020 to 2040. As part of
the NIA, DOE also analyzed scenarios
that used inputs from the AEO 2015
Low Economic Growth and High
Economic Growth cases. Those cases
have higher and lower energy price
trends compared to the Reference case.
NIA results based on these cases are
presented in appendix 10C of the NOPR
TSD.

In calculating the NPV, DOE
multiplies the net savings in future
years by a discount factor to determine
their present value. For this NOPR, DOE
estimated the NPV of consumer benefits
using both a 3-percent and a 7-percent
real discount rate. DOE uses these
discount rates in accordance with
guidance provided by the Office of
Management and Budget (OMB) to
Federal agencies on the development of
regulatory analysis.\textsuperscript{42} The discount rates for the
determination of NPV are in
contrast to the discount rates used in the
LCC analysis, which are designed to
reflect a consumer’s perspective. The 7-
percent real value is an estimate of the
average before-tax rate of return to
private capital in the U.S. economy. The
3-percent real value represents the
“social rate of time preference,” which
is the rate at which society discounts
future consumption flows to their
present value.

I. Consumer Subgroup Analysis

In analyzing the potential impact of
new or amended standards on
consumers, DOE evaluates the impact
on identifiable subgroups of consumers
that may be disproportionately affected
by a new or amended national standard.
DOE evaluates impacts on particular
subgroups of consumers by analyzing
the LCC impacts and PBP for those
particular consumers from alternative
standard levels. For this NOPR, DOE
analyzed the impacts of the considered
standard levels on low-income
households and senior-only households
for the residential sector and small
businesses for the commercial sector.
DOE found that low-income households
and senior-only households would
experience higher LCC savings than
would the national population. Chapter
11 in the NOPR TSD describes the
consumer subgroup analysis.

J. Manufacturer Impact Analysis

1. Overview

DOE performed an MIA to estimate
the financial impacts of new energy
conservation standards on
manufacturers of portable ACs and to
estimate the potential impacts of such
standards on employment and
manufacturing capacity. The MIA has
both quantitative and qualitative aspects
and includes analyses of forecasted
industry cash flows, the INPV,
investment in research and
development (R&D) and manufacturing
capital, and domestic manufacturing
employment. Additionally, the MIA
seeks to determine how new energy
conservation standards might affect
manufacturing employment, capacity,
and competition, as well as how
standards would contribute to overall
regulatory burden. Finally, the MIA
serves to identify any disproportionate
impacts on manufacturer subgroups,
including small business manufacturers.

The quantitative part of the MIA
primarily relies on the GRIM, an
industry cash flow model with inputs
specific to this rulemaking. The key
GRIM inputs include data on the
industry cost structure, unit production
costs, product shipments, manufacturer
markups, and investments in R&D and
manufacturing capital required to
produce compliant products. The key
GRIM outputs are the INPV, which is
the sum of industry annual cash flows
over the analysis period, discounted
using the industry-weighted average
cost of capital, and the impact to
domestic manufacturing employment.
The model uses standard accounting
principles to estimate the impacts of
new energy conservation standards on
the portable AC industry by comparing
changes in INPV and domestic
manufacturing employment between a
no-new-standards case and the various
TSLs in the standards case. To capture
the uncertainty relating to manufacturer
pricing strategy following new
standards, the GRIM estimates a range
of possible impacts under different
markup scenarios.

The qualitative part of the MIA
addresses manufacturer characteristics
and market trends. Specifically, the MIA
considers such factors as manufacturing
capacity, competition within the
industry, the cumulative impact of other
DOE and non-DOE regulations, and
impacts on manufacturer subgroups.
The complete MIA is outlined in
chapter 12 of the NOPR TSD.

DOE conducted the MIA for this
rulemaking in three phases. In Phase 1
of the MIA, DOE prepared a profile of
the portable AC manufacturing industry
based on the market and technology
assessment, preliminary manufacturer
interviews, and publicly available
information. This included a top-down
analysis of portable AC manufacturers
that DOE used to derive preliminary
financial inputs for the GRIM (e.g.,
revenues; materials, labor, overhead,
and depreciation expenses; selling,
general, and administrative expenses
(SGA); and R&D expenses). DOE also
used public sources of information to
further calibrate its initial
characterization of the portable AC
manufacturing industry, including SEC
10–K filings.\textsuperscript{43} Standard & Poor’s stock

17, 2003), section E (Available at:
www.whitehouse.gov/omb/memoranda/m03-
21.html).

\textsuperscript{43} Available online at www.sec.gov.
reports, \textsuperscript{44} and corporate annual reports released by both public and privately held companies.

In Phase 2 of the MIA, DOE prepared a framework industry cash flow analysis to quantify the impacts of new energy conservation standards. The GRIM uses several factors to determine a series of annual cash flows starting with the announcement of the standard and extending over a 30-year period following the effective date of the standard. These factors include annual expected revenues, costs of sales, SG&A and R&D expenses, taxes, and capital expenditures. In general, energy conservation standards can affect manufacturer cash flow in three distinct ways: (1) Create a need for increased investment; (2) raise production costs per unit; and (3) alter revenue due to higher per-unit prices and changes in sales volumes.

In addition, during Phase 2, DOE developed interview guides to distribute to manufacturers of portable ACs in order to develop other key GRIM inputs, including product and capital conversion costs, and to gather additional information on the anticipated effects of energy conservation standards on revenues, direct employment, capital assets, manufacturing capacity, industry competitiveness, and subgroup impacts.

In Phase 3 of the MIA, DOE conducted structured, detailed interviews with representative manufacturers. During these interviews, DOE discussed engineering, manufacturing, procurement, and financial topics to validate assumptions used in the GRIM and to identify key issues or concerns. See section IV.J.3 for a description of the key issues raised by manufacturers during the interviews. In Phase 3, DOE used manufacturer feedback to qualitatively assess impacts of new standards on manufacturing capacity, direct employment, and cumulative regulatory burden.

Additionally, as part of Phase 3, DOE evaluated subgroups of manufacturers that may be disproportionately impacted by new standards or that may not be accurately represented by the average cost assumptions used to develop the industry cash flow analysis. Such manufacturer subgroups may include small business manufacturers, low-volume manufacturers (LVMs), niche players, and/or manufacturers exhibiting a cost structure that largely differs from the industry average. DOE identified one potential portable AC manufacturer subgroup (small businesses) for which average cost assumptions may not hold.

Based on the size standards published by the Small Business Administration (SBA),\textsuperscript{45} to be categorized as a small business manufacturer of portable ACs under North American Industry Classification System (NAICS) code 333415 (“Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing”), a portable AC manufacturer and its affiliates may not employ more than 1,250 employees. The 1,250-employee threshold includes all employees in a business’ parent company and any subsidiaries. Using this classification in conjunction with a search of industry databases and the SBA member directory, DOE did not identify any domestic small business manufacturers of single-duct and dual-duct portable ACs that would be subject to the standards proposed in this notice.\textsuperscript{46}

The portable AC manufacturer subgroup analysis is discussed in greater detail in chapter 12 of the NOPR TSD and in section V.B.2.d of this proposed rule.

2. Government Regulatory Impact Model (GRIM)

DOE uses the GRIM to quantify the changes in industry cash flows resulting from new or amended energy conservation standards. The GRIM uses manufacturer costs, markups, shipments, and industry financial information to arrive at a series of no-new-standards case annual cash flows absent new or amended standards, beginning with the present year, 2016, and continuing through 2050. The GRIM then models changes in costs, investments, shipments, and manufacturer margins that may result from new or amended energy conservation standards and compares these results against those in the base-case forecast of annual cash flows. The primary quantitative output of the GRIM is the INPV, which DOE calculates by summing the stream of annual discounted cash flows over the full analysis period. For manufacturers of portable ACs, DOE used a real discount rate of 6.60 percent, the weighted-average cost of capital derived from industry financials and modified based on feedback received during confidential interviews with manufacturers.

The GRIM calculates cash flows using standard accounting principles and compares changes in INPV between the no-new-standards case and the various TSLS. The difference in INPV between the no-new-standards case and a standards case represents the financial impact of the new standard on manufacturers at that particular TSL. As discussed previously, DOE collected the necessary information to develop key GRIM inputs from a number of sources, including publicly available data and interviews with manufacturers (described in the next section). The GRIM results are shown in section V.B.2.a of this proposed rule. Additional details about the GRIM can be found in chapter 12 of the NOPR TSD.

a. Government Regulatory Impact Model Key Inputs

Manufacturer Production Costs

Manufacturing a higher efficiency product is typically more expensive than manufacturing a baseline product due to the use of more complex and typically more costly components. The changes in the MPCs of the analyzed products can affect the revenues, gross margins, and cash flow of the industry, making product cost data key GRIM inputs for DOE’s analysis. For each efficiency level, DOE used the MPCs developed in the engineering analysis, as described in section IV.C.2 of this proposed rule and further detailed in chapter 5 of the NOPR TSD. Additionally, DOE used information from its teardown analysis, described in section IV.C of this proposed rule, to disaggregate the MPCs into material and labor costs. These cost breakdowns and equipment markups were validated with manufacturers during interviews.

No-New-Standards Case Shipments Forecast

The GRIM estimates manufacturer revenues based on total unit shipment forecasts and the distribution of shipments by efficiency level. Changes in sales volumes and efficiency mix over time can significantly affect manufacturer finances. For this analysis, the GRIM used the NIA’s annual shipment forecasts derived from the shipments analysis from 2016 (the base year) to 2050 (the end of the analysis period). See chapter 9 of the NOPR TSD for additional details on the shipments analysis.

\textsuperscript{44} Available online at www.standardandpoors.com.

\textsuperscript{45} 65 FR 30836 (May 15, 2000), as amended at 65 FR 53531, 53544 (Sept. 5, 2000).

\textsuperscript{46} In the February 2015 TP NOPR, DOE estimated that there was one small business that manufactured portable ACs. DOE subsequently determined that this small business no longer manufactures portable ACs and, therefore, DOE estimates that there are no domestic manufacturers that meet the SBA’s definition of “small business” that currently manufacture products covered by this rulemaking.
Standards Case Shipments Forecast

For each standards case, the GRIM assumes a small, constant percentage shift in shipments to higher efficiency levels, reflecting the idea that some efficiency improvements will occur independent of new standards. The GRIM also assumes all remaining shipments of products below the projected minimum standard levels would roll up (i.e., be added) to the standard levels in response to an increase in energy conservation standards. The GRIM also assumes that demand for higher-efficiency equipment (that is, above the minimally compliant level) is a function of price, and is independent of the standard level.

Product and Capital Conversion Costs

New energy conservation standards may cause manufacturers to incur one-time conversion costs to bring their production facilities and product designs into compliance with the new standards. (See chapter 12 of the NOPR TSD.) For the purpose of the MIA, DOE classified these one-time conversion costs into two major groups: (1) Product conversion costs and (2) capital conversion costs. Product conversion costs are one-time investments in research, development, testing, and marketing, focused on making product designs comply with the new energy conservation standard. Capital conversion expenditures are one-time investments in property, plant, and equipment to adapt or change existing production facilities so that new product designs can be fabricated and assembled.

Stranded Assets

If new or amended energy conservation standards require investment in new manufacturing capital, there also exists the possibility that they will render existing manufacturing capital obsolete. If the obsolete manufacturing capital is not fully depreciated at the time new or amended standards go into effect, these assets would be stranded and the manufacturer would have to write-down the residual value that had not yet been depreciated.

DOE used multiple sources of data to evaluate the level of product and capital conversion costs and stranded assets manufacturers would likely face to comply with new energy conservation standards. DOE used manufacturer interviews to gather data on the level of investment anticipated at each proposed efficiency level and validated these assumptions using estimates of capital requirements derived from the product teardown analysis and engineering model described in section IV.C of this proposed rule. These estimates were then aggregated and scaled to derive total industry estimates of product and capital conversion costs and to protect confidential information.

In general, DOE assumes that all conversion-related investments occur between the year the final rule is published and the year by which manufacturers must comply with the new or amended standards. The investment figures used in the GRIM can be found in section V.B.2 of this proposed rule. For additional information on the estimated product conversion and capital conversion costs, see chapter 12 of the NOPR TSD.

b. Government Regulatory Impact Model Scenarios

No-New-Standards Case Markup

As discussed in section IV.D of this proposed rule, MSPs include direct manufacturing production costs (i.e., labor, material, overhead, and depreciation estimated in DOE’s MPCs) and all non-production costs (i.e., SG&A, R&D, and interest), along with profit. To calculate the MSPs in the GRIM, DOE applied manufacturer markups to the MPCs estimated in the engineering analysis. Based on publicly available financial information for manufacturers of portable ACs and comments from manufacturer interviews, DOE assumed the industry average no-new-standards case markup on production costs to be 1.42. This markup takes into account the two sourcing structures that characterize the portable AC market. Single-duct and dual-duct portable ACs sold in the United States are manufactured by overseas original equipment manufacturers (OEMs) either for sale by contract to an importer or for direct sale to retailers and builders. The engineering analysis, as detailed in chapter 5 of the NOPR TSD, estimates the cost of manufacturing at the OEM. For the OEM to importer sourcing structure, this production cost is marked up once by the OEM and again by the contracting the company who imports the product and sells it to retailers.

Markup Scenarios

Modifying the aforementioned base-case markups in the standards case yields different sets of impacts on manufacturers. For the MIA, DOE modeled two standards-case markup scenarios to represent the uncertainty regarding the potential impacts on prices and profitability for manufacturers following the implementation of new energy conservation standards: (1) A preservation of gross margin 47 (percentage) scenario; and (2) a preservation of per-unit operating profits scenario. These scenarios lead to different markup values that, when applied to the MPCs, result in varying revenue and cash flow impacts.

The preservation of gross margin as a percentage of revenues markup scenario assumes that the baseline markup of 1.42 is maintained for all products in the standards case. Typically, this scenario represents the upper bound of industry profitability as manufacturers are able to fully pass through additional costs due to standards to their customers under this scenario.

The preservation of per-unit operating profits markup scenario is similar to the preservation of gross margin as a percentage of revenues markup scenario with the exception that in the standards case, minimally compliant products lose a fraction of the baseline markup. Typically, this scenario represents the lower bound profitability and a more substantial impact on the industry as manufacturers accept a lower margin in an attempt to offer price competitive entry level products while maintaining the same level of absolute operating profits, on a per-unit basis, that they saw prior to new or amended standards. Under this scenario, gross margin as a percentage decreases in the standards case.

3. Manufacturer Interviews

To inform the MIA, DOE interviewed manufacturers with an estimated combined market share of 65 to 70 percent. These confidential interviews provided information that DOE used to evaluate the impacts of new energy conservation standards on manufacturer cash flows, manufacturing capacities, and employment levels in the portable AC industry.

During the interviews, DOE asked manufacturers to describe the major issues they anticipate to result from the energy conservation standards proposed in this rulemaking. DOE noted that manufacturer comments and concerns expressed during these interviews (and outlined below) relate to the engineering analysis presented in the February 2015 Preliminary Analysis. Information gained during these interviews helped to inform the updated analysis and

47 “Gross margin” is defined as revenues minus cost of goods sold. On a unit basis, gross margin is selling price minus manufacturer production cost. In the GRIMs, markups determine the gross margin because various markups are applied to the manufacturer production costs to reach manufacturer selling price.
Ramifications of a Single Product Class

Most manufacturers interviewed expressed concerns over the classification of single-duct and dual-duct portable ACs as in one product class for the purpose of DOE’s analysis of proposed standards for portable ACs, as this means that the two inherently different product configurations will be required to meet the same standard level. Manufacturers stated that DOE should create multiple product classes defined by different product configurations and capacity ranges, similar to DOE’s treatment of room ACs and dehumidifiers. Manufacturers justification for multiple product classes related to differences in product utility between single-duct and dual-duct portable ACs, and the potential cost burden associated with having to redesign single-duct portable AC platforms to accommodate an additional condenser duct.

Manufacturers indicated that there would be substantial conversion costs related to redesigning single-duct platforms to accommodate an additional condenser duct. At a minimum, this change would require manufacturers to retool the back of the case, which would require significant upfront investments. DOE responds to similar concerns expressed in public comments in section IV.A.2.b of this proposed rule. Details regarding DOE’s updated engineering analysis approach can be found in section IV.C of this proposed rule.

Feasibility of Design Options

Besides the cost burdens associated with adding a second duct to single-duct portable ACs, some manufacturers commented that reaching zero-percent infiltration air is not feasible using existing assembly lines, and would require an increased duct diameter in order to overcome the static pressure. DOE’s updated engineering approach no longer assumed manufacturers would rely on airflow optimization to improve efficiency. Details regarding DOE’s updated engineering analysis approach can be found in section IV.C of this proposed rule.

Test Procedure

All of the manufacturers interviewed stated that a standardized test procedure that would establish a consistent rating system for portable AC capacity and efficiency is vital for the industry. Manufacturers commented that, as a result of the lack of standardized test procedure, some portable AC manufacturers have been able to misrepresent the capacity of their products.

As discussed in section III.B of this proposed rule, the April 2016 issued TP Final Rule established the current portable AC test procedure included in appendix CC.

Impacts on Small Foreign Businesses

Some manufacturers interviewed believe that small overseas manufacturers producing portable ACs for the U.S. market may not be able to handle the potentially large investments needed to comply with new standards and test procedures. One manufacturer further noted that, at a minimum, to stay competitive, these small manufacturers would have to narrow their product offering to one or two platforms.

Impact on Shipping

Manufacturers expressed concern that transitioning from manufacturing single-duct to dual-duct units would increase shipping costs. This change would increase the size of the unit packaging and reduce the number of units that can be shipped in a standard shipping container, consequently increasing the shipping cost per unit.

For this NOPR, DOE has revised its engineering analysis approach, and no longer assumes that manufacturers would switch from single-duct to dual-duct configuration to meet any of the considered efficiency levels (the additional duct was the main driver for concerns relating to impacts on shipping costs). Details regarding DOE’s updated engineering analysis approach can be found in section IV.C. of this proposed rule.

K. Emissions Analysis

The emissions analysis consists of two components. The first component estimates the effect of potential energy conservation standards on power sector and site (where applicable) combustion emissions of CO₂, NOₓ, SOₓ, and Hg. The second component estimates the impacts of potential standards on emissions of two additional GHG, CH₄ and N₂O, as well as the reductions to emissions of all species due to “upstream” activities in the fuel production chain. These upstream activities comprise extraction, processing, and transporting fuels to the site of combustion. The associated emissions are referred to as upstream emissions.

The analysis of power sector emissions uses marginal emissions factors that were derived from data in AEO 2015, as described in section IV.M. The methodology is described in chapter 13 and chapter 15 of the NOPR TSD.

Combustion emissions of CH₄ and N₂O are estimated using emissions intensity factors published by the EPA, GHG Emissions Factors Hub.⁴⁹ The FFC

⁴⁸ Section IV.C of this NOPR describes the updated engineering analysis based on the test procedure in Appendix CC.

⁴⁹ Available at: http://www2.epa.gov/climateleadership/center-corporate-climate-leadership-ghg-emission-factors-hub.
upstream emissions are estimated based on the methodology described in chapter 15 of the NOPR TSD. The upstream emissions include both emissions from fuel combustion during extraction, processing, and transportation of fuel, and “fugitive” emissions (direct leakage to the atmosphere) of CH₄ and CO₂.

The emissions intensity factors are expressed in terms of physical units per MWh or MMBtu of site energy savings. Total emissions reductions are estimated using the energy savings calculations of the NIA.

For CH₄ and N₂O, DOE calculated emissions reduction in tons and also in terms of units of carbon dioxide equivalent (CO₂eq). Gases are converted to CO₂eq by multiplying each ton of gas by the gas’ GWP over a 100-year time horizon. Based on the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, DOE used GWP values of 28 for CH₄ and 265 for N₂O.

The AEO incorporates the projected impacts of existing air quality regulations on emissions. AEO 2015 generally represents current legislation and environmental regulations, including recent government actions, for which implementing regulations were available as of October 31, 2014. DOE’s estimation of impacts accounts for the presence of the emissions control programs discussed in the following paragraphs.

SO₂ emissions from affected electric generating units (EGUs) are subject to nationwide and regional emissions cap-and-trade programs. Title IV of the Clean Air Act sets an annual emissions cap on SO₂ for affected EGUs in the 48 contiguous States and the District of Columbia (D.C.). (42 U.S.C. 7651 et seq.) SO₂ emissions from 28 eastern States and D.C. were also limited under the Clean Air Interstate Rule (CAIR). 70 FR 25162 (May 12, 2005). CAIR created an allowance-based trading program that operates along with the Title IV program. In 2008, CAIR was remanded to EPA by the U.S. Court of Appeals for the District of Columbia Circuit, but it remained in effect. In 2011, EPA issued a replacement for CAIR, the Cross-State Air Pollution Rule (CSAPR), 76 FR 48208 (Aug. 8, 2011). On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR. and the court ordered EPA to continue administering CAIR. On April 29, 2014, the U.S. Supreme Court reversed the judgment of the D.C. Circuit and remanded the case for further proceedings consistent with the Supreme Court’s opinion. On October 23, 2014, the D.C. Circuit lifted the stay of CSAPR. Pursuant to this action, CSAPR went into effect (and CAIR ceased to be in effect) as of January 1, 2015.

EIA was not able to incorporate CSAPR into AEO 2015, so it assumes implementation of CAIR. Although DOE’s analysis used emissions factors that assume that CAIR, not CSAPR, is the regulation in force, the difference between CAIR and CSAPR is not relevant for the purpose of DOE’s analysis of emissions impacts from energy conservation standards.

The attainment of emissions caps is typically flexible among EGUs and is enforced through the use of emissions allowances and tradable permits. Under existing EPA regulations, any excess SO₂ emissions allowances resulting from the lower electricity demand caused by the adoption of an efficiency standard could be used to permit offsetting increases in SO₂ emissions by any regulated EGU. In past rulemakings, DOE recognized that there was uncertainty about the effects of efficiency standards on SO₂ emissions covered by the existing cap-and-trade system, but it concluded that negligible reductions in power sector SO₂ emissions would occur as a result of standards.

Beginning in 2016, however, SO₂ emissions will fall as a result of the Mercury and Air Toxics Standards (MATS) for power plants. 77 FR 9304 (Feb. 16, 2012). In the MATS rule, EPA established a standard for hydrogen chloride as a surrogate for acid gas hazardous air pollutants (HAP), and also established a standard for SO₂ (a non-HAP acid gas) as an alternative equivalent surrogate standard for acid gas HAP. The same controls are used to reduce HAP and non-HAP acid gas; thus, SO₂ emissions will be reduced as a result of the control technologies installed on coal-fired power plants to comply with the MATS requirements for acid gas. AEO 2015 assumes that, in order to continue operating, coal plants must have either flue gas desulfurization or dry sorbent injection systems installed by 2016. Both technologies, which are used to reduce acid gas emissions, also reduce SO₂ emissions. Under the MATS, emissions will be far below the cap established by CAIR, so it is unlikely that excess SO₂ emissions allowances resulting from the lower electricity demand would be needed or used to permit offsetting increases in SO₂ emissions by any regulated EGU. Therefore, DOE believes that energy conservation standards will generally reduce SO₂ emissions in 2016 and beyond.

CAIR established a cap on NOₓ emissions in 28 eastern States and the District of Columbia. Energy conservation standards are expected to have little effect on NOₓ emissions in those States covered by CAIR because excess NOₓ emissions allowances resulting from the lower electricity demand could be used to permit offsetting increases in NOₓ emissions from other facilities. However, standards would be expected to reduce NOₓ emissions in the States not affected by the caps, so DOE estimated NOₓ emissions reductions from the standards considered in this NOPR for these States.

The MATS limit mercury emissions from power plants, but they do not include emissions caps and, as such, DOE’s energy conservation standards would likely reduce Hg emissions. DOE estimated mercury emissions reduction using emissions factors based on AEO 2015, which incorporates the MATS.
L. Monetizing Carbon Dioxide and Other Emissions Impacts

As part of the development of this proposed rule, DOE considered the estimated monetary benefits from the reduced emissions of CO₂ and NOx that are expected to result from each of the TSLs considered. In order to make this calculation analogous to the calculation of the NPV of consumer benefit, DOE considered the reduced emissions expected to result over the lifetime of products shipped in the forecast period for each TSL. This section summarizes the basis for the monetary values used for each of these emissions and presents the values considered in this NOPR.

1. Social Cost of Carbon

The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) climate-change-related changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Estimates of the SCC are provided in dollars per metric ton of CO₂. A domestic SCC value is meant to reflect the value of damages in the United States resulting from a unit change in CO₂ emissions, while a global SCC value is meant to reflect the value of damages worldwide.

Under section 1(b) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), agencies must, to the extent permitted by law, “assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.” The purpose of the SCC estimates presented here is to allow agencies to incorporate the monetized social benefits of reducing CO₂ emissions into cost-benefit analyses of regulatory actions. The estimates are presented with an acknowledgement of the many uncertainties involved and with a clear understanding that they should be updated over time to reflect increasing knowledge of the science and economics of climate impacts.

As part of the interagency process that developed these SCC estimates, technical experts from numerous agencies met on a regular basis to consider public comments, explore the technical literature in relevant fields, and discuss key model inputs and assumptions. The main objective of this process was to develop a range of SCC values using a defensible set of input assumptions grounded in the existing scientific and economic literatures. In this way, key uncertainties and model differences transparently and consistently inform the range of SCC estimates used in the rulemaking process.

a. Monetizing Carbon Dioxide Emissions

When attempting to assess the incremental economic impacts of CO₂ emissions, the analyst faces a number of challenges. A report from the National Research Council 57 points out that any assessment will suffer from uncertainty, speculation, and lack of information about: (1) Future emissions of GHGs; (2) the effects of past and future emissions on the climate system; (3) the impact of changes in climate on the physical and biological environment; and (4) the translation of these environmental impacts into economic damages. As a result, any effort to quantify and monetize the harms associated with climate change raises questions of science, economics, and ethics and should be viewed as provisional.

Despite the limits of both quantification and monetization, SCC estimates can be useful in estimating the social benefits of reducing CO₂ emissions. The agency can estimate the benefits from reduced (or costs from increased) emissions in any future year by multiplying the change in emissions in that year by the SCC values appropriate for that year. The NPV of the benefits can then be calculated by multiplying each of these future benefits by an appropriate discount factor and summing across all affected years.

The interagency process is committed to updating these estimates as the science and economic understanding of climate change and its impacts on society improves over time. In the meantime, the interagency group will continue to explore the issues raised by this analysis and consider public comments as part of the ongoing interagency process.

b. Development of Social Cost of Carbon Values

In 2009, an interagency process was initiated to offer a preliminary assessment of how best to quantify the benefits from reducing CO₂ emissions. To ensure consistency in how benefits are evaluated across Federal agencies, the Administration sought to develop a transparent and defensible method, specifically designed for the rulemaking process, to quantify avoided climate change damages from reduced CO₂ emissions. The interagency group did not undertake any original analysis. Instead, it combined SCC estimates from the existing literature to use as interim values until a more comprehensive analysis could be conducted. The outcome of the preliminary assessment by the interagency group was a set of five interim values: Global SCC estimates for 2007 (in 2006$) of $55, $33, $19, $10, and $5 per metric ton of CO₂. These interim values represented the first sustained interagency effort within the U.S. government to develop an SCC for use in regulatory analysis. The results of this preliminary effort were presented in several proposed and final rules.

c. Current Approach and Key Assumptions

After the release of the interim values, the interagency group reconvened on a regular basis to generate improved SCC estimates. Specially, the group considered public comments and further explored the technical literature in relevant fields. The interagency group relied on three integrated assessment models commonly used to estimate the SCC: The FUND, DICE, and PAGE models. These models are frequently cited in the peer-reviewed literature and were used in the last assessment of the Intergovernmental Panel on Climate Change (IPCC). Each model was given equal weight in the SCC values that were developed.

Each model takes a slightly different approach to model how changes in emissions result in changes in economic damages. A key objective of the interagency process was to enable a consistent exploration of the three models, while respecting the different approaches to quantifying damages taken by the key modelers in the field. An extensive review of the literature was conducted to select three sets of input parameters for these models: Climate sensitivity, socio-economic and emissions trajectories, and discount rates. A probability distribution for climate sensitivity was specified as an input into all three models. In addition, the interagency group used a range of scenarios for the socio-economic parameters and a range of values for the discount rate. All other model features were left unchanged, relying on the model developers’ best estimates and judgments.

In 2010, the interagency group selected four sets of SCC values for use in regulatory analyses. These sets of values are based on the average SCC from the three integrated assessment

models, at discount rates of 2.5, 3, and 5 percent. The fourth set, which represents the 95th percentile SCC estimate across all three models at a 3-percent discount rate, was included to represent higher-than-expected impacts from climate change further out in the tails of the SCC distribution. The values grow in real terms over time. Additionally, the interagency group determined that a range of values from 7 percent to 23 percent should be used to adjust the global SCC to calculate domestic effects, although preference is given to consideration of the global benefits of reducing CO₂ emissions. Table IV.12 presents the values in the 2010 interagency group report, which is reproduced in appendix 14A of the NOPR TSD.

### Table IV.12—Annual SCC Values from 2010 Interagency Report, 2010–2050

<table>
<thead>
<tr>
<th>Year</th>
<th>Discount rate</th>
<th>Average</th>
<th>Average</th>
<th>Average</th>
<th>95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>3%</td>
<td>2.5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>4.7</td>
<td>21.4</td>
<td>35.1</td>
<td>64.9</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>5.7</td>
<td>23.8</td>
<td>38.4</td>
<td>72.8</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>6.8</td>
<td>26.3</td>
<td>41.7</td>
<td>80.7</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>8.2</td>
<td>29.6</td>
<td>45.9</td>
<td>90.4</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>9.7</td>
<td>32.8</td>
<td>50.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>11.2</td>
<td>36.0</td>
<td>54.2</td>
<td>109.7</td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>12.7</td>
<td>39.2</td>
<td>58.4</td>
<td>119.3</td>
<td></td>
</tr>
<tr>
<td>2045</td>
<td>14.2</td>
<td>42.1</td>
<td>61.7</td>
<td>127.8</td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td>15.7</td>
<td>44.9</td>
<td>65.0</td>
<td>136.2</td>
<td></td>
</tr>
</tbody>
</table>

The SCC values used for this proposed rule were generated using the most recent versions of the three integrated assessment models that have been published in the peer-reviewed literature, as described in the 2013 update from the interagency working group (revised July 2015). Table IV.13 shows the updated sets of SCC estimates from the latest interagency update in 5-year increments from 2010 to 2050. The full set of annual SCC values between 2010 and 2050 is reported in appendix 14B of the NOPR TSD. The central value that emerges is the average SCC across models at the 3-percent discount rate. However, for purposes of capturing the uncertainties involved in regulatory impact analysis, the interagency group emphasizes the importance of including all four sets of SCC values.

### Table IV.13—Annual SCC Values from 2013 Interagency Update (Revised July 2015), 2010–2050

<table>
<thead>
<tr>
<th>Year</th>
<th>Discount rate</th>
<th>Average</th>
<th>Average</th>
<th>Average</th>
<th>95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>3%</td>
<td>2.5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>10</td>
<td>31</td>
<td>50</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>36</td>
<td>56</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>12</td>
<td>42</td>
<td>62</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>14</td>
<td>46</td>
<td>66</td>
<td>138</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>16</td>
<td>50</td>
<td>73</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>18</td>
<td>55</td>
<td>78</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>21</td>
<td>60</td>
<td>84</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>2045</td>
<td>23</td>
<td>64</td>
<td>89</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td>26</td>
<td>69</td>
<td>95</td>
<td>212</td>
<td></td>
</tr>
</tbody>
</table>

It is important to recognize that a number of key uncertainties remain, and that current SCC estimates should be treated as provisional and revisable because they will evolve with improved scientific and economic understanding. The interagency group also recognizes that the existing models are imperfect and incomplete. The National Research Council report mentioned previously points out that there is tension between the goal of producing quantified estimates of the economic damages from an incremental ton of carbon and the limits of existing efforts to model these effects. There are a number of analytical challenges that are being addressed by the research community, including research programs housed in many of the Federal agencies participating in the interagency process to estimate the SCC. The interagency group intends to periodically review and reconsider those estimates to reflect increasing.

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58 It is recognized that this calculation for domestic values is approximate, provisional, and highly speculative. There is no a priori reason why domestic benefits should be a constant fraction of net global damages over time.


knowledge of the science and economics of climate impacts, as well as improvements in modeling.\textsuperscript{61}

In summary, in considering the potential global benefits resulting from reduced CO\textsubscript{2} emissions, DOE used the values from the 2013 interagency report (revised July 2015), adjusted to 2014S using the implicit price deflator for gross domestic product (GDP) from the Bureau of Economic Analysis. For each of the four sets of SCC cases specified, the values for emissions in 2015 were $12.2, $40.0, $62.3, and $117 per metric ton avoided (values expressed in 2014S). DOE derived values after 2050 using the relevant growth rates for the 2040–2050 period in the interagency update.

DOE multiplied the CO\textsubscript{2} emissions reduction estimated for each year by the SCC value for that year in each of the four cases. To calculate a present value of the stream of monetary values, DOE discounted the values in each of the four cases using the specific discount rate that had been used to obtain the SCC values in each case.

2. Social Cost of Other Air Pollutants

As noted previously, DOE has estimated how the considered energy conservation standards would decrease power sector NO\textsubscript{X} emissions in those 22 States not affected by the CAIR. DOE estimated the monetized value of net NO\textsubscript{X} emissions reductions resulting from each of the TSLs considered for this NOPR based on estimates developed by EPA for 2016, 2020, 2025, and 2030. The values reflect estimated mortality and morbidity per ton of directly emitted NO\textsubscript{X} reduced by electricity generating units. EPA developed estimates using a 3-percent and a 7-percent discount rate to discount future emissions-related costs. The values in 2016 are $5,562/ton using a 3-percent discount rate and $4,920/ton using a 7-percent discount rate (2014S). DOE extrapolated values after 2030 using the average annual rate of growth in 2016–2030. DOE multiplied the emissions reduction (tons) in each year by the associated $/ton values, and then discounted each series using discount rates of 3 percent and 7 percent as appropriate.

DOE is evaluating appropriate monetization of avoided SO\textsubscript{2} and Hg emissions in energy conservation standards rulemakings. DOE has not included monetization of those emissions in the current analysis.

M. Utility Impact Analysis

The utility impact analysis estimates several effects on the electric power industry that would result from the adoption of new or amended energy conservation standards. The utility impact analysis estimates the changes in installed electrical capacity and generation that would result for each TSL. The analysis is based on published output from the NEMS associated with AEO 2015. NEMS produces the AEO Reference case, as well as a number of side cases that estimate the economy-wide impacts of changes to energy supply and demand. DOE uses published side cases to estimate the marginal impacts of reduced energy demand on the utility sector. These marginal factors are estimated based on the changes to electricity sector generation, installed capacity, fuel consumptions in the AEO Reference case and various side cases. Details of the methodology are provided in the appendices to chapters 13 and 15 of the NOPR TSD.

The output of this analysis is a set of time-dependent coefficients that capture the change in electricity generation, primary fuel consumption, installed capacity and power sector emissions due to a unit reduction in demand for a given end use. These coefficients are multiplied by the stream of electricity savings calculated in the NIA to provide estimates of selected utility impacts of new or amended energy conservation standards.

N. Employment Impact Analysis

DOE considers employment impacts in the domestic economy as one factor in selecting a proposed standard. Employment impacts from new or amended energy conservation standards include both direct and indirect impacts. Direct employment impacts are any changes in the number of employees of manufacturers of the products subject to standards, their suppliers, and related service firms. The MIA addresses those impacts. Indirect employment impacts are changes in national employment that occur due to the shift in expenditures and capital investment caused by the purchase and operation of more-efficient appliances. Indirect employment impacts from standards consist of the net jobs created or eliminated in the national economy, other than in the manufacturing sector being regulated. As with the TSL, DOE estimated how the considered energy conservation standards would decrease power sector NO\textsubscript{X} emissions in those 22 States not affected by the CAIR. DOE estimated the monetized value of net NO\textsubscript{X} emissions reductions resulting from each of the TSLs considered for this NOPR based on estimates developed by EPA for 2016, 2020, 2025, and 2030. The values reflect estimated mortality and morbidity per ton of directly emitted NO\textsubscript{X} reduced by electricity generating units. EPA developed estimates using a 3-percent and a 7-percent discount rate to discount future emissions-related costs. The values in 2016 are $5,562/ton using a 3-percent discount rate and $4,920/ton using a 7-percent discount rate (2014S). DOE extrapolated values after 2030 using the average annual rate of growth in 2016–2030. DOE multiplied the emissions reduction (tons) in each year by the associated $/ton values, and then discounted each series using discount rates of 3 percent and 7 percent as appropriate.

DOE is evaluating appropriate monetization of avoided SO\textsubscript{2} and Hg emissions in energy conservation standards rulemakings. DOE has not included monetization of those emissions in the current analysis.

Data on industry employment, hours, labor compensation, value of production, and the implicit price deflator for output for these industries are available upon request by calling the Division of Industry Productivity Studies (202–691–5618) or by sending a request by email to dipsweb@bls.gov.


J.M. Roop, M.I. Scott, and R.W. Schultz, ImSET 3.1: Impact of Sector Energy Technologies version 3.1.1 (ImSET). 64 ImSET is a special-purpose version of the “U.S. Benchmark National Input-Output” (I–O) model, which was designed to estimate the national employment and income effects of energy-saving technologies. The ImSET software includes a computer-based I–O model having structural coefficients that characterize economic flows among 187 sectors most relevant to industrial,
commercial, and residential building energy use.

DOE notes that ImSET is not a general equilibrium forecasting model, and understands the uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Because ImSET does not incorporate price changes, the employment effects predicted by ImSET may over-estimate actual job impacts over the long run for this rule. Therefore, DOE generated results for near-term timeframes, where these uncertainties are reduced. For more details on the employment impact analysis, see chapter 16 of the NOPR TSD.

V. Analytical Results

The following section addresses the results from DOE’s analyses with respect to potential energy conservation standards for portable ACs. It addresses the TSLs examined by DOE and the projected impacts of each of these levels if adopted as energy conservation standards for portable ACs. Additional details regarding DOE’s analyses are contained in the NOPR TSD supporting this proposed rule.

A. Trial Standard Levels

DOE analyzed the benefits and burdens of four TSLs for portable ACs. These TSLs were developed by combining specific efficiency levels for each of the product classes analyzed by DOE. DOE presents the results for the TSLs in this document, while the results for all efficiency levels that DOE analyzed are contained in the NOPR TSD.

Table V.1 presents the TSLs, corresponding efficiency levels, and average EERs and CEERs at each level for portable ACs. TSL 4 represents the maximum technologically feasible (“max-tech”) energy efficiency. TSL 3 consists of an intermediate efficiency level below the max-tech level, corresponding to the single highest efficiency observed in DOE’s test sample. TSL 2 represents the maximum available efficiency across the full range of capacities, and TSL 1 represents an intermediate level between the baseline and TSL 2.

### Table V.1—Trial Standard Levels for Portable Air Conditioners

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>EER</th>
<th>CEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>5.99</td>
<td>5.97</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>7.20</td>
<td>7.19</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>8.47</td>
<td>8.47</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>10.52</td>
<td></td>
</tr>
</tbody>
</table>

B. Economic Justification and Energy Savings

1. Economic Impacts on Individual Consumers

DOE analyzed the economic impacts on portable AC consumers by looking at the effects potential new standards at each TSL would have on the LCC and PBP. DOE also examined the impacts of potential new standards on consumer subgroups. These analyses are discussed below.

a. Life-Cycle Cost and Payback Period

In general, higher-efficiency products affect consumers in two ways: (1) Increase of purchase price, and (2) decrease of annual operating costs. Inputs used for calculating the LCC and PBP include total installed costs (i.e., product price plus installation costs), and operating costs (i.e., annual energy use, energy prices, energy price trends, repair costs, and maintenance costs).

The LCC calculation also uses product lifetime and a discount rate. Chapter 8 of the NOPR TSD provides detailed information on the LCC and PBP analyses.

Table V.2 through Table V.7 show the LCC and PBP results for the TSL and efficiency levels considered for portable ACs for both sectors, residential, and commercial. The LCC results presented in Table V.2 and Table V.3 combined the results for residential and commercial users, which means that DOE had to assign an appropriate weight to the results for each type of user. Using the weighting from the room AC rulemaking, DOE assumed that 88 percent of shipments are to the residential sector and 12 percent are to the commercial sector. In the first of each pair of tables, the simple payback is measured relative to the baseline product (EL 0). In the second table, the impacts are measured relative to the efficiency distribution in the no-new-standards case in the compliance year (see section IV.F of this proposed rule). Because some consumers purchase products with higher efficiency in the no-new-standards case, the average savings are less than the difference between the average LCC of EL 0 and the average LCC at each TSL. The savings refer only to consumers who are affected by a standard at a given TSL. Those who already purchase a product with efficiency at or above a given TSL are not affected. Consumers for whom the LCC increases at a given TSL experience a net cost.

### Table V.2—Average LCC and PBP Results by Efficiency Level, Residential Setting

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs 2014$</th>
<th>Simple payback years</th>
<th>Average lifetime years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year’s operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>583</td>
<td>125</td>
<td>1,067</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>629</td>
<td>110</td>
<td>937</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>652</td>
<td>94</td>
<td>800</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>676</td>
<td>82</td>
<td>697</td>
</tr>
</tbody>
</table>

Note: The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline (EL 0) product.

TABLE V.3—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR RESIDENTIAL SETTING

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average LCC savings *2014$</th>
<th>Percent of consumers that experience net cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>84</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>144</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>194</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>242</td>
<td>31</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.

TABLE V.4—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL, COMMERCIAL SETTING

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs 2014$</th>
<th>Simple payback years</th>
<th>Average lifetime years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year's operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>583</td>
<td>234</td>
<td>1,881</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>629</td>
<td>205</td>
<td>1,648</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>652</td>
<td>175</td>
<td>1,403</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>676</td>
<td>152</td>
<td>1,219</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>750</td>
<td>126</td>
<td>1,008</td>
</tr>
</tbody>
</table>

Note: The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline (EL 0) product.

TABLE V.5—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR COMMERCIAL SETTING

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average LCC savings *2014$</th>
<th>Percent of consumers that experience net cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>188</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>292</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>392</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>528</td>
<td>9</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.

TABLE V.6—AVERAGE LCC AND PBP RESULTS BY EFFICIENCY LEVEL, BOTH SECTORS

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average costs 2014$</th>
<th>Simple payback years</th>
<th>Average lifetime years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Installed cost</td>
<td>First year's operating cost</td>
<td>Lifetime operating cost</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>583</td>
<td>139</td>
<td>1,165</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>629</td>
<td>122</td>
<td>1,022</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>652</td>
<td>104</td>
<td>872</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>676</td>
<td>90</td>
<td>759</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>750</td>
<td>74</td>
<td>626</td>
</tr>
</tbody>
</table>

Note: The results for each TSL are calculated assuming that all consumers use products at that efficiency level. The PBP is measured relative to the baseline (EL 0) product.

TABLE V.7—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR BOTH SECTORS

<table>
<thead>
<tr>
<th>TSL</th>
<th>EL</th>
<th>Average LCC savings *2014$</th>
<th>Percent of consumers that experience net cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>97</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>162</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>218</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>276</td>
<td>28</td>
</tr>
</tbody>
</table>

* The savings represent the average LCC for affected consumers.
As discussed in section IV.E, DOE conducted a sensitivity analysis that assumes consumers use portable ACs 50 percent less than room ACs. For the proposed standard, TSL 2, the average LCC savings declines to $60 and 26 percent of consumers experience a net cost under the sensitivity analysis. See appendix 8F of the NOPR TSD for additional information.

b. Consumer Subgroup Analysis

In the consumer subgroup analysis, DOE estimated the impact of the considered TSLs on low-income households, senior-only households, and small businesses. Table V.8 compares the average LCC savings and PBP at each EL for the three consumer subgroups, along with the average LCC savings for the entire sample. In most cases, the average LCC savings and PBP for low-income households and small businesses at the considered efficiency levels are not substantially different from the average for all households. Chapter 11 of the NOPR TSD presents the complete LCC and PBP results for the subgroups.

<table>
<thead>
<tr>
<th>TSL</th>
<th>Average life-cycle cost savings (2014$)</th>
<th>Simple payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-income households</td>
<td>Senior-only households</td>
</tr>
<tr>
<td>1</td>
<td>115</td>
<td>84</td>
</tr>
<tr>
<td>2</td>
<td>187</td>
<td>144</td>
</tr>
<tr>
<td>3</td>
<td>250</td>
<td>194</td>
</tr>
<tr>
<td>4</td>
<td>324</td>
<td>242</td>
</tr>
</tbody>
</table>

c. Rebuttable Presumption Payback

As discussed in section III.E.2, EPCA establishes a rebuttable presumption that an energy conservation standard is economically justified if the increased purchase cost for a product that meets the standard is less than three times the value of the first-year energy savings resulting from the standard. In calculating a rebuttable presumption payback period for each of the considered TSLs, DOE used discrete values, and, as required by EPCA, based the energy use calculation on the DOE test procedure for portable ACs. In contrast, the PBPs presented in section V.B.1.a were calculated using distributions for input values, with energy use based on field metering studies and RECS data.

Table V.9 presents the rebuttable-presumption payback periods for the considered TSLs. While DOE examined the rebuttable-presumption criterion, it considered whether the standard levels considered for the NOPR are economically justified through a more detailed analysis of the economic impacts of those levels, pursuant to 42 U.S.C. 6295(o)(2)(B)(i), that considers the full range of impacts to the consumer, manufacturer, Nation, and environment. The results of that analysis serve as the basis for DOE to definitively evaluate the economic justification for a potential standard level, thereby supporting or rebutting the results of any preliminary determination of economic justification. Table V.9 shows the rebuttable presumption PBPs for the considered TSLs for portable ACs.

<table>
<thead>
<tr>
<th>Trial standard level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>2.1</td>
<td>1.5</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Commercial</td>
<td>2.8</td>
<td>2.1</td>
<td>2.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Both sectors</td>
<td>2.2</td>
<td>1.6</td>
<td>1.6</td>
<td>2.1</td>
</tr>
</tbody>
</table>

2. Economic Impacts on Manufacturers

DOE performed an MIA to estimate the impact of new energy conservation standards on portable AC manufacturers. The section below describes the expected impacts on manufacturers at each TSL. Chapter 12 of the NOPR TSD explains the analysis in further detail.

a. Industry Cash Flow Analysis Results

The following tables illustrate the estimated financial impacts (represented by changes in INPV) of new energy conservation standards on portable AC manufacturers, as well as the conversion costs that DOE estimates manufacturers would incur at each TSL. To evaluate the range of cash-flow impacts on the portable AC manufacturing industry, DOE used two different markup scenarios to model the range of anticipated market responses to new energy conservation standards.

To assess the lower (less severe) end of the range of potential impacts, DOE modeled a preservation of gross margin percentage markup scenario, in which a flat markup of 1.42 (i.e., the baseline manufacturer markup) is applied across all efficiency levels. In this scenario, DOE assumed that a manufacturer’s absolute dollar markup would increase as production costs increase in the new energy conservation standards case. During interviews, manufacturers have indicated that it is optimistic to assume that they would be able to maintain the same gross margin markup as their production costs increase in response to a new energy conservation standard, particularly at higher TSLs.

To assess the higher (more severe) end of the range of potential impacts, DOE modeled the preservation of per-unit operating profit markup scenario, which assumes that manufacturers would not be able to preserve the same overall gross margin, but instead would cut their markup for minimally compliant
products to maintain a cost competitive product offering while maintaining the same overall level of operating profit in absolute dollars as in the no-new-standards case. The two tables below show the range of potential INPV impacts for manufacturers of portable ACs. Table V.10 reflects the lower bound of impacts (higher profitability) and Table V.11 represents the upper bound of impacts (lower profitability). Each scenario results in a unique set of cash flows and corresponding industry values at each TSL. In the following discussion, the INPV results refer to the sum of discounted cash flows through 2050, the difference in INPV between the no-new-standards case and each standards case, and the total industry conversion costs required for each standards case.

**Table V.10—Manufacturer Impact Analysis Under the Preservation of Gross Margin Percentage Markup Scenario for Analysis Period (2016–2050)**

<table>
<thead>
<tr>
<th>Units</th>
<th>No-new-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014$ Millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>725.5</td>
<td>631.3</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2014$ Millions</td>
<td>49.2</td>
</tr>
<tr>
<td>Free Cash Flow (2020)</td>
<td>(%)</td>
<td>(113.7%)</td>
</tr>
<tr>
<td>Change in Free Cash Flow (2020)</td>
<td>(%)</td>
<td>(13.0%)</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2014$ Millions</td>
<td>86.5</td>
</tr>
<tr>
<td>Total Conversion Costs</td>
<td>2014$ Millions</td>
<td>139.9</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (–) values.

**Table V.11—Manufacturer Impact Analysis Under the Preservation of Per-Unit Operating Profit Markup Scenario for Analysis Period (2016–2050)**

<table>
<thead>
<tr>
<th>Units</th>
<th>No-new-standards case</th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014$ Millions</td>
<td>1</td>
</tr>
<tr>
<td>INPV</td>
<td>725.5</td>
<td>631.3</td>
</tr>
<tr>
<td>Change in INPV</td>
<td>2014$ Millions</td>
<td>49.2</td>
</tr>
<tr>
<td>Free Cash Flow (2020)</td>
<td>(%)</td>
<td>(113.7%)</td>
</tr>
<tr>
<td>Change in Free Cash Flow (2020)</td>
<td>(%)</td>
<td>(13.0%)</td>
</tr>
<tr>
<td>Capital Conversion Costs</td>
<td>2014$ Millions</td>
<td>86.5</td>
</tr>
<tr>
<td>Total Conversion Costs</td>
<td>2014$ Millions</td>
<td>139.9</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (–) values.

Beyond impacts on INPV, DOE includes a comparison of free cash flow between the no-new-standards case and the standards case at each TSL in the year before new standards take effect to provide perspective on the short-run cash flow impacts in the discussion of the results below.

At TSL 1, the industry as a whole is expected to incur $53.4 million in product conversion costs associated to upfront research, development, testing, and certification; as well as $86.5 million in one-time investments in property, plant, and equipment (PP&E) necessary to manufacture updated platforms. The industry conversion cost burden at TSL 1 would be associated with updates for portable ACs sold in the U.S. that are currently at the baseline, approximately 38 percent of platforms and 29 percent of shipments. At TSL 1, roughly half of non-compliant platforms will require some new components, including a higher efficiency heat exchanger (with increases in efficiency ranging from 10 to 20 percent). Higher efficiency heat exchangers are larger and will necessitate larger chassis sizes. The remaining non-compliant portable ACs will likely require a complete platform redesign, necessitating all new components and high associated re-tooling and R&D costs.

At TSL 2, DOE estimates the impact on INPV for manufacturers of portable ACs to range from $221.7 million to $203.8 million, or a decrease in INPV of 30.6 percent to 28.1 percent under the preservation of gross margin percentage markup scenario and the preservation of per-unit operating profit markup scenario, respectively. At this TSL, industry free cash flow is estimated to decrease by approximately 246.7 percent to $72.2 million, compared to the no-new-standards case value of $49.2 million in 2020, the year before the projected compliance date.
testing, and certification; as well as $188.9 million in one-time investments in PP&E for products requiring platform updates. The industry conversion cost burden at this TSL would be associated with updates for portable ACs sold in the U.S. that are currently below the efficiency level corresponding to TSL 2, approximately 77 percent of platforms and 79 percent of shipments. At TSL 2, roughly 40 percent of non-compliant platforms will require some new components, including a higher efficiency heat exchanger (with increases in efficiency ranging from 10 to 20 percent). Higher efficiency heat exchangers are larger and will necessitate larger chassis sizes. The remaining non-compliant portable ACs will likely require a complete platform redesign, necessitating all new components and high associated re-tooling and R&D costs.

At TSL 3, DOE estimates the impact on INPV for manufacturers of portable ACs to range from $346.8 million to $306.2 million, or a decrease in INPV of 47.8 percent to 42.2 percent under the preservation of gross margin percentage markup scenario and the preservation of per-unit operating profit markup scenario, respectively. At this TSL, industry free cash flow is estimated to decrease by approximately 397.2 percent to $146.4 million, compared to the base-case value of $49.2 million in 2020, the year before the projected compliance date.

At TSL 4, the industry as a whole is expected to spend $170.8 million in product conversion costs associated with the research and development and testing and certification, as well as $305.7 million in one-time investments in PP&E for complete platform redesigns. The industry conversion cost burden at this TSL would be associated with updates for portable ACs sold in the U.S. that are currently below the efficiency level corresponding to TSL 4, approximately 100 percent of platforms and 100 percent of shipments. At TSL 4, 100 percent of non-compliant portable ACs will likely require a complete platform redesign, necessitating all new components and high associated re-tooling and R&D costs.

b. Impacts on Employment

DOE used the GRIM to estimate the domestic labor expenditures and number of domestic production workers in the no-new-standards case and at each TSL from 2016 to 2050. DOE used statistical data from the U.S. Census Bureau’s 2013 Annual Survey of Manufacturers, the results of the engineering analysis, and interviews with manufacturers to determine the inputs necessary to calculate industry-wide labor expenditures and domestic employment levels at each TSL. Labor expenditures for the manufacture of a product are a function of the labor intensity of the product, the sales volume, and an assumption that wages in real terms remain constant. DOE notes that the MIA assessment of impacts on manufacturing employment focuses specifically on the production workers manufacturing the covered products in question, rather than a manufacturer’s broader operations. Thus, the estimated number of impacted employees in the MIA is separate and distinct from the total number of employees used to determine whether a manufacturer is a small business for purposes of analysis under the Regulatory Flexibility Act.

The estimates of production workers in this section only cover those up to and including the line-supervisor level that are directly involved in fabricating and assembling a product within the OEM facility. In addition, workers that perform services that are closely associated with production operations are included. Employees above the working-supervisor level are excluded from the count of production workers. Thus, the labor associated with non-production functions (e.g., factory supervision, advertisement, sales) is explicitly not covered.66 In addition, DOE’s estimates only account for production workers that manufacture the specific products covered by this rulemaking. Finally, because DOE does not expect that this standard will impact shipments, this analysis also does not factor in the dependence by some manufacturers on production volume to make their operations viable.

In the GRIM, DOE used the labor content of each product and the manufacturing production costs from the engineering analysis to estimate the annual labor expenditures in the portable AC manufacturing industry. DOE used information gained through interviews with manufacturers to estimate the portion of the total labor expenditures that can be attributed to domestic production labor.

Because industry research and manufacturer feedback indicates that there are no single-duct or dual-duct portable ACs produced in the United States, DOE does not provide an estimate of direct employment impacts. Employment impacts in the broader U.S. economy are documented in chapter 16 of the NOPR TSD.

c. Impacts on Manufacturing Capacity

As noted in the previous section, no single-duct or dual-duct portable ACs are manufactured in the United States. Therefore, new energy conservation standards would have no impact on U.S. production capacity.

d. Impacts on Subgroups of Manufacturers

Using average cost assumptions to develop an industry cash flow estimate is not adequate for assessing differential impacts among subgroups of manufacturers. Small manufacturers, niche players, or manufacturers

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66 The U.S. Census Bureau’s 2013 Annual Survey of Manufacturers provides the following definition: “The ‘production workers’ number includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant’s own use (e.g., power plant), rework, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.”
exhibiting a cost structure that differs significantly from the industry average could be affected differently. DOE used the results of the industry characterization to group manufacturers exhibiting similar characteristics.

As previously mentioned, DOE did not identify any domestic small business manufacturers of single-duct or dual-duct portable ACs.

Additional information about the small business analysis is found in chapter 12 of the NOPR TSD and section V.B of this proposed rule.

e. Cumulative Regulatory Burden

One aspect of assessing manufacturer burden is the cumulative impact of multiple DOE standards and the regulatory actions of other Federal agencies and States that affect the manufacturers of a covered product or equipment. While any one regulation may not impose a significant burden on manufacturers, the combined effects of several existing or impending regulations may have serious consequences for some manufacturers, groups of manufacturers, or an entire industry.

Companies that produce a wider range of regulated products, including those that produce components of other products subject to regulation, may be faced with more capital and product development expenditures than their competitors. This can prompt those companies to exit the market or reduce their product offerings, potentially reducing competition. Smaller companies can be especially affected, since they have lower sales volumes over which to amortize the costs of compliance with new regulations.

DOE aims to recognize and seeks to mitigate the overlapping effects on manufacturers of new or revised DOE standards and other regulatory actions affecting the same products, components and other equipment. In addition to DOE's proposed energy conservation regulations for portable ACs, several other existing and pending regulations apply to portable ACs products and other equipment produced by the same manufacturers. DOE evaluates these regulations that could affect portable AC manufacturers that will take effect approximately 3 years before or after the 2021 compliance date of the new energy conservation standards for portable ACs and the associated costs of these rulemakings. Additionally, DOE will evaluate its approach to assessing cumulative regulatory burden for use in future rulemakings to ensure that it is effectively capturing the overlapping impacts of its regulations. In particular, DOE will assess whether looking at rules where any portion of the compliance period potentially overlaps with the compliance period for the subject rulemaking would yield more a more accurate reflection of cumulative regulatory burdens. In this regard, DOE recognizes that if it were to undertake a rulemaking to amend the standards for Consumer Room ACs pursuant to the 6-year look back requirement under 42 U.S.C. 6295(m), that future Consumer Room AC rule could have a cumulative impact with this PACs rule during the portable ACs compliance period. The compliance years and expected industry conversion costs of energy conservation standards that may also impact portable AC manufacturers are indicated in Table V.12. DOE seeks public comment on the cumulative regulatory burden to manufacturers associated with the proposed portable AC standard and on the approach DOE used in evaluating cumulative regulatory burden, including the timeframes and regulatory dates evaluated.

**Table V.12—Compliance Dates and Expected Conversion Expenses of DOE Federal Energy Conservation Standards Affecting Portable AC Manufacturers**

<table>
<thead>
<tr>
<th>DOE regulation</th>
<th>Approximate compliance dates</th>
<th>Estimated total industry conversion costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microwave Ovens 78 FR 36316 (June 17, 2013)</td>
<td>June 17, 2016 ..................</td>
<td>43.1 M (2011$)</td>
</tr>
<tr>
<td>Dehumidifiers 80 FR 31646 (June 3, 2015)</td>
<td>June 2019 .........................</td>
<td>$50.7M (2013$)†</td>
</tr>
</tbody>
</table>

†The final rule for this energy conservation standard has not been published. Therefore, the compliance date is an estimate and analysis of conversion costs have not been finalized at this time. If a value is provided for total industry conversion costs, this value represents an estimate from the NOPR.

In addition to other Federal energy conservation standards, manufacturers cited potential restrictions on the use of certain refrigerants and State-level refrigerator recovery regulations as sources of cumulative regulatory burden for portable AC manufacturers. For more details, see chapter 12, section 12.7.3 of the NOPR TSD.

3. National Impact Analysis

a. Significance of Energy Savings

To estimate the energy savings attributable to potential standards for portable ACs, DOE compared their energy consumption under the no-new-standards case to their anticipated energy consumption under each TSL. The savings are measured over the entire lifetime of products purchased in the 30-year period that begins in the year of anticipated compliance with new standards (2021–2050). Table V.13 presents DOE’s projections of the NES for each TSL considered for portable ACs. The savings were calculated using the approach described in section IV.H.2 of this proposed rule.

**Table V.13—Cumulative National Energy Savings for Portable Air Conditioners Shipped in 2021–2050**

<table>
<thead>
<tr>
<th>Savings</th>
<th>Trial standard level (quads)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Source Energy Savings</td>
<td>0.21</td>
</tr>
<tr>
<td>Full Fuel Cycle Energy Savings</td>
<td>0.22</td>
</tr>
</tbody>
</table>
OMB Circular A–4 \(^{67}\) requires agencies to present analytical results, including separate schedules of the monetized benefits and costs that show the type and timing of benefits and costs. Circular A–4 also directs agencies to consider the variability of key elements underlying the estimates of benefits and costs. For this rulemaking, DOE undertook a sensitivity analysis using nine, rather than 30, years of product shipments. The choice of a nine-year period is a proxy for the timeline in EPCA for the review of certain energy conservation standards and potential revision of and compliance with such revised standards.\(^{68}\) The review timeframe established in EPCA is generally not synchronized with the product lifetime, product manufacturing cycles, or other factors specific to portable ACs. Thus, such results are presented for informational purposes only and are not indicative of any change in DOE’s analytical methodology. The NES sensitivity analysis results based on a nine-year analytical period are presented in Table V.14. The impacts are counted over the lifetime of portable ACs purchased in 2021–2050.

### Table V.14—Cumulative National Energy Savings for Portable Air Conditioners: Nine Years of Shipments (2021–2029)

<table>
<thead>
<tr>
<th>Savings</th>
<th>Trial standard level (quads)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Energy Savings</td>
<td></td>
<td>0.04</td>
<td>0.14</td>
<td>0.23</td>
<td>0.34</td>
</tr>
<tr>
<td>Full-Fuel-Cycle Energy Savings</td>
<td></td>
<td>0.05</td>
<td>0.14</td>
<td>0.24</td>
<td>0.36</td>
</tr>
</tbody>
</table>

b. Net Present Value of Consumer Costs and Benefits

DOE estimated the cumulative NPV of the total costs and savings for consumers that would result from the TSLs considered for portable ACs. In accordance with OMB’s guidelines on regulatory analysis,\(^{69}\) DOE calculated NPV using both a 7-percent and a 3-percent real discount rate. Table V.15 shows the consumer NPV results with impacts counted over the lifetime of products purchased in 2021–2050.

### Table V.15—Cumulative Net Present Value of Consumer Benefits for Portable Air Conditioners Shipped in (2021–2050)

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Trial standard level (billion 2014$)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 percent</td>
<td></td>
<td>2.08</td>
<td>5.20</td>
<td>7.64</td>
<td>10.64</td>
</tr>
<tr>
<td>7 percent</td>
<td></td>
<td>0.81</td>
<td>2.15</td>
<td>3.23</td>
<td>4.46</td>
</tr>
</tbody>
</table>

The NPV results based on the aforementioned 9-year analytical period are presented in Table V.16. The impacts are counted over the lifetime of products purchased in 2021–2029. As mentioned previously, such results are presented for informational purposes only and are not indicative of any change in DOE’s analytical methodology or decision criteria.

### Table V.16—Cumulative Net Present Value of Consumer Benefits for Portable Air Conditioners; Nine Years of Shipments (2021–2029)

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Trial standard level (billion 2014$)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 percent</td>
<td></td>
<td>0.55</td>
<td>1.78</td>
<td>2.87</td>
<td>4.05</td>
</tr>
<tr>
<td>7 percent</td>
<td></td>
<td>0.30</td>
<td>1.01</td>
<td>1.63</td>
<td>2.28</td>
</tr>
</tbody>
</table>

The above results reflect the use of a default trend to estimate the change in price for portable ACs over the analysis period (see section IV.F.1 of this document). DOE also conducted a sensitivity analysis that considered one scenario with a lower rate of price decline than the reference case and one scenario with a higher rate of price decline than the reference case. The results of these alternative cases are presented in appendix 10C of the NOPR.

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\(^{67}\) U.S. OMB. “Circular A–4: Regulatory Analysis” (Sept. 17, 2003) [Available at: http://www.whitehouse.gov/omb/circulars_a04/a-4/].

\(^{68}\) Section 325(m) of EPCA requires DOE to review its standards at least once every 6 years, and requires, for certain products, a 3-year period after any new standard is promulgated before compliance is required, except that in no case may any new standards be required within 6 years of the compliance date of the previous standards. While adding a 6-year review to the 3-year compliance period adds up to 9 years, DOE notes that it may undertake reviews at any time within the 6-year period and that the 3-year compliance date may yield to the 6-year backstop. A 9-year analysis period may not be appropriate given the variability factors specific to portable ACs.

TSD. In the high-price-decline case, the NPV of consumer benefits is higher than in the default case. In the low-price-decline case, the NPV of consumer benefits is lower than in the default case.

c. Indirect Impacts on Employment

DOE expects energy conservation standards for portable ACs to reduce energy bills for consumers of those products, with the resulting net savings being redirected to other forms of economic activity. These expected shifts in spending and economic activity could affect the demand for labor. As described in section IV.N of this document, DOE used an input/output model of the U.S. economy to estimate indirect employment impacts of the TSLs that DOE considered in this rulemaking. DOE understands that there are uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Therefore, DOE generated results for near-term timeframes (2021–2050), where these uncertainties are reduced.

The results suggest that the proposed standards are likely to have a negligible impact on the net demand for labor in the economy. The net change in jobs is so small that it would be imperceptible in national labor statistics and might be offset by other, unanticipated effects on employment. Chapter 16 of the NOPR TSD presents detailed results regarding anticipated indirect employment impacts.

4. Impact on Utility or Performance of Products

Based on testing conducted in support of this proposed rule, discussed in chapter 5 of the NOPR TSD, DOE has tentatively concluded that the standards proposed in this NOPR would not reduce the utility or performance of the portable ACs under consideration in this rulemaking. Manufacturers of these products currently offer units that meet or exceed the proposed standards.

5. Impact of Any Lessening of Competition

As discussed in section III.E.1.e, the Attorney General determines the impact, if any, of any lessening of competition likely to result from a proposed standard, and transmits such determination in writing to the Secretary, together with any analysis of the nature and extent of such impact. To assist the Attorney General in making such determination, DOE has provided DOJ with copies of this NOPR and the accompanying TSD for review. DOE will consider DOJ’s comments on the proposed rule in determining whether to proceed to a final rule. DOE will publish and respond to DOJ’s comments in that document. DOE invites comment from the public regarding the competitive impacts that are likely to result from this proposed rule. In addition, interested parties may also provide comments separately to DOJ regarding these potential impacts. See the ADDRESSES section for information to send comments to DOJ.

6. Need of the Nation To Conserve Energy

Enhanced energy efficiency, where economically justified, improves the Nation’s energy security, strengthens the economy, and reduces the environmental impacts (costs) of energy production. Reduced electricity demand due to energy conservation standards is also likely to reduce the cost of maintaining the reliability of the electricity system, particularly during peak-load periods. As a measure of this reduced demand, chapter 15 in the NOPR TSD presents the estimated reduction in generating capacity, relative to the no-new-standards case, for the TSLs that DOE considered in this rulemaking.

Energy conservation resulting from new standards for portable ACs is expected to yield environmental benefits in the form of reduced emissions of air pollutants and GHGs. Table V.17 provides DOE’s estimate of cumulative emissions reductions expected to result from the TSLs considered in this rulemaking. The table includes both power sector emissions and upstream emissions. The emissions were calculated using the multipliers discussed in section IV.K. DOE reports annual emissions reductions for each TSL in chapter 13 of the NOPR TSD.

**TABLE V.17—CUMULATIVE EMISSIONS REDUCTION FOR PORTABLE AIR CONDITIONERS SHIPPED IN 2021–2050**

<table>
<thead>
<tr>
<th></th>
<th>Trial standard level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Power Sector Emissions</strong></td>
<td></td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>14.6</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>8.0</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>16.5</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.03</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>1.2</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Upstream Emissions</strong></td>
<td></td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>0.8</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>0.2</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>12.2</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.00</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>67.3</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Total FFC Emissions</strong></td>
<td></td>
</tr>
<tr>
<td>CO₂ (million metric tons)</td>
<td>15.5</td>
</tr>
<tr>
<td>SO₂ (thousand tons)</td>
<td>8.2</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>28.7</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.03</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>68.5</td>
</tr>
<tr>
<td>CH₂Cl₂ (thousand tons CO₂eq)</td>
<td>1.917</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.2</td>
</tr>
<tr>
<td>N₂O (thousand tons CO₂eq)</td>
<td>45.5</td>
</tr>
</tbody>
</table>

* CO₂eq is the quantity of CO₂ that would have the same GWP.
As part of the analysis for this proposed rule, DOE estimated monetary benefits likely to result from the reduced emissions of CO\textsubscript{2} and NO\textsubscript{X} that DOE estimated for each of the considered TSls for portable ACs. As discussed in section IV.L of this document, for CO\textsubscript{2}, DOE used the most recent values for the SCC developed by an interagency process. The four sets of SCC values for CO\textsubscript{2} emissions reductions in 2015 resulting from that process (expressed in 2014\$) are represented by $12.2/metric ton (the average value from a distribution that uses a 5-percent discount rate), $40.0/metric ton (the average value from a distribution that uses a 3-percent discount rate), $62.3/metric ton (the average value from a distribution that uses a 2.5-percent discount rate), and $117/metric ton (the 95th-percentile value from a distribution that uses a 3-percent discount rate). The values for later years are higher due to increasing damages (public health, economic and environmental) as the projected magnitude of climate change increases.

Table V.18 presents the global value of CO\textsubscript{2} emissions reductions at each TSL. For each of the four cases, DOE calculated a present value of the stream of annual values using the same discount rate as was used in the studies upon which the dollar-per-ton values are based. DOE calculated domestic values as a range from 7 percent to 23 percent of the global values; these results are presented in chapter 14 of the NOPR TSD.

Table V.18—Estimates of Global Present Value of CO\textsubscript{2} Emissions Reduction for Products Shipped in 2021–2050

<table>
<thead>
<tr>
<th>TSL</th>
<th>5% discount rate, average (million 2014$)</th>
<th>3% discount rate, average</th>
<th>2.5% discount rate, average</th>
<th>3% discount rate, 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
<td>241</td>
<td>362</td>
<td>532</td>
</tr>
<tr>
<td></td>
<td>450</td>
<td>1,119</td>
<td>1,666</td>
<td>2,445</td>
</tr>
<tr>
<td></td>
<td>718</td>
<td>1,781</td>
<td>2,648</td>
<td>3,885</td>
</tr>
<tr>
<td></td>
<td>1,374</td>
<td>3,411</td>
<td>5,078</td>
<td>7,452</td>
</tr>
</tbody>
</table>

Power Sector Emissions

<table>
<thead>
<tr>
<th>TSL</th>
<th>5% discount rate, average (million 2014$)</th>
<th>3% discount rate, average</th>
<th>2.5% discount rate, average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>117.5</td>
<td>47.4</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td>47.4</td>
<td>27.0</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>21.3</td>
<td>27.0</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>117.5</td>
<td>47.4</td>
<td>21.3</td>
</tr>
</tbody>
</table>

Upstream Emissions

Total FFC Emissions

TABLE V.19—Estimates of Present Value of NO\textsubscript{X} Emissions Reduction for Portable Air Conditioners Shipped in 2021–2050

<table>
<thead>
<tr>
<th>TSL</th>
<th>3% Discount rate</th>
<th>7% Discount rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Million 2014$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power Sector Emissions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>26.6</td>
<td>10.1</td>
</tr>
<tr>
<td>2</td>
<td>67.4</td>
<td>27.0</td>
</tr>
<tr>
<td>3</td>
<td>101.2</td>
<td>41.4</td>
</tr>
<tr>
<td>4</td>
<td>148.8</td>
<td>61.2</td>
</tr>
<tr>
<td></td>
<td>Upstream Emissions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>21.3</td>
<td>7.9</td>
</tr>
<tr>
<td>2</td>
<td>53.5</td>
<td>21.0</td>
</tr>
<tr>
<td>3</td>
<td>80.0</td>
<td>32.1</td>
</tr>
<tr>
<td>4</td>
<td>117.5</td>
<td>47.4</td>
</tr>
<tr>
<td></td>
<td>Total FFC Emissions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>47.9</td>
<td>18.0</td>
</tr>
<tr>
<td>2</td>
<td>120.9</td>
<td>47.9</td>
</tr>
<tr>
<td>3</td>
<td>181.2</td>
<td>73.5</td>
</tr>
</tbody>
</table>
Two issues are relevant in considering the above results. First, the national 
operating cost savings are domestic U.S. 
monetary savings that occur as a result 
of market transactions, while the value of 
CO₂ reductions is based on a global 
value. Second, the assessments of 
operating cost savings and the SCC are 
performed with different methods that 
use different time frames for analysis. 
The national operating cost savings is 
measured for the lifetime of products 
shipped in 2021 to 2050. Because CO₂ 
emissions have a very long residence 
time in the atmosphere,70 the SCC 
values in future years reflect future CO₂ 
emissions impacts that continue beyond 
2100.

C. Conclusion

When considering proposed 
standards, the new or amended energy 
conservation standard that DOE adopts 
for any type (or class) of covered 
product must be designed to achieve the 
maximum improvement in energy 
efficiency that the Secretary determines 
is technologically feasible and 
economically justified. (42 U.S.C. 
6295(o)[2](B)(i)(VII)) In determining whether a standard is 
economically justified, may consider any 
other factors that the Secretary 
determines to be relevant. (42 U.S.C. 
6295(o)[2](A)) In determining whether a standard is 
economically justified, the 
Secretary must determine whether the 
benefits of the standard exceed its 
burdens, considering to the greatest 
extent practicable the seven statutory 
Factors discussed previously. (42 U.S.C. 
6295(o)[2](B)(i)) The new or amended 
standard must also “result in significant 
conservation of energy.” (42 U.S.C. 
6295(o)[3](B))

DOE considered the impacts of 
standards at each TSL, beginning with a 
maximum technologically feasible 
level, to determine whether that level 
was economically justified. Where the 
max-tech level was not justified, DOE 
thensidered the next most efficient 
level and undertook the same evaluation 
until it reached the highest TSL that is 
both technologically feasible and 
economically justified and saves a 
significant amount of energy.

To aid the reader as DOE discusses 
the benefits and/or burdens of each TSL, 
tables present a summary of the results 
of DOE’s quantitative analysis for each 
TSL. In addition to the quantitative 
results presented in the tables, DOE also 
considers other burdens and benefits 
that affect economic justification. These 
include the impacts on identifiable 
subgroups of consumers, such as low-
income households and seniors, who 
may be disproportionately affected by a 
national standard (see section V.B.2.d).

DOE also notes that the economics 
literature provides a wide-ranging 
discussion of how consumers trade off 
upfront costs and energy savings in the 
absence of government intervention. 
Much of this literature attempts to 
explain why consumers appear to 
undervalue energy efficiency 
improvements. There is evidence that 
consumers undervalue future energy 
savings as a result of (1) a lack of 
information; (2) a lack of sufficient 
salience of the long-term or aggregate 
benefits; (3) a lack of sufficient savings 
to warrant delaying or altering 
purchases; (4) excessive focus on the 
short term, in the form of inconsistent 
weighting of future energy cost savings 
relative to available returns on other 
investments; (5) computational or other

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70 The atmospheric lifetime of CO₂ is estimated of 
the order of 30–55 years. Jacobson, MZ, “Correction 
to ‘Control of fossil-fuel particulate black carbon 
and organic matter, possibly the most effective 
method of slowing global warming.” J. 
difficulties associated with the evaluation of relevant tradeoffs; and (6) a divergence in incentives (that is, renter versus owner; builder versus purchaser). Other literature indicates that with less than perfect foresight and a high degree of uncertainty about the future, consumers may trade off these types of investments at a higher than expected rate between current consumption and uncertain future energy cost savings. This undervaluation suggests that regulation that promotes energy efficiency can produce significant net private gains (as well as producing social gains by, for example, reducing pollution).

In DOE’s current regulatory analysis, potential changes in the benefits and costs of a regulation due to changes in consumer purchase decisions are included in two ways. First, if consumers forgo a purchase of a product in the standards case, this decreases sales for product manufacturers and the impact on manufacturers attributed to lost revenue is included in the MIA. Second, DOE accounts for energy savings attributable only to products actually used by consumers in the standards case; if a regulatory option decreases the number of products used by consumers, this decreases the potential energy savings from an energy conservation standard. However, DOE’s current analysis does not explicitly control for heterogeneity in consumer preferences, preferences across subcategories of products or specific features, or consumer price sensitivity variation according to household income.74

In its energy use and economic analyses, DOE did not consider product switching as a result of setting portable AC standards. There is no literature informing whether a substitution effect may be occurring between portable ACs and room ACs. Therefore, DOE is requesting input and data from interested parties as to whether product switching is occurring between these different types of cooling products and, if so, whether switching to room or central ACs would be significantly increased due to DOE establishing portable AC standards.

DOE did consider the impact of portable AC standards on product utilization through the use of a direct rebound effect. Higher-efficiency portable ACs reduce the operating costs for a consumer, which can lead to greater use of the product. A direct rebound effect occurs when a piece of equipment that is made more efficient is used more intensively, such that the expected energy savings from the efficiency improvement may not fully materialize. For the NOPR analysis, DOE examined a 2009 review of empirical estimates of the rebound effect for various energy-using products.75 There are relatively few estimates of the direct rebound effect for household cooling. The two studies discussed in the review are relatively old studies, conducted during the period of rising energy prices and using small sample sizes. One shows a short-run rebound effect of 4 percent,76 while the other reported a wide range of 1–26 percent.77 In the recent NOPR for residential furnaces, DOE chose to use a rebound effect of 15 percent, which is roughly in the center of the range reported for household cooling. 80 FR 13120, 13148 (May 12, 2015).78 For consistency, DOE used a rebound effect of 15 percent for portable ACs in all of the estimates in this rulemaking.

While DOE is not prepared at present to provide a fuller quantifiable framework for estimating the benefits and costs of changes in consumer purchase decisions due to an energy conservation standard, DOE is committed to developing a framework that can support empirical quantitative tools for improved assessment of the consumer welfare impacts of appliance standards. DOE has posted a paper that discusses the issue of consumer welfare impacts of appliance energy efficiency standards, and potential enhancements to the methodology by which these impacts are defined and estimated in the regulatory process.79 DOE welcomes comments on how to more fully assess the potential impact of energy conservation standards on consumer choice and how to quantify this impact in its regulatory analysis in future rulemakings.

1. Benefits and Burdens of Trial Standard Levels Considered for Portable ACs

Table V.21 and Table V.22 summarize the quantitative impacts estimated for each TSL for portable ACs. The efficiency levels contained in each TSL are described in section V.A of this proposed rule.

<p>| Table V.21—Summary of Analytical Results for Portable Air Conditioner TSLs: (National Impacts, 2021–2050) |
|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative FFC National Energy Savings (quads)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.22</td>
<td>0.53</td>
<td>0.78</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>NPV of Consumer Costs and Benefits (2014$ billion)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3% discount rate</td>
<td>2.08</td>
<td>5.20</td>
<td>7.64</td>
<td>10.64</td>
</tr>
<tr>
<td>7% discount rate</td>
<td>0.81</td>
<td>2.15</td>
<td>3.23</td>
<td>4.46</td>
</tr>
<tr>
<td>Cumulative FFC Emissions Reduction (Total FFC Emission)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2 (million metric tons)</td>
<td>15.5</td>
<td>37.7</td>
<td>55.7</td>
<td>81.6</td>
</tr>
</tbody>
</table>

TABLE V.21—SUMMARY OF ANALYTICAL RESULTS FOR PORTABLE AIR CONDITIONER TSLs: (NATIONAL IMPACTS, 2021–2050)—Continued

<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂ (thousand tons)</td>
<td>8.2</td>
<td>20.2</td>
<td>29.9</td>
<td>43.9</td>
</tr>
<tr>
<td>NOₓ (thousand tons)</td>
<td>28.7</td>
<td>69.6</td>
<td>102.6</td>
<td>150.1</td>
</tr>
<tr>
<td>Hg (tons)</td>
<td>0.03</td>
<td>0.07</td>
<td>0.11</td>
<td>0.16</td>
</tr>
<tr>
<td>CH₄ (thousand tons)</td>
<td>88.5</td>
<td>165.3</td>
<td>243.0</td>
<td>355.5</td>
</tr>
<tr>
<td>CH₃O (thousand tons CO₂eq)</td>
<td>1.917</td>
<td>4.629</td>
<td>6.804</td>
<td>9.954</td>
</tr>
<tr>
<td>N₂O (thousand tons)</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>N₂O (thousand tons CO₂eq)</td>
<td>45.5</td>
<td>111.8</td>
<td>165.6</td>
<td>242.8</td>
</tr>
</tbody>
</table>

Value of Emissions Reduction (Total FFC Emissions)

- CO₂ (2014$ billion) **
  - 0.101 to 1.453
  - 0.255 to 3.606
  - 0.382 to 5.367
  - 0.562 to 7.875

- NOₓ—3% discount rate (2014$ million) ▲
  - 47.9 to 109.3
  - 120.9 to 275.6
  - 181.2 to 413.2
  - 266.3 to 607.2

- NOₓ—7% discount rate (2014$ million) ▲
  - 18.0 to 40.6
  - 47.9 to 108.1
  - 73.5 to 165.7
  - 108.6 to 244.8

*CO₂eq is the quantity of CO₂ that would have the same GWP.
**Range of the economic value of CO₂ reductions is based on estimates of the global benefit of reduced CO₂ emissions.


<table>
<thead>
<tr>
<th>Category</th>
<th>TSL 1</th>
<th>TSL 2</th>
<th>TSL 3</th>
<th>TSL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer Impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry NPV (2014$ millions) (Base Case INPV = 725.5)</td>
<td>631.3 to 637.9</td>
<td>503.8 to 521.7</td>
<td>378.6 to 419.2</td>
<td>301.9 to 404.5</td>
</tr>
<tr>
<td>Industry NPV (% change)</td>
<td>(13.0%) to (12.1%)</td>
<td>(30.6%) to (28.1%)</td>
<td>(47.8%) to (42.2%)</td>
<td>(58.4%) to (44.2%)</td>
</tr>
<tr>
<td>Consumer Average LCC Savings (2014$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>84</td>
<td>144</td>
<td>194</td>
<td>242</td>
</tr>
<tr>
<td>Commercial</td>
<td>188</td>
<td>292</td>
<td>392</td>
<td>528</td>
</tr>
<tr>
<td>All</td>
<td>97</td>
<td>162</td>
<td>218</td>
<td>276</td>
</tr>
<tr>
<td>Consumer Simple PBP (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>3.0</td>
<td>2.2</td>
<td>2.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Commercial</td>
<td>1.6</td>
<td>1.2</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>All</td>
<td>2.8</td>
<td>2.1</td>
<td>2.0</td>
<td>2.7</td>
</tr>
<tr>
<td>% of Consumers that Experience Net Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>9</td>
<td>13</td>
<td>19</td>
<td>31</td>
</tr>
<tr>
<td>Commercial</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>All</td>
<td>9</td>
<td>12</td>
<td>17</td>
<td>28</td>
</tr>
</tbody>
</table>

Parentheses indicate negative (−) values.

DOE first considered TSL 4, which represents the max-tech efficiency level. TSL 4 would save 1.15 quads of energy, an amount DOE considers significant. Under TSL 4, the NPV of consumer benefit would be $4.46 billion using a discount rate of 7 percent, and $10.64 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 4 are 81.6 Mt of CO₂, 43.9 thousand tons of SO₂, 150.1 thousand tons of NOₓ, 0.16 tons of Hg, 355.5 thousand tons of CH₄, and 0.9 thousand tons of N₂O. The estimated monetary value of the CO₂ emissions reduction at TSL 4 ranges from $562 million to $7,875 million.

At TSL 4, the average LCC impact is a savings of $242 for residential, $528 for commercial, and $276 for both sectors. The simple payback period is 2.9 years for residential, 1.5 years for commercial, and 2.7 years for both sectors. The fraction of all consumers experiencing a net LCC cost is 28 percent.

At TSL 4, the projected change in INPV ranges from a decrease of $423.5 million to a decrease of $320.9 million, which correspond to decreases of 58.4 percent and 44.2 percent, respectively. DOE estimates that no portion of the market will meet the efficiency standard specified by this TSL in 2020, the year before the compliance year. As such, manufacturers would have to redesign all products by the expected 2021 compliance date to meet demand. Redesigning all units to meet the max-tech efficiency level would require considerable capital and product conversion expenditures. At TSL 4, the capital conversion costs total as much as $305.7 million, roughly 13.1 times the industry annual ordinary capital expenditure in 2020 (the year leading up to new standards). DOE estimates that complete platform redesigns would cost the industry $170.8 million in product conversion costs. These conversion costs largely relate to the extensive research programs required to develop new products that meet the efficiency standards at TSL 4. These costs are equivalent to 17.8 times the industry annual budget for research and development. As such, the conversion costs associated with the changes in products and manufacturing facilities...
required at TSL 4 would require significant use of manufacturers’ financial reserves (manufacturer capital pools), impacting other areas of business that compete for these resources and significantly reducing INPV. In addition, manufacturers could face a substantial impact on profitability at TSL 4. Because manufacturers are more likely to reduce their margins to maintain a price-competitive product at higher TSLs, especially in the lower-capacity portable segment, DOE expects that TSL 4 would yield impacts closer to the high end of the range of INPV impacts. If the high end of the range of impacts is reached, as DOE expects, TSL 4 could result in a net loss to manufacturers of 58.4 percent of INPV.

Beyond the direct financial impact on manufacturers, TSL 4 may also contribute to the unavailability of portable ACs at certain cooling capacities. The efficiency at TSL 4 is a theoretical level that DOE developed by modeling the most efficient components available. However, DOE is aware that the highest-efficiency compressors that are necessary to meet TSL 4 may not be available to all manufacturers for the full range of capacities of portable ACs. Because specific high-efficiency components available are driven largely by the markets for other products with higher shipments (e.g., room ACs), portable AC manufacturers may be constrained in their design choices. This may have the potential to eliminate portable ACs of certain cooling capacities from the market, should TSL 4 be selected.

The Secretary tentatively concludes that at TSL 4 for portable ACs, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, and the estimated monetary value of the emissions reductions would be outweighed by the economic burden on some consumers, and the impacts on manufacturers, including the conversion costs and profit margin impacts that could result in a large reduction in INPV. Consequently, the Secretary has tentatively concluded that TSL 4 is not economically justified.

DOE then considered TSL 3, which would save an estimated 0.78 quads of energy, an amount DOE considers significant. Under TSL 3, the NPV of consumer benefit would be $3.23 billion using a discount rate of 7 percent, and $7.64 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 3 are 55.7 Mt of CO₂, 29.9 thousand tons of SO₂, 102.6 thousand tons of NOₓ, 102.6 thousand tons of Hg, 243.0 thousand tons of CH₂, and 0.6 thousand tons of N₂O. The estimated monetary value of the CO₂ emissions reduction at TSL 3 ranges from $382 million to $3,367 million.

At TSL 3, the average LCC impact is a savings of $194 for residential, $392 for commercial, and $218 for both sectors. The simple payback period is 2.1 years for residential, 1.1 years for commercial, and 2.0 years for both sectors. The fraction of all consumers experiencing a net LCC cost is 17 percent.

At TSL 3, the projected change in INPV ranges from a decrease of $346.8 million to a decrease of $306.2 million, which correspond to decreases of 47.8 percent and 42.2 percent, respectively. Again, DOE estimates that no portion of the market will meet the efficiency standard specified by this TSL in 2020, the year before the compliance year. As such, manufacturers would have to make upgrades to all products by the 2021 projected compliance date to meet demand. Redesigning all units to meet TSL 3 would require considerable capital and product conversion expenditures. The estimated capital conversion costs total as much as $282.0 million, which is 12.1 times the industry annual capital expenditure in 2020 (the year leading up to the new standards). DOE estimates that the redesigns necessary to meet these standards would cost the industry $161.8 million in product conversion costs. These conversion costs largely relate to the research programs and re-testing required to develop products that meet the efficiency standards set forth by TSL 3. In 2020, 12.1 times the industry annual budget for research and development. As such, the conversion costs associated with the changes in products and manufacturing facilities required at TSL 3 would still require significant use of manufacturers’ financial reserves, impacting other areas of business that compete for these resources and significantly reducing INPV. Because manufacturers are more likely to reduce their margins to maintain a price-competitive product at higher TSLs, DOE expects that TSL 3 would yield impacts closer to the high end of the range of INPV impacts as indicated by the preservation of per-unit operating profit markup scenario. If this is the case, TSL 3 could result in a net loss of 47.8 percent in INPV to manufacturers of portable ACs.

Similar to TSL 4, beyond the direct financial impact on manufacturers, TSL 3 may also contribute to the unavailability of portable ACs at certain cooling capacities. TSL 3 is based on the single highest efficiency unit in DOE’s test sample. However, DOE believes few, if any, other units on the market are able to achieve these efficiencies and that the highest efficiency single-speed compressors likely necessary to meet TSL 3 may not be available to all manufacturers for the full range of capacities of portable ACs. Because high-efficiency components available at any given time are driven largely by the market, potential to eliminate portable ACs of certain cooling capacities from the market.

The Secretary tentatively concludes that at TSL 3 for portable ACs, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, and the estimated monetary value of the emissions reductions would be outweighed by the negative impacts on some consumers and on manufacturers, including the conversion costs that could result in a large reduction in INPV for manufacturers. Consequently, the Secretary has tentatively concluded that TSL 3 is not economically justified.

DOE then considered TSL 2, which would save an estimated 0.53 quads of energy, an amount DOE considers significant. Under TSL 2, the NPV of consumer benefit would be $2.15 billion using a discount rate of 7 percent, and $5.20 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 2 are 37.7 Mt of CO₂, 20.2 thousand tons of SO₂, 69.6 thousand tons of NOₓ, 0.07 tons of Hg, 165.3 thousand tons of CH₂, and 0.4 thousand tons of N₂O. The estimated monetary value of the CO₂ emissions reduction at TSL 2 ranges from $255 million to $3,606 million.

At TSL 2, the average LCC impact is a savings of $144 for residential, $292 for commercial, and $162 for both sectors. The simple payback period is 2.2 years for residential, 1.2 years for commercial, and 2.1 years for both sectors. The fraction of all consumers experiencing a net LCC cost is 12 percent.

At TSL 2, the projected change in INPV ranges from a decrease of $221.7 million to a decrease of $203.8 million, which correspond to decreases of 30.6 percent and 28.1 percent, respectively. DOE estimates that approximately 23 percent of available platforms and 21 percent of shipments will meet the efficiency standards specified by this TSL in 2020, the year before the compliance year. As such, manufacturers would have to make upgrades to 77 percent of platforms by
the 2021 projected compliance date to meet demand. At TSL 2, manufacturers will incur conversion costs associated with the integration of higher efficiency components. The estimated capital conversion costs total as much as $188.9 million, which is 8.1 times the industry annual capital expenditure in 2020 (the year leading up to the new standards). DOE estimates that the redesigns necessary to meet these standards would cost the industry $113.9 million in product conversion costs. These conversion costs largely relate to the research programs and re-testing required to develop products that meet the efficiency standards set forth by TSL 2, and are 11.8 times the industry annual budget for research and development in 2020, the year leading up to new standards. Because manufacturers are more likely to reduce their margins to maintain a price-competitive product at higher TSLs, DOE expects that TSL 2 would yield impacts closer to the high end of the range of INPV impacts as indicated by the preservation of per-unit operating profit markup scenario. If this is the case, TSL 2 could result in a net loss of 30.6 percent in INPV to manufacturers of portable ACs.

After considering the analysis and weighing the benefits and burdens, the Secretary has tentatively concluded that at TSL 2 for portable ACs, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, the estimated monetary value of the emissions reductions, and positive average LCC savings would outweigh the negative impacts on some consumers and on manufacturers, including the conversion costs that could result in a reduction in INPV for manufacturers. Accordingly, the Secretary has tentatively concluded that TSL 2 would offer the maximum improvement in efficiency that is technologically feasible and economically justified, and would result in the significant conservation of energy.

Therefore, based on the above considerations, DOE proposes to adopt the energy conservation standards for portable ACs at TSL 2. The proposed new energy conservation standards for portable ACs, which are expressed as CEER, are shown in Table V.23.

### Table V.23 Proposed Energy Conservation Standards for Portable Air Conditioners

<table>
<thead>
<tr>
<th>Portable Air Conditioner Product Class</th>
<th>Minimum CEER (Btu/Wh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-duct and dual-duct portable air conditioners</td>
<td>$Minimum CEER = 1.14 \times \frac{SACC}{(2.7447 \times SACC^{0.6829})}$</td>
</tr>
<tr>
<td>CEER is Combined Energy Efficiency Ratio in Btu/Wh</td>
<td></td>
</tr>
<tr>
<td>Seasonally Adjusted Cooling Capacity (SACC) in Btu/h determined in accordance with Appendix CC</td>
<td></td>
</tr>
</tbody>
</table>

2. Summary of Annualized Benefits and Costs of the Proposed Standards

The benefits and costs of the proposed standards can also be expressed in terms of annualized values. The annualized net benefit is the sum of: (1) The annualized national economic value (expressed in 2014$) of the benefits from operating products that meet the proposed standards (consisting primarily of operating cost savings from using less energy, minus increases in product purchase costs, and (2) the annualized monetary value of the benefits of CO₂ and NOₓ emission reductions.77

Table V.24 shows the annualized values for portable ACs under TSL 2, expressed in 2014$. The results under the primary estimate are as follows.

Using a 7-percent discount rate for benefits and costs other than CO₂ reductions (for which DOE used a 3-percent discount rate along with the average SCC series corresponding to a value of $40.0/ton in 2015 (2014$)), the estimated cost of the proposed standards for portable ACs is $30 million per year in increased equipment costs, while the estimated benefits are $273 million per year in reduced equipment operating costs, $70 million per year in CO₂ reductions, and $5.4 million per year in reduced NOₓ emissions. In this case, the net benefit amounts to $318 million per year.

Using a 3-percent discount rate for all benefits and costs and the average SCC series corresponding to a value of $40.0/ton in 2015 (2014$), the estimated cost of the proposed standards for portable ACs is $30 million per year in increased equipment costs, while the estimated annual benefits are $338 million in reduced operating costs, $70 million in CO₂ reductions, and $7.2 million in reduced NOₓ emissions. In this case, the net benefit amounts to $385 million per year.

### Table V.24—Annualized Benefits and Costs of Proposed Standards (TSL 2) for Portable Air Conditioners

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Million 2014$/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary estimate *</td>
<td>Low net benefits estimate *</td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
</tr>
<tr>
<td>Consumer Operating Cost Savings</td>
<td>7%</td>
</tr>
</tbody>
</table>

77 To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2014, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year’s shipments in the year in which the shipments occur (2020, 2030, etc.), and then discounted the present value from each year to 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO₂ reductions, for which DOE used case-specific discount rates. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year that yields the same present value.
VI. Certification Reporting and Enforcement Requirements

In a recent test procedure rulemaking, DOE established sampling plan requirements for portable ACs in 10 CFR 429.62, to enable manufacturers to make representations of energy consumption or efficiency metrics. DOE proposes in this rulemaking that certain product specific information be included when a manufacturer wishes to certify their products with DOE and demonstrate compliance with any energy conservation standards established as a result of this rulemaking. DOE proposes in this NOPR that portable AC certification reports include CEER and SACC, as determined by the DOE test procedure in appendix CC, in addition to the duct configuration (single-duct, dual-duct, or ability to operate in both configurations), presence of heating function, and primary condensate removal feature (auto-evaporation, gravity drain, removable internal collection bucket, or condensate pump). In this NOPR, DOE is also establishing a new section within 10 CFR 429.134 to include enforcement requirements for portable ACs. The enforcement provisions clarify how the SACC would be used for determining the minimum allowable CEER for a tested basic model. DOE requests comment on the proposed certification reporting requirements and enforcement requirements for portable ACs.

VII. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

Section 1(b)(1) of Executive Order 12866, “Regulatory Planning and Review,” 58 FR 51735 (Oct. 4, 1993), requires each agency to identify the problem that it intends to address, including, where applicable, the failures of private markets or public institutions that warrant new agency action, as well as to assess the significance of that problem. The problems that the proposed standards set forth in this NOPR are intended to address are as follows:

1. Insufficient information and the high costs of gathering and analyzing relevant information leads some consumers to miss opportunities to make cost-effective investments in energy efficiency.

2. In some cases the benefits of more efficient equipment are not realized due to misaligned incentives between purchasers and users. An example of such a case is when the equipment purchase decision is made by a building contractor or building owner who does not pay the energy costs.

3. There are external benefits resulting from improved energy efficiency of appliances and equipment.
that are not captured by the users of such products. These benefits include externalities related to public health, environmental protection, and national energy security that are not reflected in energy prices, such as reduced emissions of air pollutants and GHGs that impact human health and global warming. DOE attempts to quantify some of these external benefits through use of social cost of carbon values.

The Administrator of the Office of Information and Regulatory Affairs (OIRA) in the OMB has determined that the proposed regulatory action is a significant regulatory action under section (3)(f) of Executive Order 12866. Accordingly, pursuant to section 6(a)(3)(B) of the Order, DOE has provided to OIRA: (i) The text of the draft regulatory action, together with a reasonably detailed description of the need for the regulatory action and an explanation of how the regulatory action will meet that need; and (ii) An assessment of the potential costs and benefits of the regulatory action, including an explanation of the manner in which the regulatory action is consistent with a statutory mandate. DOE has included these documents in the rulemaking record.

Furthermore, the Administrator of OIRA has determined that the proposed regulatory action is an “economically” significant regulatory action under section (3)(f)(1) of Executive Order 12866. Accordingly, pursuant to section 6(a)(3)(C) of the Order, DOE has provided to OIRA an assessment, including the underlying analysis, of benefits and costs anticipated from the regulatory action, together with, to the extent feasible, a quantification of those costs; and an assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, and an explanation why the planned regulatory action is preferable to the identified potential alternatives. These assessments can be found in the TSD for this rulemaking.

DOE has also reviewed this regulation pursuant to Executive Order 13563, issued on January 18, 2011. 76 FR 3281 (Jan. 21, 2011). Executive Order 13563 is supplemental to and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. To the extent permitted by law, agencies are required by Executive Order 13563 to: (1) Propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognize that some benefits and costs are difficult to quantify); (2) tailor regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

DOE emphasizes as well that Executive Order 13563 requires agencies to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible. In its guidance, OIRA has emphasized that such techniques may include identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes. For the reasons stated in the preamble, DOE believes that this NOPR is consistent with these principles, including the requirement that, to the extent permitted by law, benefits justify costs and that net benefits are maximized.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires preparation of an initial regulatory flexibility analysis (IRFA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking” 67 FR 53461 (Aug. 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel’s Web site (http://energy.gov/ gc//office-general-counsel). DOE has prepared the following IRFA for the products that are the subject of this rulemaking.

For manufacturers of portable ACs, the SBA has set a size threshold, which defines those entities classified as “small businesses” for the purposes of the statute. DOE used the SBA’s small business size standards to determine whether any small entities would be subject to the requirements of the rule. See 13 CFR part 121. The size standards are listed by NAICS code and industry description and are available at http://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf.

Manufacturing of portable ACs is classified under NAICS 333415, “Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing Other Major Household Appliance Manufacturing.” The SBA sets a threshold of 1,250 employees or less for an entity to be considered as a small business for this category.

To estimate the number of companies that could be small business manufacturers of products covered by this rulemaking, DOE first surveyed the AHAM member directory. DOE then consulted publicly available data, purchased company reports from vendors such as Dun and Bradstreet, and contacted manufacturers, where needed, to determine the number of manufacturers with manufacturing facilities located within the United States that meet the SBA’s definition of a “small business manufacturing facility.” DOE screened out companies that do not manufacture products covered by this rulemaking or are foreign owned and operated. In the February 2015 TP NOPR, DOE estimated that there was one small business that manufactured portable ACs. DOE subsequently determined that this small business no longer manufactures portable ACs and, therefore, DOE estimates that there are no domestic manufacturers of single-duct or dual-duct portable ACs that meet the SBA’s definition of a “small business.”

Based on the discussion above, DOE certifies that the standards for portable ACs set forth in this proposed rule would not have a significant economic impact on a substantial number of small entities. Accordingly, DOE has not prepared a regulatory flexibility analysis for this rulemaking, DOE will transmit this certification to the SBA as required by 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act

DOE has determined that portable ACs are a covered product under EPCA. 81 FR 22514 (April 18, 2016). Because portable ACs are a covered product, manufacturers would need to certify to
DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including portable ACs. 76 FR 12422 (Mar. 7, 2011); 80 FR 5099 (Jan. 30, 2015). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. Public reporting burden for the certification is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

Pursuant to the National Environmental Policy Act (NEPA) of 1969, DOE has determined that the proposed rule fits within the category of actions included in Categorical Exclusion (CX) B5.1 and otherwise meets the requirements for application of a CX. See 10 CFR part 1021, App. B, B5.1(b); 1021.410(b) and App. B, B(1)–(5). The proposed rule fits within this category of actions because it is a rulemaking that establishes energy conservation standards for consumer products or industrial equipment, and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, DOE has made a CX determination for this rulemaking, and DOE does not need to prepare an Environmental Assessment or Environmental Impact Statement for this proposed rule. DOE’s CX determination for this proposed rule is available at http://energy.gov/nea/categorical-exclusion-cx-determinations-cx/.

E. Review Under Executive Order 13132

Executive Order 13132, “Federalism,” 64 FR 43255 (Aug. 10, 1999), imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has tentatively determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297) No further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction. 61 FR 4729 (Feb. 7, 1996). Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531) For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officials of State, local, and Tribal governments on a proposed “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820. DOE’s policy statement is also available at http://energy.gov/sites/prod/files/gcprod/documents/umra_97.pdf.

This proposed rule does not contain a Federal intergovernmental mandate because it does not require expenditures of $100 million or more in any one year by the private sector. The proposed rule will likely result in a final rule that could result in expenditures of $100 million or more, but there is no proposed requirement that mandates that result. Potential expenditures may include: (1) Investment in R&D and in capital expenditures by portable AC manufacturers in the years between the final rule and the projected compliance date for the new standards, and (2) incremental additional expenditures by
consumers to purchase higher-efficiency portable ACs, starting at the projected compliance date for the applicable standard.

Section 202 of UMRA authorizes a Federal agency to respond to the content requirements of UMRA in any other statement or analysis that accompanies the proposed rule. (2 U.S.C. 1532(c)) The content requirements of section 202(b) of UMRA relevant to a private sector mandate substantially overlap the economic analysis requirements that apply under section 325(o) of EPCA and Executive Order 12866. The SUPPLEMENTARY INFORMATION section of this NOPR and the TSD for this proposed rule respond to those requirements.

Under section 205 of UMRA, the Department is obligated to identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a written statement under section 202 is required. (2 U.S.C. 1535(a)) DOE is required to select from those alternatives the most cost-effective and least burdensome alternative that achieves the objectives of the proposed rule unless DOE publishes an explanation for doing otherwise, or the selection of such an alternative is inconsistent with law. As required by 42 U.S.C. 6295(o), this proposed rule would establish energy conservation standards for portable ACs that are designed to achieve the maximum improvement in energy efficiency that DOE has determined to be both technologically feasible and economically justified. A full discussion of the alternatives considered by DOE is presented in the “Regulatory Impact Analysis” section of the TSD for this proposed rule.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516, note) provides for Federal agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB’s guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE’s guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this NOPR under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the energy supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use. DOE has tentatively concluded that this regulatory action, which propose new energy conservation standards for portable ACs, is not a significant energy action because the proposed standards are not likely to have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as such by the Administrator of OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects on the proposed rule.

L. Review Under the Information Quality Bulletin for Peer Review

On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review (the Bulletin), 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal Government, including influential scientific information related to agency regulatory actions. The purpose of the bulletin is to enhance the quality and credibility of the Government’s scientific information. Under the Bulletin, the energy conservation standards rulemaking analyses are “influential scientific information,” which the Bulletin defines as “scientific information the agency reasonably can determine will have, or does have, a clear and substantial impact on important public policies or private sector decisions.” Id. at 2667.

In response to OMB’s Bulletin, DOE conducted formal in-progress peer reviews of the energy conservation standards development process and analyses and has prepared a Draft Peer Review Report pertaining to the energy conservation standards rulemaking analyses. Generation of this report involved a rigorous, formal, and documented evaluation using objective criteria and qualified and independent reviewers to make a judgment as to the technical/scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of programs and/or projects. The “Energy Conservation Standards Rulemaking Peer Review Report” dated February 2007 has been disseminated and is available at the following Web site: http://energy.gov/eere/buildings/downloads/energy-conservation-standards-rulemaking-peer-review-report-0.

VIII. Public Participation

A. Attendance at the Public Meeting

The time, date, and location of the public meeting are listed in the DATES and ADDRESSES sections at the beginning of this proposed rule. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586–2945 or Brenda.Edwards@ee.doe.gov.

Please note that foreign nationals participating in the public meeting are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. If a foreign national wishes to participate in the public meeting, please inform DOE of this fact as soon as possible by contacting Ms. Regina Washington at (202) 586–1214 or by email (Regina.Washington@ee.doe.gov)
The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make follow-up contact, if needed.

C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA (42 U.S.C. 6306). A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. There shall not be discussion of proprietary information, costs or prices, market share, or other commercial matters regulated by U.S. anti-trust laws. After the public meeting, interested parties may submit further comments on the proceedings, as well as on any aspect of the rulemaking until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will allow, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the Docket section at the beginning of this proposed rule. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule before or after the public meeting, but no later than the date provided in the DATES section at the beginning of this proposed rule. Interested parties may submit comments, data, and other information using any of the methods described in the ADDRESSES section at the beginning of this proposed rule.

Submitting comments via www.regulations.gov. The www.regulations.gov Web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment itself or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Otherwise, persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to www.regulations.gov information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through www.regulations.gov cannot be claimed as CBI. Comments received through the Web site will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section below.

DOE processes submissions made through www.regulations.gov before or after the public meeting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of
Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person that would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE’s policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

1. The proposal to maintain one product class for single-duct and dual-duct portable ACs (see section IV.A.2 of this proposed rule or chapter 3 of the NOPR TSD).

2. The determination that alternative refrigerants should be screened out as a design option for portable ACs because products incorporating these refrigerants are not practicable to manufacture at this time while meeting all applicable safety standards (see section IV.B.1 of this proposed rule or chapter 4 of the NOPR TSD).

3. Data from interested parties that characterize portable AC performance based on the DOE test procedure in appendix CC (see section IV.C.1 of this proposed rule or chapter 5 of the NOPR TSD).

4. The general approach and technological feasibility of the efficiency levels considered for this analysis. Specifically, the determination that the baseline performance be represented by the minimum performance ratio observed for units in DOE’s test sample. DOE also seeks comment on potential utility impacts at any of the analyzed efficiency levels (see section IV.C.1 of this proposed rule or chapter 5 of the NOPR TSD).

5. The specific efficiency improvements associated with microchannel designs in portable AC heat exchangers (see section IV.C.1 of this proposed rule or chapter 5 of the NOPR TSD).

6. Whether to promote installation of any of the design options, including thermostatic or electronic expansion valves, even though the resulting efficiency gains would not be measurable with the existing test procedure (see section IV.C.1 of this proposed rule or chapter 5 of the NOPR TSD).

7. The incremental manufacturer production costs DOE estimated at each efficiency level (see section IV.C.2 of this proposed rule or chapter 5 of the NOPR TSD).

8. The use of room AC consumer usage data from BECS 2009 to establish operating hours for portable ACs. DOE’s literature review performed to establish a distribution of energy use values for portable ACs revealed limited available data pertaining to how portable ACs are operated in the field. DOE assumed that the distribution of use calculated for rooms ACs represented the hours of use in cooling mode for a baseline portable AC unit. DOE conducted a sensitivity analysis that assumed hours of operation to be 50 percent of the hours used in the LCC analysis. DOE seeks data on operating hours and seasonal usage specific to portable AC (see section IV.E of this proposed rule, chapter 7 of the NOPR TSD, or appendix 8F of the NOPR TSD).

9. The determination that there are no domestic small business manufacturers of single-duct and dual-duct portable ACs that would be impacted by the proposed standards (see sections IV.J and V.B.2.d of this proposed rule or chapter 12 of the NOPR TSD).

10. The market share distribution of portable ACs in residential (88 percent) and commercial (12 percent) settings (see section V.B.1.a of this proposed rule or chapter 9 of the NOPR TSD).

11. The use of room AC lifetime as input data to determine portable AC lifetime (see section IV.F of this proposed rule or chapter 8 of the NOPR TSD).

12. Data on historic trends in portable AC efficiency (see section IV.F of this proposed rule or chapter 8 of the NOPR TSD).

13. The proposed certification reporting requirements for portable ACs (see section VI of this proposed rule).

14. Information demonstrating that product switching is occurring between portable ACs and room or central ACs. If data demonstrates switching is occurring, additional data on whether switching to room or central ACs would be significantly increased due to DOE establishing portable AC standards.
15. DOE seeks public comment on the cumulative regulatory burden to manufacturers associated with the proposed portable AC standard and on the approach DOE used in evaluating cumulative regulatory burden, including the timeframes and regulatory dates evaluated.

IX. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking.

List of Subjects
10 CFR Part 429
Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Reporting and recordkeeping requirements.

10 CFR Part 430
Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, and Small businesses.

Issued in Washington, DC, on April 27, 2016.

David Friedman,
Principal Assistant Secretary, Energy Efficiency and Renewable Energy.

For the reasons set forth in the preamble, DOE proposes to amend parts 429 and 430 of chapter II, subpart C, of title 10 of the Code of Federal Regulations, as set forth below:

PART 429—CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

1. The authority citation for part 429 continues to read as follows:


2. Section § 429.12 is amended by:
   a. Removing in paragraph (b)(13) “§§ 429.14 through 429.60” and adding in its place, “§§ 429.14 through 429.62”;
   and
   b. Adding a ninth row to the table in paragraph (d) to read as follows:

§ 429.12 General requirements applicable to certification reports.

<table>
<thead>
<tr>
<th>Portable air conditioners</th>
<th>February 1.</th>
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<tbody>
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<td>* * * * *</td>
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</table>

3. Section § 429.62 [proposed at 81 FR 35242 (June 1, 2016)] is amended by adding paragraph (b) to read as follows:

§ 429.62 Portable Air Conditioners.

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</table>

(b) Certification reports. (1) The requirements of § 429.12 are applicable to single-duct and dual-duct portable air conditioners; and
   (2) Pursuant to § 429.12(b)(13), a certification report shall include the following public product-specific information: The combined energy efficiency ratio (CEER in British thermal units per Watt-hour (Btu/Wh)), the seasonally adjusted cooling capacity in British thermal units per hour (Btu/h), the duct configuration (single-duct, dual-duct, or ability to operate in both configurations), presence of heating function, and primary condensate removal feature (auto-evaporation, gravity drain, removable internal collection bucket, or condensate pump).

4. Section § 429.134 is amended by adding paragraph (n) to read as follows:

§ 429.134 Product-specific enforcement provisions.

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</table>

(n) Portable air conditioners.

Verification of seasonally adjusted cooling capacity. The seasonally adjusted cooling capacity will be measured pursuant to the test requirements of 10 CFR part 430 for each unit tested. The results of the measurement(s) will be averaged and compared to the value of seasonally adjusted cooling capacity certified by the manufacturer. The certified seasonally adjusted cooling capacity will be considered valid only if the average measured seasonally adjusted cooling capacity is within five percent of the certified seasonally adjusted cooling capacity.

   (1) If the certified seasonally adjusted cooling capacity is found to be valid, the certified value will be used as the basis for determining the minimum allowed combined energy efficiency ratio for the basic model.

   (2) If the certified seasonally adjusted cooling capacity is found to be invalid, the average measured seasonally adjusted cooling capacity will be used to determine the minimum allowed combined energy efficiency ratio for the basic model.

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

5. The authority citation for part 430 continues to read as follows:


6. In § 430.32, add paragraph (z) to read as follows:

§ 430.32 Energy and water conservation standards and their effective dates.

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<th>* * * * *</th>
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</table>

(z) Portable air conditioners. Single-duct portable air conditioners and dual-duct portable air conditioners manufactured on or after [DATE 5 YEARS AFTER THE PUBLICATION OF THE FINAL RULE] must have a combined energy efficiency ratio (CEER) in Btu/Wh no less than:

\[
CEER = 1.14 \times \frac{SACC}{(2.7447 \times SACC^{0.6829})}
\]

SACC: Seasonally adjusted cooling capacity in Btu/h
Part V

Commodity Futures Trading Commission

17 CFR Parts 37, 38, and 150
Position Limits for Derivatives: Certain Exemptions and Guidance; Proposed Rule
All comments must be submitted in English, or if not, accompanied by an English translation. Comments will be posted as received to http://www.cftc.gov. You should submit only information that you wish to make available publicly. If you wish the Commission to consider information that may be exempt from disclosure under the Freedom of Information Act, a petition for confidential treatment of the exempt information may be submitted according to the procedures established in CFTC regulations at 17 CFR part 145.

The Commission reserves the right, but shall have no obligation, to review, pre-screen, filter, redact, refuse, remove any or all of your submission from http://www.cftc.gov that it may deem to be inappropriate for publication, such as obscene language. All submissions that have been redacted or removed that contain comments on the merits of the rulemaking will be retained in the public comment file and will be considered as required under the Administrative Procedure Act and other applicable laws, and may be accessible under the Freedom of Information Act.

FOR FURTHER INFORMATION CONTACT: Stephen Sherrod, Senior Economist, Division of Market Oversight, (202) 418–5452, ssherrod@cftc.gov; Riva Spear Adiance, Senior Special Counsel, Division of Market Oversight, (202) 418–5494, radiance@cftc.gov; Lee Ann Duffy, Assistant General Counsel, Office of General Counsel, 202–418–6763, lduffy@cftc.gov; or Steven Benton, Industry Economist, Division of Market Oversight, (202) 418–5617, sbenton@cftc.gov; Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.

SUPPLEMENTARY INFORMATION:

I. Introduction

The Commission has long established a federal position limits regime 2 generally includes three components: (1) the level of the limits, which set a threshold that restricts the number of speculative positions that a person may hold in the spot month, an individual month, and all months combined, (2) exemptions for positions that constitute bona fide hedging transactions and certain other types of transactions, and (3) rules to determine which accounts and positions a person must aggregate for the purpose of determining compliance with the position limit levels.

In late 2013, the CFTC proposed to amend its part 150 regulations governing speculative position limits. These proposed amendments were intended to conform to the requirements of the Dodd-Frank Act introducing the Wall Street Transparency and Accountability Act of 2010 (“Dodd-Frank Act”). 4 The proposed amendments included the adoption of federal position limits for 28 exempt and agricultural commodity futures and option contracts and swaps that are “economically equivalent” to such contracts. 5 In addition, the Commission generally includes three components: (1) the level of the limits, which set a threshold that restricts the number of speculative positions that a person may hold in the spot month, an individual month, and all months combined, (2) exemptions for positions that constitute bona fide hedging transactions and certain other types of transactions, and (3) rules to determine which accounts and positions a person must aggregate for the purpose of determining compliance with the position limit levels.

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Commission proposed to require that DCMs and SEFs that are trading facilities (collectively, “exchanges”) establish exchange-set limits on such futures, options and swaps contracts. Further, the Commission proposed to (i) revise the definition of bona fide hedging position (which includes a general definition with requirements applicable to all hedges, as well as an enumerated list of bona fide hedges), (ii) revise the process for market participants to request recognition of certain types of positions as bona fide hedges, including anticipatory hedges and hedges not specifically enumerated in the proposed bona fide hedging definition, and (iii) revise the exemptions from position limits for transactions normally known to the trade as spreads.

II. Proposal To Supplement and Revise the December 2013 Position Limits Proposal

The CFTC is now proposing revisions and additions to regulations and guidance proposed in December 2013 concerning speculative position limits in response to comments received on that proposal. The Commission is proposing new alternative processes for DCMs and SEFs to recognize certain positions in commodity derivative contracts as non-enumerated bona fide hedges or enumerated anticipatory bona fide hedges, as well as to exempt from federal position limits certain spread positions, in each case subject to Commission review. In this regard, the Commission proposes to amend certain of the regulations proposed in 2013 regarding exemptions from federal position limits and exchange-set position limits to take into account these new alternative processes. In connection with these changes, the Commission proposes to further amend certain relevant definitions, including to clearly define the general definition of bona fide hedging for physical commodities under the standards in CEA section 4a(c). Separately, the Commission proposes to delay for DCMs and SEFs that lack access to sufficient swap position information the requirement to establish and monitor position limits on swaps at this time.

Because this proposal supplements the December 2013 position limits proposal, it must be read in conjunction with that notice of proposed rulemaking, such that where this supplemental proposal sets out a proposed rule text in full, as in four definitions which this supplement proposes to amend, the rule text is intended to replace what was proposed in the December 2013 position limits proposal. Where this supplemental proposal reserves a subsection proposed in the December 2013 position limits proposal, the intention is to provide additional time for Commission consideration of that subsection. For the avoidance of doubt, the Commission is still reviewing comments received on such reserved subsections and does not seek further comment on such reserved subsections.

A. Proposed Guidance Regarding Exchange-Set Limitations on Swap Positions

As noted above, in December 2013 the Commission proposed federal position limits on futures and swaps in physical commodities. Since that time, the Commission has worked with industry to improve the quality of swap position reporting to the Commission under part 20. In light of the improved quality of the swap position reporting, the Commission intends to rely on part 20 swap position data, given adjustments for obvious errors (e.g., data reported based on a unit of measure, such as an ounce, rather than a futures equivalent number of contracts), to establish initial levels of federal non-spot month limits on futures and swaps in a final rule. Moreover, the Commission notes that the improved quality allows the Commission to utilize part 20 swap position data when monitoring market participants’ compliance with such federal position limits on futures and swaps.

However, the Commission notes that with respect to exchange-set limits on swaps, exchanges, on the other hand, generally do not have access to swap position information. Unlike futures contracts—which are proprietary to a particular DCM and typically cleared at a single DCO affiliated with the DCM—swaps in a particular commodity are not proprietary to any particular trading facility or platform. Market participants may execute swaps involving a particular commodity on or subject to the rules of multiple exchanges or, in some circumstances, over the counter (“OTC”). Further, under the Commission regulations, data with respect to a particular swap transaction may be reported to any swap data repository (“SDR”).

In addition, it should be noted that although CEA section 2(h)(8) requires that swap transactions required to be cleared under CEA section 2(h)(7) must be traded on either a DCM or a SEF if a DCM or SEF “makes the swap available to trade,” there currently is neither a requirement for mandatory clearing of a swap on a physical commodity, nor has a swap on a physical commodity been made available to trade. Consequently, swaps on physical commodities may use means of execution other than on a DCM or SEF.

Even if an exchange had access to cleared swap data from a particular DCO, an exchange may need access to data from additional DCOs in order to have a sufficient understanding of a market participant’s cleared swap position, because a market participant may clear economically equivalent swaps on multiple DCOs. Further, DCO cleared swap data would not provide an exchange with data regarding economically equivalent uncleared swaps. While SDR data would include.

14 See §§ 45.3, 45.4, and 45.10 of the Commission’s regulations, 17 CFR 45.3, 45.4, and 45.10. See generally CEA sections 4r (reporting and recordkeeping for uncleared swaps) and 21 (swap data repositories), 7 U.S.C. 6r and 24a.
15 CEA section 2(h)(8), 7 U.S.C. 2(h)(8) (the “trading mandate”).
16 See CEA section 2(h) and part 50 of the Commission’s regulations. 7 U.S.C. 2(h) and 17 CFR part 50.
17 For example, under rule 37.10, a swap execution facility may make a swap available to trade, pursuant to CEA section 2(h)(8). See current list of swaps made available to trade at http://www.cftc.gov/idc/groups/public/@otherif/documents/file/swapsmadeavailablechart.pdf.
The CEA requires in SEF Core Principle 6(B) that a SEF: (i) Set its exchange-set limit on swaps at a level no higher than that of the federal position limit; and (ii) monitor positions established on or through the SEF for compliance with the federal position limit and any exchange-set limit.23 Similarly, for any contract subject to a federal position limit, including a swap contract, DCM Core Principle 5(B) requires that DCMs must set a position limit at a level no higher than that of the federal position limit.24

The December 2013 position limits proposal specified that federal position limits would apply to referenced contracts,25 whether futures or swaps, regardless of where the futures or swaps positions are established.26 Consistent with DCM Core Principle 5 and SEF Core Principle 6, the Commission proposed at § 150.5(a)(1) that, for any commodity derivative contract that is subject to a speculative position limit under § 150.2, a DCM or [SEF] that is a trading facility shall set a speculative position limit no higher than that set in § 150.2.27

Three commenters on proposed regulation § 150.5 recommended that the Commission not require SEFs to establish position limits.28 Two noted that because SEF participants may use more than one derivatives clearing organization (“DCO”), a SEF may not know when a position has been offset.29

Further, during the ongoing SEF registration process,30 a number of persons applying to become registered as SEFs told the Commission that they lack access to information that would enable them to knowledgeably establish position limits or monitor positions.31 The Commission observes that this information gap would also be a concern for DCMs in respect of swaps, because DCMs lacking access to swap position information also would not be able to reliably establish position limits on swaps or monitor swap positions.

The Commission acknowledges that, if an exchange does not have access to sufficient data regarding individual market participants’ open swap positions, then it cannot effectively monitor swap position limits. The Commission believes that most exchanges do not have access to sufficient swap position information to effectively monitor swap position limits.32 In this regard, the Commission believes that an exchange would have or could have access to sufficient swap position information to effectively monitor swap position limits if, for example: (1) It had access to daily information about its market participants’ open swap positions; or (2) it knows that its market participants regularly engage on its exchange in large volumes of speculative trading activity.


For example, in a submission to the Commission under part 40 of the Commission’s regulations, BGC Derivative Markets, L.P. states that “[t]he information to administer limits or accountability cannot be readily ascertained. Position limits or accountability levels apply market-wide to a trader’s overall position in a given swap. To monitor this position, a SEF must have access to information about a trader’s overall position. However, a SEF may not have information about swap transactions that take place on its own Facility and has no way of knowing whether a particular trade on its facility adds to or reduces a trader’s position. And because swaps may trade on a number of facilities or, in many cases, over-the-counter, a SEF does not know the size of the trader’s overall swap position and thus cannot ascertain whether the trader’s position relative to any position limit. Such information would be required to be supplied to a SEF from a variety of independent sources, including SDRs, DCDs, and market participants themselves. Unless coordinated by the Commission operating a centralized reporting system, such a data collection requirement would be duplicative as each separate SEF required reporting by each information sources.” BGC Derivative Markets; L.P., Rule Submission 2015–09 (Oct. 6, 2015), available at http://www.cftc.gov/filings/orgrules/rule100615bgcsef001.pdf.

The Commission is aware of one SEF that may have access to sufficient swap position information. The SEF derives its position information from data that are CFTC registrants and shared personnel. This SEF requires that all of its listed swaps be cleared on an affiliated DCO, which reports to an affiliated SDR.


21 Added by the Dodd-Frank Act, section 5h(a) of the CEA, 7 U.S.C. 7b-3. The Energy & Environmental Markets Advisory Committee (EEMAC) recommended that the Commission codify this provision in its regulations.


25 Under the December 2013 position limits proposal, “referenced contracts” are defined as futures, options, economically equivalent swaps, and certain foreign board of trade contracts, in physical commodities, and are subject to the proposed federal position limits. See December 2013 position limits proposal at 78 FR 75825.

26 December 2013 positions limits proposal at 78 FR 75826 (proposed § 150.2).

27 See December 2013 position limits proposal at 78 FR 75754–8.


practicable for an exchange to require that market participants self-report their total open swap positions. 36 And with only the transaction data from a particular exchange, it would be impracticable, if not impossible, for that exchange to monitor and enforce position limits for swaps.

Moreover, the Commission has neither required any DCO 37 or SDR 38 to provide such swap data to exchanges. 39

36 An exchange could theoretically obtain swap position data directly from market participants, for example, by requiring a market participant to report its swap positions, as a condition of trading on the exchange. However, the Commission thinks it is unlikely that a single exchange would unilaterally impose a swaps reporting regime on market participants. The Commission abandoned the approach of requiring market participants to report futures positions directly to the Commission many years ago. See Reporting Requirements for Contract Markets, Futures Commission Merchants, Members of Exchanges and Large Traders, 46 FR 59960 (Dec. 8, 1981). Instead, the Commission and DCMs rely on a large trader reporting system where futures positions are reported to the CFTC and then to other than that position holder itself, including futures commission merchants, clearing members and foreign brokers. See generally part 19 of the Commission’s regulations, 17 CFR part 19. See also, for example, the discussion of an exchange’s large trader reporting system in the Division of Market Oversight Rule Enforcement Review of the Chicago Mercantile Exchange and the Chicago Board of Trade, July 26, 2013, at 24–7, available at http://www.cftc.gov/idec/groups/public/@idecmons/documents/file/remercbo072613.pdf.

Further, as non-exchanges do not have authority to demand swap position data from derivative clearing organizations or swap data repositories; nor do exchanges have general authority to demand market participants’ swap position data from clearing members of DCOs or swap dealers (as the Commission does under part 20).

37 Core principle M for DCOs addresses information sharing only for the purpose of the DCO’s carrying out its risk management program as “appropriate and applicable,” but does not address information sharing, and does not address information sharing with exchanges. CEA section 5h(f)(2)(M), 7 U.S.C. 7a-1e-1(2)(M), and § 39.22, 17 CFR 39.22. The Commission has access to DCO information relating to trade and clearing details under § 39.19, 17 CFR 39.19, as is necessary to conduct its oversight of a DCO. However, the Commission has not used its general rulemaking authority under section 8a(5), 7 U.S.C. 12a(5), to require DCOs to provide registered entities access to swap information, although the Commission could impose such a requirement by rule. CEA section 5h(f)(2)(M), 7 U.S.C. 7a-1e-1(2)(A).

38 An SDR has a duty to provide direct electronic access to the Commission, or a designee of the Commission who may be a registered entity (such as an exchange). CEA section 210(c)(4), 7 U.S.C. 24a(c)(4). See 76 FR 54538 at 54551, note 141 and accompanying text (Sept. 1, 2011). However, the Commission has not designated any exchange as a designee of the Commission for that purpose. Further, the Commission has not used its general rulemaking authority under CEA section 8a(5), 7 U.S.C. 12a(5), to require SDRs to provide registered entities (such as exchanges) access to swap information, although the Commission could impose such a requirement by rule. CEA section 21a(3)(A)(ii), 7 U.S.C. 24a(a)(3)(A)(ii).

39 Even if such information were to be made available to exchanges, the swaps positions would need to be converted to futures-equivalent positions for purposes of monitoring position limits on a futures-equivalent basis, which would place an additional burden on exchanges. See December 2013 positions limits proposal at 78 FR57825 for the proposed definition of futures-equivalent; see also discussion, below, regarding this current notice’s amendments to that proposed definition. If at some future time, the Commission were to consider requiring DCOs or SDRs to provide swap data to exchanges, or to provide the exchanges with swap data collected under part 20, the Commission would then consider the burden that would be placed on the exchange by the need to convert swap positions into futures-equivalent positions.

40 The part 20 swaps data is reported in futures equivalents, but does not include data specifying where (e.g., OTC or a particular exchange) reportable positions in swaps were established. See, e.g., CEA sections 5b(h)(1)(B) and 5b(e), 7 U.S.C. 7b–3(b)(1)(B) and 7b–3(e), respectively.

41 Once the guidance was no longer applicable, a DCM or a SEF would be required to file rules with the Commission to implement the relevant position limits and demonstrate compliance with Core Principles or 6, as appropriate. The Commission notes that, for the same reasons regarding swap position data discussed above, CEA section 5h(f)(6)(B), the proposed guidance also would temporarily delay the requirement for SEFs to comply with their statutory obligation under CEA section 5h(f)(6)(A).
acquiring sufficient swap position information because of the ensuing difficulty of enforcing such a limit. The Commission believes that providing the proposed delay for those exchanges that need it both preserves flexibility for subsequent Commission rulemaking and allows for phased implementation of limitations on swaps by exchanges, as practicable.43

The Commission observes that courts have upheld relieving regulated entities of their statutory obligations where compliance is impossible or impracticable.44 The Commission believes that it would be impracticable, if not impossible, for an exchange to monitor and enforce position limits for swaps with only the transaction data from that particular exchange. Accordingly, the Commission believes that it is reasonable at this time to delay implementation of this discrete aspect of position limits, only with respect to swaps position limits, and only for exchanges that lack access to sufficient swap position information. The Commission believes that this approach would further the policy objectives of the Dodd-Frank Act regulatory regime, including the facilitation of trade processing of swaps and the promotion of trading arrangements. While this approach would delay the requirement for certain exchanges to establish and monitor exchange-set limits on swaps at this time, the Commission notes that, under the December 2013 position limits proposal, federal position limits would apply to swaps that are economically equivalent to futures contracts subject to federal position limits.7

Request for comment (‘‘RFC’’). The Commission requests comment on all aspects of the proposed delay in implementing the requirements of SEF core principle 6(B) and DCM core principle 5(B) with respect to the setting and monitoring by exchanges of position limits for swaps. Does any DCM or SEF currently have access to sufficient data regarding individual market participants’ open swaps positions to so set and monitor swaps position limits other than by special call? If yes, please describe in detail how such access could be obtained.45 If no, how easy or difficult would it be for an exchange to obtain access to sufficient swap position information by means of contract or other arrangements?

B. Proposal To Amend the Definition of Bona Fide Hedging Position

As discussed below, the Commission is now proposing a general definition of bona fide hedging position that incorporates only the standards in CEA section 4a(c)(2), regarding physical commodity derivatives. Conforming the standards of a general definition of bona fide hedging position to those of the statute requires eliminating two components of the general definition of bona fide hedging position in current § 1.3(z)(1): The incidental test and the orderly trading requirement.46 Thus, the Commission is now proposing to eliminate the incidental test and the orderly trading requirement, as discussed below.

43 Although this current proposal would provide position limits relief to SEFs and to DCMs in regards to swaps, it would not alter the definition of referenced contract (including economically equivalent swaps) as proposed in December 2013. See December 2013 position limits proposal 78 FR at 75825. The Commission continues to review and consider comments received regarding the definition of referenced contract.

44 See, e.g., Ass’n of Irritated Residents v. EPA, 494 F.3d 1027, 1031 (D.C. Cir. 2007) (allowing regulated entities to enter into consent agreements with EPA—without notice and comment—that deferred prosecution of statutory violation until such time as compliance would be practicable); Catron v. County Bd. Of Commissioners v. New Mexico Fish & Wildlife Serv., 75 F.3d 1429, 1433 (10th Cir.1996) (noting that “Compliance with [the National Environmental Protection Act] is excused when there is a statutory conflict with the agency’s authorizing legislation that prohibits or renders compliance impossible.”). Further, it is axiomatic that courts will avoid reading statutes to reach absurd or unreasonable consequences. See, e.g., Griffin v. Oceanic Contractors, Inc., 458 U.S. 564 (1982) (requiring an exchange to monitor position limits on swaps, when it currently has extremely limited visibility into a market participant’s swap position, is arguably absurd and certainly appears unreasonable.

45 The Commission expects that any DCM or SEF that has access to sufficient swap position information will report this to the Commission in a comment letter to be publicly available in the comment file for this current proposal on the Commission’s Web site.

46 The inclusion of the incidental test and the orderly trading requirement in the definition of bona fide hedging has a long history. As noted in the December 2013 Position Limits proposal, “In response to the 1974 legislation, the Commission’s predecessor adopted in 1975 a bona fide hedging definition in § 1.3(a) of its regulations stating, among other requirements, that transactions or positions would not be classified as hedging unless their bona fide purpose was to offset price risks incidental to commercial cash or spot operations, and such positions were established and liquidated in an orderly manner and in accordance with sound commercial practices. Shortly thereafter, the newly formed Commission sought comment on amending that definition. Given the large number of issues raised in comment letters, the Commission adopted the predecessor’s definition with minor changes as an interim definition of bona fide hedging transactions or positions, effective October 18, 1975.” See December 2013 Position Limits Proposal at 75703. The Commission is also proposing a non-substantive change to subsection (1)(ii)(B) of the bona fide hedging definition by deleting from the definition proposed in the December 2013 position limits proposal the lead in words “such position.”
trading prohibitions and polices would apply regardless of whether there is an orderly trading requirement.\textsuperscript{52} Commenters requested that if the Commission were to retain the orderly trading requirement, the Commission interpret such requirement in a manner consistent with the Commission’s disruptive trading practices interpretation (i.e., a standard of intentional or reckless conduct); commenters also requested that the Commission not apply a negligence standard.\textsuperscript{53}

3. Proposal To Amend the Definition

For the reasons discussed below, and in response to the comments received, the Commission is proposing to eliminate the incidental test and orderly trading requirement from the general definition of bona fide hedging position. For clarity, the Commission is herein publishing, in proposed § 150.1, a general definition of bona fide hedging position for physical commodity derivatives that incorporates only the standards of CEA section 4a(c), but notes that the definition is subject to further requirements not inconsistent with those statutory standards and the policy objectives of position limits.

i. Incidental Test

The Commission proposes to eliminate the incidental test. As noted above, the incidental test and the orderly trading requirement have been part of the rule 1.3(2)(1) definition of bona fide hedging since 1975.\textsuperscript{54} These provisions were not separately explained in the 1974 notice proposing the adoption of rule 1.3(2)(1) the notice observed only that the ‘‘proposed definition otherwise deviates in only minor ways from the hedging definition presently contained in (CEA section 4a(3)).\textsuperscript{55} The then-current statutory definition of bona fide hedging position in CEA section 4a(3) used the concepts of ‘‘good faith’’ (regarding the amount of a commodity a person expects to raise) and a ‘‘reasonable hedge’’ (regarding hedges of inventory).

The Commission adopted the concept of economically appropriate in 1977, after finding its definition of bona fide hedging inadequate due to changes in commercial practices and the diverse nature of commodities now under regulation, but did not address whether the concept of economically appropriate overlapped with the incidental test.\textsuperscript{56} The economically appropriate test requires that a bona fide hedging position be economically appropriate to the reduction of risks in the conduct and management of a commercial enterprise.\textsuperscript{57} While in the 1977 rulemaking defining bona fide hedging the Commission discussed the concept of economically appropriate as an expansive standard, the incidental test appears to have simply been left in the definition as an historical carryover. In the December 2013 position limits proposal, the Commission noted that it believed the incidental test’s concept of commercial cash market activities is embodied in the economically appropriate test for physical commodities in CEA section 4a(c)(2).\textsuperscript{58}

In light of this connection between the concept of commercial cash market activities and the economically appropriate test, the Commission notes that it included in the December 2013 positions limits proposal the intention to apply the economically appropriate test to hedges in an excluded commodity.\textsuperscript{59}

In both the current and December 2013 proposed definitions of bona fide hedging position, the incidental test requires a reduction in price risk. Although the Commission is now proposing to eliminate the incidental test from the first paragraph of its proposed bona fide hedge definition, the Commission notes that it interprets risk, in the economically appropriate test, to mean price risk. Commenters suggested the Commission adopt a broader interpretation of risk (including, for example, execution and logistics risk and credit risk). However, a broader interpretation appears to be inconsistent with the policy objectives of position limits in CEA section 4a(a)(3)(B) regarding physical commodities, particularly: Diminishing excessive speculation that causes sudden or unreasonable fluctuations or unwarranted changes in the price of a commodity; deterring manipulation, squeezes, and corners; and ensuring the price discovery function is not disrupted.

ii. Orderly Trading Requirement

The Commission proposes to eliminate the orderly trading requirement. While that provision has been a part of the regulatory definition of bona fide hedge since 1975,\textsuperscript{60} and previously was found in the statutory definition of bona fide hedge prior to the 1974 amendment removing the statutory definition from CEA section 4a(3), the Commission is not aware of a denial of recognition of a position as a bona fide hedge as a result of a lack of orderly trading on an exchange. Further, the Commission notes that the meaning of the orderly trading requirement is unclear in the context of the over-the-counter swap market, as well as in the context of permitted off-exchange transactions (e.g., exchange of derivatives for related positions). In addition, the Commission observes that disruptive trading activity by a commercial entity engaged in establishing or liquidating a hedging position would generally appear to be contrary to its economic interests. However, the Commission notes that an exchange may use its own discretion to condition its recognition of a bona fide

\textsuperscript{52} Section 747 of the Dodd-Frank Act amended the CEA to expressly prohibit certain disruptive trading practices. Specifically, CEA section 4c(a)(5), 7 U.S.C. 6c(a)(5), states that it is unlawful for a person to engage in any trading, practice, or conduct on or subject to the rules of a registered entity that (A) violates bids or offers; (B) demonstrates intentional or reckless disregard for the orderly execution of transactions after the closing period; or (C) is, of the character of, or is commonly known to the trade as, ‘‘spoofing’’ (bidding or offering with the intent to cancel the bid or offer before execution). See also, Antidisruptive Practices Authority, 78 FR 31890 (May 28, 2103) (providing a policy statement and guidance).


\textsuperscript{54} 40 FR 11560 (March 12, 1975).

\textsuperscript{55} See 38 FR 39731 (Nov. 11, 1974). CEA section 4a(3) then stated that no order issued under its paragraph (1) shall apply to transactions or positions which are shown to be bona fide hedging transactions or positions as such terms as shall be defined by the Commission within one hundred and eighty days after the effective date of the Commodity Futures Trading Commission Act of 1974 by order consistent with the purposes of this chapter. 7 U.S.C. 6a(3) 1974. As noted in the Federal Register release adopting the definition, the definition was proposed pursuant to section 404 of the Commodity Futures Trading Commission Act of 1974 (P.L. 93–463), which directed the Secretary of Agriculture to promulgate regulations defining ‘‘bona fide hedging transactions and positions.’’ 39 FR at 39731 (Nov. 11, 1974).

\textsuperscript{56} 42 FR 42748 (August 24, 1977). In the Federal Register release adopting the amended definition, the Commission stated that it was adopting amendments to its general regulations to ‘‘generally broaden the scope of the hedging definition to include current commercial risk shifting practices in the markets now under regulation. The Commission has also recognized the potential for market disruption if certain trading practices are carried out during the delivery period of any futures. The definition therefore restricts the classification of certain transactions and positions as bona fide hedging during the last five days of trading. In addition, the Commission has amended its regulations to include reporting requirements for some new types of bona fide hedging which will now be recognized.’’ 42 FR 42748 (Aug. 24, 1977).

\textsuperscript{57} See CEA section 4a(c)(2)(A)(ii).

\textsuperscript{58} See December 2013 Proposal at 75707.

\textsuperscript{59} See 39 FR 39731 (Nov. 11, 1974). CEA section 4a(3) then stated that no order issued under its paragraph (1) shall apply to transactions or positions which are shown to be bona fide hedging transactions or positions as such terms as shall be defined by the Commission within one hundred and eighty days after the effective date of the Commodity Futures Trading Commission Act of 1974 by order consistent with the purposes of this chapter. 7 U.S.C. 6a(3) 1974. As noted in the Federal Register release adopting the definition, the definition was proposed pursuant to section 404 of the Commodity Futures Trading Commission Act of 1974 (P.L. 93–463), which directed the Secretary of Agriculture to promulgate regulations defining ‘‘bona fide hedging transactions and positions.’’ 39 FR at 39731 (Nov. 11, 1974).

\textsuperscript{60} 42 FR 42748 (August 24, 1977). In the Federal Register release adopting the amended definition, the Commission stated that it was adopting amendments to its general regulations to ‘‘generally broaden the scope of the hedging definition to include current commercial risk shifting practices in the markets now under regulation. The Commission has also recognized the potential for market disruption if certain trading practices are carried out during the delivery period of any futures. The definition therefore restricts the classification of certain transactions and positions as bona fide hedging during the last five days of trading. In addition, the Commission has amended its regulations to include reporting requirements for some new types of bona fide hedging which will now be recognized.’’ 42 FR 42748 (Aug. 24, 1977).

\textsuperscript{61} See CEA section 4a(c)(2)(A)(ii).

\textsuperscript{62} See December 2013 Proposal at 75707.
hedging position on an orderly trading requirement.

The Commission notes the anti-disruptive trading prohibitions of CEA section 4c(a)(5), as added by the Dodd-Frank Act, apply to trading on registered entities, but not to over-the-counter transactions, regardless of whether the trading is related to hedging activities. Specifically, the anti-disruptive trading prohibitions in CEA section 4c(a)(5) make it unlawful to engage in trading on a registered entity that “demonstrates intentional or reckless disregard for orderly execution of trading during the closing period.” In this regard, the Commission notes that it also has the authority, under CEA section 4c(a)(6), to prohibit the intentional or reckless disregard for the orderly execution of transactions on a registered entity outside of the closing period.

C. Proposed Rules Related to Recognition of Bona Fide Hedging Positions and Granting of Spread Exemptions

In sections D, E, and F, below, this current proposal discusses three sets of proposed Commission rules that would enable an exchange to submit to the Commission exchange rules under which the exchange could take action to recognize certain bona fide hedging positions and to grant certain spread exemptions, with regard to both exchange-set and federal position limits. In each case, the proposed Commission rules would establish a formal CFTC review process that would permit the Commission to revoke all such exchange actions.

If the changes in this current proposal are adopted, exchanges would be able to: (i) Recognize certain non-enumerated bona fide hedging positions (“NEBFHs”), i.e., positions that are not enumerated by the Commission’s rules (pursuant to proposed § 150.9); (ii) grant exemptions to position limits for certain spread positions (pursuant to proposed § 150.10); and (iii) recognize certain enumerated anticipatory bona fide hedging positions (pursuant to proposed § 150.11).63

The Commission’s authority to permit certain exchanges to recognize positions as bona fide hedging positions is found, in part, in CEA section 4a(c)(1).65 The Commission has the authority to apply the “transaction or positions which are shown to be bona fide hedging transactions or positions,” as those terms are defined by Commission rule consistent with the purposes of the CEA. The Commission notes that “shown to be” is passive voice, which could encompass either a position holder or an exchange being able to “show” that a position is entitled to treatment as a bona fide hedge, and does not specify that the Commission must determine in advance whether the position or transaction was shown to be bona fide. The Commission interprets CEA section 4a(c)(1) to authorize the Commission to permit certain SROs (i.e., DCMs and SEFs, meeting certain criteria) to recognize positions as bona fide hedges for purposes of federal limits, subject to Commission review.

When determining whether to recognize certain bona fide hedges, an exchange would be required to apply the standards in the Commission’s general definition of bona fide hedging position, which incorporates the standards in CEA section 4a(c)(2), and bona fide hedging transactions or positions. 7

The Commission’s current proposal to further amend its other policy objectives for position limits, in a similar manner to the proposed

62 See note 73 below.

63 The Commission has authority to exempt spread positions under CEA section 4a(a)(1), which provides that the Commission may exempt transactions normally known to the trade as “spreads” from position limits. Under this current proposal, applicants may rely on an exchange’s grant of a spread exemption absent notice from such exchange or the Commission to the contrary.

64 Unauthorized exemptions for spreads, no exemption is needed for bona fide hedging transactions or positions as under CEA section 4a(c)(1), no rule, regulation or order issued under CEA section 4a(c) applies to transactions or positions shown to be the exchange’s conclusions would be subject to Commission review and, if necessary, remediation.67

In addition, the Commission would permit certain exchanges to exempt positions normally known to the trade as spreads, subject to a consideration of the four policy objectives of position limits found in CEA section 4a(a)(3)(B).68 The Commission notes that nothing in CEA section 4a(a)(1) prohibits the Commission from exempting such spreads.69 The Commission interprets this provision as CEA statutory authority to exempt spreads that are consistent with the other policy objectives for position limits, such as those in CEA section 4a(a)(3)(B).70 The Commission finds, pursuant to CEA section 8a(5), that permitting certain exchanges to recognize such spreads, subject to subsequent Commission review of such actions, is reasonably necessary to effectuate the CEA’s policy objectives.71
Further, the Commission would permit certain exchanges to recognize certain enumerated anticipatory hedging positions under the Commission’s definition of bona fide hedging position, essentially as an administrative collection of certain information, but subject to Commission review. Under proposed § 150.11, the exchange would be required to follow defined administrative procedures that require the market participant to file certain information with the exchange, including the information the market participant chooses to file and the contact information of the market participant. The exchange would, in turn, file certain information with the Commission under § 150.7 as proposed in the December 2013 position limits proposal; in the alternative, the market participant could choose to file that same information directly with the Commission under proposed § 150.7.72 Each of the exchange-administered processes under proposed §§ 150.9, 150.10.74 and 150.11 75 would be subject to Commission review.76 The three proposed processes would allow market participants to rely on an exchange’s recognition of an NEBFH, spread, or anticipatory exemption until an exchange or the Commission notifies them to the contrary. However, the proposed processes would not protect exchanges or applicants from charges of violations of applicable sections of the CEA or other Commission regulations, other than position limits. For instance, a market participant’s compliance with position limits or an exemption does not confer any type of safe harbor or good faith defense to a claim that the market participant had engaged in an attempted manipulation, a perfected manipulation or deceptive conduct, as is the case under both current § 150.6 as well as § 150.6 as proposed in the December 2013 position limits proposal.77

The Commission views this current proposal, enabling exchanges to elect to administer these three processes, to be suitable since each process requires that: (i) An exchange submit implementing rules subject to Commission review, under the ordinary rule submission procedures of the Commission’s part 40 regulations; (ii) the standards for determining whether recognition or exemption be those set out under the statute; 78 (iii) each exchange’s actions under such implementation rules are subject to Commission review.79 The Commission observes that for decades, exchanges have operated as self-regulatory organizations (“SROs”).80 These SROs are charged with carrying out regulatory functions, including, since 2001, complying with core principles and operate subject to the regulatory oversight of the Commission pursuant to the CEA as a whole, and more specifically, sections 5 and 5h.82 As SROs, exchanges do not act only as independent, private actors.83 When the Act is read as a whole, as the Commission noted in 1981, “it is apparent that Congress envisioned cooperative efforts between the self-regulatory organizations and the Commission. Thus, the exchanges, as well as the Commission, have a continuing responsibility in this matter with carrying out regulatory functions, including, since 2001, complying with core principles, and operate subject to the regulatory oversight of the Commission pursuant to the CEA as a whole, and more specifically, sections 5 and 5h.82 As SROs, exchanges do not act only as independent, private actors.83 When the Act is read as a whole, as the Commission noted in 1981, “it is apparent that Congress envisioned cooperative efforts between the self-regulatory organizations and the Commission. Thus, the exchanges, as well as the Commission, have a continuing responsibility in this matter with carrying out regulatory functions, including, since 2001, complying with core principles, and operate subject to the regulatory oversight of the Commission pursuant to the CEA as a whole, and more specifically, sections 5 and 5h.82 As SROs, exchanges do not act only as independent, private actors.83 When the Act is read as a whole, as the Commission noted in 1981, “it is apparent that Congress envisioned cooperative efforts between the self-regulatory organizations and the Commission. Thus, the exchanges, as well as the Commission, have a continuing responsibility in this matter.
under the Act.” The Commission’s approach to its oversight of its SROs was subsequently ratified by Congress in 1982, when it gave the CFTC authority to enforce exchange set limits. As the Commission observed in 2010, “since 1982, the Act’s framework explicitly anticipates the concurrent application of Commission and exchange-set speculative position limits.” The Commission further noted that the “concurrent application of limits is particularly consistent with an exchange’s close knowledge of trading activity at the facility and the Commission’s greater capacity for monitoring trading and implementing remedial measures across interconnected commodity futures and option markets.”

The Commission notes that it retains the power to approve or disapprove the rules of exchanges, under standards set out pursuant to the CEA, and to review an exchange’s compliance with those rules. By way of example, the Commission notes that its Division of Market Oversight would conduct “rule enforcement reviews” of each exchange’s compliance with the rules it files under this current proposal. Such reviews would include an examination of how effectively an exchange administers these three proposed processes, including review of recognitions and exemptions granted under the rules. Exchanges, as SROs, are also subject to comprehensive Commission regulation.

The Commission—in adopting and administering a regime that permits certain SROs (e.g., DCMs and SEFs that meet certain criteria) to recognize positions as bona fide hedges subject to Commission review, modification, or rejection—proposes building upon the experience and expertise of the DCMs in administering their own processes for recognition of bona fide hedging positions under current § 1.3(z).

Consistent with current market practice, the three proposed exchange-administered processes will accomplish fact gathering regarding large positions for the Commission, without much expense of Commission resources. The information obtained by means of fact gathering during the application processes will be available to the Commission at any time upon request and pursuant to the recordkeeping and recording provisions at proposed §§ 150.9(b) and (c), 150.10(b) and (c), and 150.11(b) and (c). The Commission believes that the initial disposition of applications through the exchange-administered processes should establish a reasonable basis for a Commission determination that an application should be subsequently approved or denied. The Commission anticipates that exchanges will advise and consult with Commission staff regarding the effectiveness of these programs, once implemented by the exchanges, and their utility in advancing the policy objectives of the Act.

Moreover, the Commission is not diluting its ability to recognize or not recognize bona fide hedging positions.


See note 116, and accompanying text (pointing to ICE Futures U.S. and Intercontinental Group comment letters noting their experience overseeing position limits, position accountability levels, and the recognition of bona fide hedges.)

In connection with recognition of bona fide hedging positions, the Commission notes that the statute is silent or ambiguous with respect to the specific issue—whether the CFTC may authorize SROs to recognize positions as bona fide hedging positions. CEA section 4a(c) provides that market participants can request a staff interpretive letter under § 140.99 from the Commission to consider an NEBFH application by a market participant to recognize positions as bona fide hedges, but the Commission appears to share.’’

The December 2013 position limits proposal provides that market participants can request a staff interpretive letter under § 140.99 from the Commission to seek exemptive relief under CEA section 4a(a)(7) from the Commission, as an alternative to the three proposed exchange-administered processes.

Under the review process set forth in proposed §§ 150.9(d) and 150.10(d), the Commission will give notice to the exchange and the applicable applicant that they have 10 business days to provide any supplemental information to the Commission. The review process set forth in proposed § 150.11(d) is simpler because the Commission does not anticipate that applications for recognition of enumerated anticipatory bona fide hedge positions would be based on novel facts and circumstances; instead the review of such an application would focus on whether the application met the filing requirements contained in proposed § 150.11(a). If the filing was not complete, then proposed § 150.11(d) would provide an opportunity to supplement to the applicant and the exchange.

During the review process, when the Commission considers an exchange’s disposition of an application, the Commission considers not only the Act but the Commission’s relevant regulations and interpretations. That is, the Commission will apply the same standards during review as the exchange should or would have applied in disposing of an application.

The December 2013 position limits proposal provides that market participants can request a staff interpretive letter under § 140.99 from Commission staff or seek exemptive relief under CEA section 4a(a)(7) from the Commission. See, e.g., 78 FR at 75719–20. As noted above, the process of requesting interpretations under § 140.99 would also be available to market participants whose application for recognition of a position as a bona fide hedge was rejected by an exchange. See supra note 76; see also infra note 109 and accompanying text.
The Commission notes that CEA section 8a(5) authorizes the Commission to make such rules as, in its judgment, are reasonably necessary to effectuate any of the purposes of the Act. The Commission currently views the proposed processes to be reasonably necessary to implement CEA section 4a(a)(1), including for the purpose of diminishing, eliminating, or preventing the burden of excessive speculation. As pointed out by the Commission in 1981: “Section [4a(a)(1)] represents an express Congressional finding that excessive speculation is harmful to the market, and a finding that speculative limits are an effective prophylactic measure. Section 8a(5), accordingly would authorize the Commission to develop regulations necessary to effectuate the purposes of the Act, one of which is expressed in section [4a(a)(1)]. Consistent with this approach, the Commission fashioned rule 1.61 (current rule 150.5) to assure that the exchanges would have an opportunity to employ their knowledge of their individual contract markets to propose the position limits they believe most appropriate. In addition, section 8a(7) of the Act provides the Commission with authority to alter or supplement the rules of a registered entity, including DCMs and SEFs, if the Commission determines that such changes are necessary or appropriate. Consequently, as the Commission noted in 1981, “CEA section 8a(7) further underscores the fact that Congress affirmatively contemplated a regulatory system whereby the exchanges would act in the first instance to adopt rules which would protect persons producing, handling, processing or consuming any commodity or a product derived therefrom to hedge their legitimate anticipated business needs.”

In contrast to the longstanding DCM experience monitoring position limits on futures contracts and granting exemptions to those exchange-set limits on futures contracts, exchanges generally do not currently administer speculative position limits on swaps. Previously, facilities operating under CEA section 2(b)(3) as exempt commercial markets were subject to CFTC regulation under authority granted by Congress in 2008 (although that authority was subsequently superseded by the Dodd-Frank Act). Under that 2008 authority, the Commission issued guidance that an ECM should establish spot month position limits on any swap contract that the Commission determined to be a significant price discovery contract (“SPDC”). However, since the Dodd-Frank Act, exchanges have “futurized” (or converted into futures contracts) those SPDCs. Thus, the Commission understands that exchanges generally do

100 17 CFR 1.3(j)(1).
102 17 CFR part 36. It should be noted that prior to the Dodd-Frank Act, ECMs could require clearing of swaps at a particular DCO and, thus, could gain access to information on open positions in a particular swap from a single affiliated DCO. The Dodd-Frank Act altered the playing field, providing market participants with a choice as to which DCO they wish to use. CEA section 3(b)(13)(B) generally does not permit a SEF to impose any material anticompetitive burden on clearing. 7 U.S.C. 7b–3(c)(1)(B).
103 In 2012, ICE (which listed the only contracts that had been determined by the Commission to be SPDCs) “futurized” the SDPC contracts listed on its ECM by listing them instead on its ECM (as it noted at that time, its plan was “to convert 251 Energy Contracts to futures contracts that would be listed for trading on the Exchange’s electronic trading platform,” along with a request that the Commission issue an order transferring the swap open interest carried at the DCO for the ICE ECM OTC contracts to futures and options open interest carried at the DCO for ICE, the DCM, ICE Submission No. 12–45, August 15, 2012).
not currently have speculative position limits applicable to swaps contracts. CEA section 4a(c) provides generally that federal position limits do not apply to positions that are shown to be bona fide hedging positions.104 CEA section 4a(c)(2), adopted by the Dodd-Frank Act, directs the Commission to narrow the scope of what constitutes a bona fide hedging position, for the purpose of implementing federal position limits on physical commodity derivatives, within specific parameters.105 In response to that directive, the Commission proposed to add a definition of bona fide hedging position in §150.1, to replace the definition in current §1.3(z).106

The December 2013 position limits proposal would replace the process for Commission recognition of NEFBFs under current §1.3(z)(3)107 and §1.47108 of the Commission’s regulations with proposed §150.3(e), which would provide guidance for persons seeking non-enumerated hedging exemptions through the filing of a petition under section 4a(a)(7) of the Act or by requesting an interpretation under §140.99.109 When discussing non-enumerated hedges in the December 2013 position limits proposal, the Commission noted that “[u]nder the proposal for physical commodities, additional enumerated hedges could only be added to the definition of bona fide hedging position by way of notice and comment rulemaking,” and asked whether it should “adopt, as an alternative, an administrative procedure that would allow the Commission to add additional enumerated hedge hedges without requiring notice and comment rulemaking.”110 The Commission recognized that “there are complexities to analyzing the various price risks applicable to particular commercial circumstances in order to determine whether a hedge exemption is warranted.”111 Historically, the Commission has recognized bona fide hedges where a demonstrated physical price risk has been shown.112 In addition, when summarizing the conclusions of the Working Group petition requests in the December 2013 position limits proposal, the Commission observed that “context is essential to determining the nature of any price risk that has been realized and could support the existence of a bona fide hedge,” and “the only way to evaluate the nature of any price risk would be for the Commission to be provided with particulars of the transaction.”113

2. Comments on the December 2013 Process for Recognition of a Position as a Bona Fide Hedge

Some commenters have suggested that the Commission permit exemptions to process applications for non-enumerated bona fide hedges (“NEFBFs”).114 For example, ICE Futures U.S. (“ICE Futures U.S.”) commented that the Commission should not now undertake the daily administration of NEFBFs when its resources are limited,115 and stated that it has extensive, direct experience overseeing position limits, position accountability levels, and the recognition of bona fide hedges.116 The enumerated hedge applications in the first instances ISDA and SIFMA on July 7, 2013 (“CL–ISDA–SIFMA–59911”), at 4 (requesting that the Commission include in the final rulemaking a process for market participants to apply to registered exchanges for non-enumerated hedge exemptions); Natural Gas Supply Association (“NGSA”) on Aug. 4, 2013 (“CL–NGSA–59941”), at 9 (requesting the Commission to consider using ICE and CME Group to continue to administer hedge exemptions); Working Group on March 30, 2015 (“CL–Working Group–60396”), at 6 (recommending that DCMs be able to grant bona fide hedge exemptions in the energy industry either on an enumerated or non-enumerated basis); International Energy Credit Association (“IECreditAssn”) on Aug. 4, 2014 (“CL–IECreditAssn–59957”), at 6 (stating that “[t]he [IECreditAssn] is generally supportive of a pre-approval process for nonenumerated hedging exemptions, whereby a commercial end-user could first seek and obtain review and approval by a CFTC-regulated Exchange”); ICE on March 30, 2015 (“CL–ICE–60387”), at 8 (noting that “the exchanges should continue to exercise the authority to grant non-enumerated hedge exemption requests pursuant to their rules and procedures”); CPOE on March 30, 2015 (“CL–CPOE–60316”), at 6–8 (supporting Working Group’s suggestion that DCMs be empowered to grant non-enumerated hedge exemptions). See also Plains All-American Pipeline, L.P. (“PAAP”) on Aug. 4, 2014 (“CL–PAAP–59951”), at 3–4; BG Energy Merchant (“BG Energy”) on March 30, 2015 (“CL–BG Energy–60383”), at 7–8; Sempra Energy (“Sempra”) on March 30, 2015 (“CL–SEMP–60384”), at 5. Contra Occupy the SEC on Aug. 7, 2014 (“CL–OSEC–59972”) at 4 (maintaining that permitting exchanges to “self-define” hedging exceptions “would likely create an environment conducive to producing a ‘race to the bottom’ among exchanges as they would have incentives to attract participants seeking to take advantage of the least restrictive rules”).


ICE Futures U.S., on March 30, 2015 (“CL–ICEUS–60378”), at 3–4. See also CL–CME–60406, at 5 (stating that “CME Group is sympathetic to the fact that the Commission has generally supportive constraints that would prevent it from administering a workable non-enumerated hedge exemption in real time”);.

116 1 CL–ICEUS–60378 at 1. See also CL–CME–60406 at 5 (noting that “[t]he exchanges have years of experience reviewing requests for hedge exemptions and approving or denying those requests based on a facts-and-circumstances approach.”); statement of R. Oppenheimer on behalf of the Working Group, Energy and Environmental Markets Advisory Committee meeting, July 29, 2015 (asserting that “the exchanges have the knowledge,
rules and procedures developed and used by . . . [ICE Futures U.S.] to perform this important function were designed to incorporate the specific needs and differing practices of the commercial participants in each of its markets as those needs and practices have developed over time.”117 These commenters generally espoused the view that the Commission should continue in its broad oversight role in the granting of hedge exemptions and should not begin to become involved in the daily administration of hedge exemptions. One academic suggested that permitting the exchanges to process NEBFH applications would be acceptable so long as the Commission surveils the work of the exchanges.118

3. Proposed NEBFH Recognition Process

In light of DCM experience in granting NEBFH exemptions to exchange-set position limits for futures contracts, and after considering comments recommending exchange review of NEBFH requests, the Commission now proposes to permit exchanges to recognize NEBFHs with respect to the proposed federal speculative position limits. Under proposed § 150.9, an exchange, as an SRO 119 that is under Commission oversight and whose rules are subject to Commission review,120 could establish rules under which the exchange could recognize as NEBFHs positions that meet the general definition of bona fide hedging position in proposed § 150.1, which implements the statutory directive in CEA section 4a(c) for the general definition of bona fide hedging position in § 150.1.121 If the Commission determined that the exchange-granted recognition was inconsistent with the expertise, and the regulatory incentive to carefully scrutinize the exemption process, and they already engage in a parallel process for their own implementation and ensuring convergence and orderly liquidation of futures contracts as they come to expiry.”122

117 CL–ICEUS–60378 at 1.


119 As noted above, under the Commission’s regulations, SROs have certain delineated regulatory responsibilities, which are carried out under Commission oversight and which are subject to Commission review. See also note 126 (describing reviews of DCMs carried out by the Commission).

120 See CEA section 5(c), 7 U.S.C. 7a–2(a) (providing Commission with authority to review rules and rule amendments of registered entities, including DCMs).

121 As previously noted, Congress has required in CEA section 4a(c) that the Commission, within specific parameters, define what constitutes a bona fide hedging position for the purpose of implementing federal position limits on physical commodity derivatives, including, as previously stated, the inclusion in new section 4a(c)(2) of a directive to narrow the bona fide hedging definition for physical commodity positions from that currently in Commission regulation § 1.3(z). See supra notes 32 and 105 and accompanying text; see also December 2013 positions limits proposal at 75705. In response to that mandate, the Commission proposed in December 2013 position limits proposal to add a definition of bona fide hedging position in § 150.1, to replace the definition in current § 1.3(z) (See 78 FR at 75706–75832. For the avoidance of doubt, the Commission is still reviewing comments received on these provisions. The Commission intends to finalize the general definition of hedging position based on the standards of CEA section 4a(c), and may further define the bona fide hedging position definition consistent with those standards.

122 See generally the discussion of proposed § 150.9(d) and how regarding the review of applications by the Commission, below. The Commission notes that exchange participation is voluntary, not mandatory and that exchanges could elect not to administer the process. Market participants could still request a staff interpretive letter under § 140.99 or seek exemptive relief under CEA section 4a(c)(7), per the December 2013 position limits proposal. The process does not protect exchanges or applicants from charges of violations of applicable sections of the CEA or other Commission regulations. For instance, a market participant’s compliance with position limits or an exemption thereto would not confer any type of safe harbor or good faith defense to a claim that he had engaged in an attempted manipulation, a perfected manipulation or deceptive conduct; see the discussion of § 150.6 (Ongoing application of the Act and Commission regulations) as proposed in the December 2013 position limits proposal, 78 FR at 75746–7.

123 See, e.g., the general discussion of the Commission’s review process proposed in § 151.9(c), which would support the Commission’s surveillance program by facilitating the tracking of NEBFHs recognized by exchanges, keeping the Commission informed of the manner in which an exchange is administering its procedures for recognizing such NEBFHs. section 4a(c) of the Act and the Commission’s general definition of bona fide hedging position in § 150.1 and so notified a market participant relying on such recognition, the market participant would be required to reduce the derivative position or otherwise come into compliance with position limits within a commercially reasonable amount of time.

The Commission believes that permitting exchanges to so recognize NEBFHs is consistent with its statutory obligation to set and enforce position limits on physical commodity contracts, because the Commission is retaining its authority to determine ultimately whether any NEBFH so recognized is in fact a bona fide hedging position. The Commission’s authority to set position limits does not extend to any position that is shown to be a bona fide hedging position.124 Further, most, if not all, DCMs already have a framework and application process to recognize non-enumerated positions, for purposes of exchange-set limits, as within the meaning of the general bona fide hedging definition in § 1.3(f)(1).125 The Commission has a long history of overseeing the performance of the DCMs in granting appropriate exemptions under current exchange rules regarding exchange-set position limits 126 and

124 CEA section 4a(c)(1), 7 U.S.C. 6a(c)(1). See also supra note 65.

125 Rulebooks for some DCMs can be found in the links to their associated documents on the Commission’s Web site at http://sirt.cftc.gov/SBRT/ SBRT.aspx?Topic=TradingOrganizations.

126 The Commission bases this view on its long experience overseeing DCMs and their compliance with the requirements of CEA section 5 and part 38 of the Commission’s regulations, 17 CFR part 38. Under part 38, a DCM must comply, on an initial and ongoing basis, with twenty-three Core Principles established in section 5(d) of the CEA, 7 U.S.C. 7(d), and part 38 of the CFTC’s regulations analogous to those Core Principles, section 5(d), and part 38. The Division of Market Oversight’s Market Compliance Section conducts regular reviews of each DCM’s ongoing compliance with these principles through the self-regulatory programs operated by the exchange in order to enforce its rules, prevent market manipulation and customer and market abuses, and ensure the recording and safe storage of trade information. These reviews are known as rule enforcement reviews (“RERs”). Some periodic RERs examine a DCM’s market surveillance program for compliance with Core Principle 4, Monitoring of Trading, and Core Principle 5, Position Limitations or Accountability. On some occasions, these two types of RERs may be combined in a single RER. Market Compliance can also conduct horizontal RERs of the compliance of multiple exchanges in regard to particular core principles. In conducting an RER, the Division of Market Oversight (DMO) staff examines trading and compliance activities at the exchange in question over an extended time period selected by DMO, typically the twelve months immediately preceding the start of the review. Staff conducts extensive review of documents and systems used by the exchange in carrying out its self-regulatory responsibilities; interviews compliance officials and

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believes that it would be efficient and in the best interest of the markets, in light of current resource constraints, to rely on the exchanges to initially process applications for recognition of positions as NEBFHs. In addition, because many market participants are familiar with current DCM practices regarding bona fide hedges, permitting DCMs to build on current practice may reduce the burden on market participants. Moreover, the process outlined below should reduce duplicative efforts because market participants seeking recognition of an NEBFH would be able to file one application for relief, only to an exchange, rather than to both an exchange with respect to exchange-set limits and to the Commission with respect to federal limits.

staff of the exchange; and prepare a detailed written report. In nearly all cases, the RER report is made available to the public and posted on CFTC.gov. See materials regarding RERs of DCMs at http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/dcmreview on the Commission’s Web site. Recent RERs conducted by DMO covering DCM Core Principle 5 and exemptions from position limits have included the Minneapolis Grain Exchange, Inc. (“MC.EX”) (June 5, 2015), ICE Futures U.S. (July 22, 2014), the Chicago Mercantile Exchange (“CME”) and the Chicago Board of Trade (“CBOT”) (July 26, 2013), and the New York Mercantile Exchange (NYMEX) (May 19, 2008). While DMO may sometimes identify deficiencies or make recommendations for improvements, it is the Commission’s view that it should be permissible for DCMS to process applications for recognition of positions as NEBFHs. Consistent with the fifteen SEF core principles established in section 5 of the CEA, 7 U.S.C. § 7h–3(f), and with the implementing regulations under part 37, 17 CFR part 37, the Commission will perform similar RERs for SEFs. The Commission’s preliminary view is that it should be permissible for SEFs to process applications as well, after obtaining the requisite experience administering exchange-set position limits discussed below.

127 Since the enactment of the Dodd-Frank Act, Commissioners, CFTC staff, and public officials have expressed repeatedly and publicly that Commission resources have not kept pace with the CFTC’s expanded jurisdiction and increased responsibilities. The Commission anticipates there may be hundreds of applications for NEBFHs. This is based on the number of exemptions currently processed by DCMs. For example, under the existing process, during the period from June 15, 2011 to June 15, 2012, the Market Surveillance Department of the CME received 114 new exemptive applications, 295 applications for renewal, 10 applications for increased levels, and one temporary exemption on an inter-commodity spread rule. See Report of the Chicago Mercantile Exchange and the Chicago Board of Trade, July 26, 2013, p. 54. These statistics are now a few years old, and it is possible that the number of applications under the processes outlined in this proposal will increase relative to the number of applications described in the RERs. The CFTC would need to shift substantial resources, to the detriment of other oversight activities, to process so many requests and applications and has determined, as described below, to permit exchanges to process applications initially. The Commission will also require, as practicable, check a sample of the exemptions granted, including in cases where the facts warrant special attention, retroactively as described below, including through RERs.

reduce the burden on market participants. Moreover, the process outlined below should reduce duplicative efforts because market participants seeking recognition of an NEBFH would be able to file one application for relief, only to an exchange, rather than to both an exchange with respect to exchange-set limits and to the Commission with respect to federal limits.

128 One commenter specifically requested that the Commission streamline duplicative processes. American Gas Association ("AGA") on March 30, 2015 ("CL–AGA–60382") at 12 (stating that "AGA . . . urges the Commission to ensure that hedge exemption requests and any hedge reporting do not require duplicative filings at both the exchanges and the Commission") and recommends revising the rules to streamline the process by providing that an applicant need only apply to and report to the exchanges, while the Commission could require any necessary data and applications by coordinating data flow between the exchanges and the Commission."). See also CL–Working Group—60396 (explaining that "To avoid employing duplicative efforts, the Commission should simply rely on DCMS to administer bona fide hedge exemptions from federal speculative position limits as they carry out their core duties to ensure orderly markets.")

129 DCMs currently process applications for exemptions from exchange-set position limits for certain NEBFHs and enumerated anticipatory bona fide hedges, as well as for exemptions from exchange-set position limits for certain spread positions, pursuant to CFMA-era regulatory guidance. See note 102, above, and accompanying text. This practice continues because, among other things, the Commission has not finalized the rules proposed in the December 2013 position limits proposal.

As noted above and as explained in the December 2013 position limits proposal, while current § 150.5 regarding exchange-set position limits pre-dates the CFMA, the CFTC’s regime concerning position limitations or accountability for exchanges had the effect of undercutting the mandatory rules promulgated by the Commission in current § 150.5. Since the CFMA amended the CEA in 3:50, the Commission has retained § 150.5, but only as guidance on, and acceptable practice for, compliance with DCM core principle 5."

December 2013 position limits proposal 76 FR at 75724.

The Commission’s view, allowing DCMs to continue to follow current practice, and extend that practice to exchange recognition of NEBFHs for purposes of the federal position limits, will permit the Commission to more effectively allocate its limited resources to oversight of the exchanges’ actions.

RFC 2. Are there any facts and circumstances specific to DCMs that, for purposes of exchange limits, currently recognize non-enumerated positions meeting the general definition of bona fide hedging position in § 1.3(e)(1), that the Commission should accommodate in any final regulations regarding the processing of NEBFH applications?

RFC 3. Are there any concerns regarding an exchange that elects to stop processing NEBFH applications? For example, what should be the status of a previously recognized NEBFH, if the exchange that recognized a NEBFH no longer provides for an annual review?

b. Requirements for an Exchange To Process Applications

Proposed § 150.9(a)(1) provides that exchange rules must incorporate the general definition of bona fide hedging position in § 150.1. It also provides that, with respect to a commodity derivative position for which an exchange elects to process NEBFH applications, (i) the position must be in a commodity derivative contract that is a referenced contract; (ii) the exchange must list such commodity derivative contract for trading; (iii) such commodity derivative contract must be actively traded on such exchange; (iv) such exchange must have established position limits for such commodity derivative contract; and (v) such exchange must have at least one year of experience administering exchange-set position limits for such commodity derivative contract. The requirement for one year of experience is intended as a proxy for a minimum level of expertise gained in monitoring futures or swaps trading in a particular physical commodity.

The DCM application processes for bona fide hedge exemptions from exchange-set position limits generally reference or incorporate the general definition of bona fide hedging position contained in current § 1.3(e)(1), and the Commission believes the exchange processes for approving non-enumerated bona fide hedge applications are at least to some degree informed by the Commission process outlined in current § 1.4.

130 If the Commission becomes concerned about an exchange’s general processing of NEBFH applications, the Commission may review such processes pursuant to a periodic rule enforcement review or a request for information pursuant to Commission regulation § 37.5. Separately, under proposed § 150.9(d), the proposal provides that the Commission may review a DCM’s determinations in the case of any specific NEBFH application.
The Commission believes that the exchange NEBFH process should be limited only to those exchanges that have at least one year of experience overseeing exchange-set position limits in an actively traded referenced contract in a particular commodity because an individual exchange may not be familiar enough with the specific needs and differing practices of the commercial participants in those markets for which the exchange does not list any actively traded referenced contract in a particular commodity. Thus, if a referenced contract is not actively traded on an exchange that elects to process NEBFH applications for positions in such referenced contract, that exchange might not be incentivized to protect or manage the relevant commodity market, and its interests might not be aligned with the policy objectives of the Commission as expressed in CEA section 4a. The Commission expects that an individual exchange will describe how it will determine whether a particular listed referenced contract is actively traded in its rule submission, based on its familiarity with the specific needs and differing practices of the commercial participants in the relevant market.131

The Commission is also mindful that some market participants, such as commercial end users in some circumstances, may not be required to trade on an exchange, but may nevertheless desire to have a particular derivative position recognized as a NEBFH. The Commission believes that commercial end users should be able to avoid themselves of an exchange’s NEBFH application process in lieu of requesting a staff interpretive letter under § 140.99 or seeking CEA section 4a(a)(7) exemptive relief. This is because the Commission believes that exchanges that list particular referenced contracts will have enough information about the markets in which such contracts trade and will be sufficiently familiar with the specific needs and differing practices of the commercial participants in such markets in order to knowledgeably recognize NEBFHs for derivatives positions in commodity derivative contracts included within a particular referenced contract. The Commission also views this to be consistent with the efficient allocation of Commission resources.

RFC 4. Are there circumstances in which the Commission should permit an exchange to process an NEBFH application for a position in a commodity derivative contract where that contract is not actually traded on such exchange or for which the exchange has less than one year of experience administering position limits?

RFC 5. Should the Commission define “actively traded” in terms of a minimum monthly volume of trading, such as an average monthly trading volume of 1,000 futures-equivalent contracts over a twelve month period?

RFC 6. Are there any concerns if a market participant applies for recognition of a NEBFH on one exchange, intending to execute the trades comprising the recognized position away from that exchange (e.g., over the counter)?

RFC 7. Are there concerns regarding the applicability of NEBFH positions in the spot month? Should the Commission, parallel to the requirements of current regulation 1.3(z)(2) (i.e., the “five-day rule”), provide that such positions not be recognized as NEBFH positions during the lesser of the last five days of trading or the time period for the spot month?132

RFC 8. If the Commission permits NEBFH positions to be held into the spot month, should recognition of NEBFH positions be conditioned upon additional filings to the exchange—similar to the proposed Form 504 filings required for the proposed conditional spot month limit exemption?133 As proposed, Form 504 would require additional information on the market participant’s cash market holdings for each day of the spot month period. Under this alternative, market participants would submit daily cash position information to the exchanges in a format determined by the exchange, which would then be required to forward that information to the Commission in a process similar to that proposed under § 150.9(c)(2).

RFC 9. Alternatively, if the Commission permits NEBFH positions to be held into the spot month, should the Commission require market participants to file the Form 504 with the Commission? Under this alternative, the relevant cash market information would be submitted directly to the Commission, eliminating the need for the exchange to intermediate, although the Commission could share such a filing with the exchanges. The Commission would adjust the title of the Form 504 to clarify that the form would be used for all daily spot month cash position reporting purposes, not just the proposed requirements of the conditional spot month limit exemption in proposed § 150.3(c).

Consistent with the restrictions regarding the offset of risks arising from a swap position in CEA section 4a(c)(2)(B), proposed § 150.9(a)(1) would not permit an exchange to recognize an NEBFH involving a commodity index contract and one or more referenced contracts. That is, an exchange may not recognize an NEBFH where a bona fide hedge position could not be recognized for a pass through swap offset of a commodity index contract.134

c. Exchanges May Establish a Dual-Track Application Process

Proposed § 150.9(a)(2) permits an exchange to establish a less expansive application process for NEBFHs previously recognized and published on such exchange’s Web site than for NEBFHs based on novel facts and circumstances. This is because the Commission believes that some lesser degree of scrutiny may be adequate for applications involving recurring fact patterns, so long as the applicants are

131 For example, a DCM (“DCM A”) may list a commodity derivative contract (“X”), where “X” refers to contract and “X” refers to the commodity) that is a referenced contract, actively traded, and DCM A has the requisite experience and expertise in administering position limits in that one contract. DCM A can therefore recognize NEBFHs in contract X. But DCM A is not limited to recognition of just that one contract X—DCM A can also recognize any other contract that falls within the meaning of referenced contract for commodity X. So a could, for example, apply to DCM A for recognition of a position in any contract that falls within the meaning of referenced contract for commodity X. However, that market participant would still need to seek separate recognition from each exchange where it seeks an exemption from that other exchange’s limit for a commodity derivative contract in the same commodity X.

132 17 CFR 1.3(z)(2). See also, e.g., the “bona fide hedging position” definition proposed in the December 2013 position limits proposal, 78 FR at 75823–24.

133 The conditional spot month limit exemption and the related Form 504 were discussed in the December 2013 position limits proposal (78 FR at 75680). A copy of the proposed form was submitted to the Federal Register (id. at 75803–8) to ensure the public has the opportunity to comment on the comment on the information required by the proposed form. The Commission estimated the number of market participants that would be required to file the form in the December 2013 position limits proposal (id. at 75783). Commenters are encouraged to review and comment on the proposed Form 504 under the context of this current proposal.

134 This is consistent with the Commission’s interpretation in the December 2013 position limits proposal that CEA section 4a(c)(2)(B) is a direction from Congress to narrow the scope of what constitutes a bona fide hedge in the context of index trading activities. “Financial products are not substitutes for positions taken or to be taken in a physical trading channel. Thus, the offset of financial risks from financial products is inconsistent with the proposed definition of bona fide hedging for physical commodities.” December 2013 position limits proposal, 78 FR at 75704. See also the discussion of the temporary substitute test in the December 2013 position limits proposal, 78 FR at 75708–9.
similarly situated. However, the Commission understands that DCMs currently use a single-track application process to recognize non-enumerated positions, for purposes of exchange limits, as within the meaning of the general bona fide hedging definition in § 1.32(1). The Commission does not know whether any exchange will elect to establish a separate application process for NEBFHs based on novel versus non-novel facts and circumstances, or what the salient differences between the two processes might be, or whether a dual-track application process might be more likely to produce inaccurate results, e.g., inappropriate recognition of positions that are not bona fide hedges within the parameters set forth by Congress in CEA section 4a(c). In proposing to permit separate application processes for novel and non-novel NEBFHs, the Commission seeks to provide flexibility for exchanges, but will insist on fair and open access for market participants to seek recognition of compliant positions as NEBFHs.

RFC 10. Would separate application processes for novel and non-novel NEBFHs be more likely to produce inaccurate results, e.g., inappropriate recognition of positions that are not bona fide hedges within the parameters set forth by Congress in section 4a(c) of the Act?

d. Market Participant’s Facts and Circumstances

The Commission believes that there is a core set of information and materials necessary to enable an exchange to determine the positions the Commission to verify, whether the facts and circumstances attendant to a position satisfy the requirements of CEA section 4a(c). Accordingly, the Commission proposes to require in § 150.9(a)(3)(i), (iii) and (iv) that all applicants submit certain factual statements and representations. Proposed § 150.9(a)(3)(i) requires a description of the position in the commodity derivative contract for which the application is submitted and the offsetting cash positions. Proposed § 150.9(a)(3)(iii) requires a statement concerning the maximum size of all gross positions in derivative contracts to be acquired during the year after the application is submitted. Proposed § 150.9(a)(3)(iv) requires detailed information regarding the applicant’s activity in the cash markets for the commodity underlying the position for which the application is submitted during the past three years. These proposed application requirements are similar to existing requirements for recognition under current § 1.48 of a NEBFH.

The Commission also proposes to require in § 150.9(a)(3)(ii) and (v) that all applicants submit detailed information to demonstrate why the position satisfies the requirements of CEA section 4a(c) and any other information necessary to enable the exchange to determine, and the Commission to verify, whether it is appropriate to recognize such a position as a NEBFH. The Commission anticipates that such detailed information may include both a factual and legal analysis indicating why recognition is justified for such applicant’s position. The Commission expects that if the materials submitted in response to proposed § 150.9(a)(3)(ii) are relatively comprehensive, requests for additional information pursuant to proposed § 150.9(a)(3)(v) will be relatively infrequent. Nevertheless, the Commission believes that it is important to include the requirement in proposed § 150.9(a)(3)(v) that applicants submit any other information necessary to enable the exchange to determine, and the Commission to verify, whether it is appropriate to recognize a position as a non-enumerated bona fide hedge so that DCMs can protect and manage their markets.

Under the proposal, the Commission would permit an exchange to recognize a smaller than requested position for purposes of exchange-set limits. For instance, an exchange might recognize a smaller than requested position that otherwise satisfies the requirements of CEA section 4a(c) if the exchange determines that recognizing a larger position would be disruptive to the exchange’s markets. This is consistent with current exchange practice. This is also consistent with DCM and SEF core principles. DCM core principle 5(A) provides that, “[t]o reduce the potential threat of market manipulation or other unlawful practices, DCMs can protect and manage their markets.

By requiring in proposed § 150.9(a)(3) that all applicants submit a core set of information and materials, the Commission anticipates that all exchanges will develop similar NEBFH application processes. However, the Commission intends that exchanges have sufficient discretion to accommodate the needs of their market participants. The Commission also intends to promote fair and open access for market participants to recognition of compliant derivative positions as NEBFHs.
RFC 11. Is the proposed core set of information required of market participants adequate for an exchange to review applications for NEBFHs?

e. Application Process Timeline

Proposed § 150.9(a)(4) sets forth certain timing requirements that an exchange must include in its rules for the NEBFH application process. A person intending to rely on an exchange's recognition of a position as a NEBFH would be required to submit an application in advance and to reapply at least on an annual basis. This is consistent with commenters' views and DCMs' current annual exemption review process. Proposed § 150.9(a)(4) would require an exchange to notify an applicant in a timely manner whether the position was recognized as a NEBFH or rejected, including the reasons for any rejection.

On the other hand, and consistent with the status quo, proposed § 150.9(a)(4) would allow the exchange to review applications for NEBFH recognition previously issued pursuant to proposed § 150.9 if the exchange determines the recognition is no longer in accord with section 4a(c) of the Act.146

The Commission does not propose to prescribe time-limited periods (e.g., a specific number of days) for submission or review of NEBFH applications. The Commission proposes only to require that an applicant must have received recognition for a NEBFH position before such applicant exceeds any limit then in effect, and that the exchange administer the process, and the various steps in the process, in a timely manner. This means that an exchange must, in a timely manner, notify an applicant if a submission is incomplete, determine whether a position is an NEBFH, and notify an applicant whether a position will be recognized, or the application rejected. The Commission anticipates that rules of an exchange may nevertheless set deadlines for various parts of the application process. The Commission does not believe that reasonable deadlines or minimum review periods are inconsistent with the general principle of timely administration of the application process. An exchange could also establish different deadlines for a dual-track application process. The Commission believes that the individual exchanges themselves are in the best position to evaluate how quickly each can administer the application process, in order best to accommodate the needs of market participants. In addition to review of an exchange's timeline when it submits its rules for its application process under part 40, the Commission would review the exchange's timeliness in the context of a rule enforcement review.

RFC 12. The Commission invites comment regarding the discretion proposed for exchanges to process NEBFH applications in a timely manner.

f. NEBFH Deemed Recognized Upon Exchange Recognition

Proposed § 150.9(a)(5) makes it clear that the position will be deemed to be recognized as a NEBFH when an exchange recognizes it; proposed § 150.9(d) provides the process through which the exchange's recognition would be subject to review by the Commission.147 As noted above, DCMs currently exercise discretion with regard to exchange-set limits to approve exemptions meeting the general

144 See, e.g., statement of Ron Oppenheimer on behalf of the Working Group (supporting an annual NEBFH application), statement of Erik Haas, Director, Market Regulation, ICE Futures U.S., (describing the DCM's annual exemption review process), and statement of Tom LaSala, Chief Regulatory Officer, CME Group, (describing NEBFHs and market participants applying for NEBFHs on a yearly basis), transcript of the EEMAC open meeting, July 29, 2015, at 50, 53, and 58, available at http://www.cftc.gov/idc/groups/public/@aboutcftc/documents/file/emactranscript072915.pdf.


146 As noted above, the current proposal does not impair the ability of any market participant to request an interpretation under § 140.99 for recognition of a position as a bona fide hedge if an exchange rejects their recognition application or revokes recognition previously issued. See supra note 78 and accompanying text.

147 See supra notes 121–123 and accompanying text; see also the discussion of proposed § 150.9(d), review of applications, below. Exchange recognition of a position as a NEBFH would allow the market participant to exceed the federal position limit until such time that the Commission notified the market participant to the contrary, pursuant to the proposed review procedure that the exchange action was dismissed. That is, if a party were to hold positions pursuant to a NEBFH recognition granted by the exchange, such positions would not be subject to federal position limits, unless or until the Commission were to determine that such NEBFH recognition is inconsistent with the CEA or CFTC regulations thereunder. Under this framework, the Commission would continue to exercise its authority in this regard by reviewing an exchange's determination and verifying whether the facts and circumstances in respect of a derivative position satisfy the requirements of the Commission's general definition of bona fide hedging position in § 150.1. If the Commission determines that the exchange-granted recognition is inconsistent with section 4a(c) of the Act and the Commission's general definition of bona fide hedging position in § 150.1, a market participant would be required to reduce the derivative position or otherwise come into compliance with position limits within a commercially reasonable amount of time.

g. Market Participant Reporting Requirements

Proposed § 150.9(a)(6) requires exchanges that elect to process NEBFH applications to promulgate reporting rules for applicants who own, hold or control positions recognized as NEBFHs. The Commission expects that the exchanges will promulgate enhanced reporting rules in order to obtain sufficient information to conduct an adequate surveillance program to detect and potentially deter excessively large positions that may disrupt the price discovery process. At a minimum, these rules should require applicants to report when an NEBFH position has been established, and to update and maintain the accuracy of such reports. These rules should also elicit information from applicants that will assist exchanges in complying with proposed § 150.9(c) regarding exchange reports to the Commission.

RFC 13. Should the Commission provide further guidance regarding the types of information that exchanges should seek to elicit from reporting rules with respect to NEBFH positions?

h. Transparency to Market Participants

Proposed § 150.9(a)(7) requires an exchange to publish on its Web site, no less frequently than quarterly, a description of each new type of derivative position that it recognizes as a NEBFH. The Commission envisions that each description would be an executive summary. The description must include a summary describing the type of derivative position and an explanation of why it qualifies as a NEBFH. The Commission believes that the exchanges are in the best position when quickly crafting these descriptions to accommodate an applicant's desire for trading anonymity while promoting fair and open access for market participants to information regarding which positions might be recognized as NEBFHs. As discussed below, the Commission proposes to spot check these summaries pursuant to proposed § 150.9(e).

RFC 14. Should the Commission prescribe that exchanges publish any
specific information regarding recognized NEBFHs based on novel facts and circumstances?

RFC 15. Should the Commission require exchanges to publish summary statistics, such as the number of recognized NEBFHs based on non-novel facts and circumstances?

i. Requests for Commission Consideration

An exchange may elect to request the Commission review an NEBFH application that raises novel or complex issues under proposed § 150.9(a)(6), using the process set forth in proposed § 150.9(d), discussed below. If an exchange makes a request pursuant to proposed § 150.9(a)(6), the Commission, as would be the case for an exchange, would not be bound by a time limitation. This is because the Commission proposes only that NEBFH applications be processed in a timely manner. Essentially, this proposed provision largely preserves the Commission’s review process under current § 1.47, except that a market participant first seeks recognition of a NEBFH from an exchange.

RFC 16. Does the proposed flexibility for exchanges to request Commission review provide market participants with a sufficient process for review of a potential NEBFH?

ii. Proposed § 150.9(b)—Recordkeeping Requirements

Proposed § 150.9(b) outlines recordkeeping requirements for exchanges that elect to process non-enumerated bona fide hedge applications under proposed § 150.9(a). Exchanges must maintain complete books and records of all activities relating to the processing and disposition of applications in a manner consistent with the Commission’s existing general regulations regarding recordkeeping, with certain minor conforming changes. In consideration of the fact that DCMs currently recognize NEBFHs for periods of up to a year and that the proposal would require annual updates, the Commission proposes that exchanges keep books and records until the termination, maturity, or expiration date of any recognition of a NEBFH and for a period of five years after such date. Five years should provide an adequate time period for Commission reviews, whether that be a review of an exchange’s rule enforcement or a review of a market participant’s representation.

Exchanges would be required to store and produce records pursuant to current § 1.31 of the Commission’s regulations, and would be subject to requests for information pursuant to other applicable Commission regulations including, for example, § 38.5. Consistent with current § 1.31, the Commission expects that these records would be readily accessible until the termination, maturity, or expiration date of the recognition and during the first two years of the subsequent five year period. The Commission does not intend in proposed § 150.9(b)(1) to create any new obligation for an exchange to record conversations with applicants, which includes their representatives; however, the Commission does expect that an exchange would preserve any written or electronic notes of verbal interactions with such parties.

Finally, the Commission emphasizes that parties who avail themselves of exemptions under proposed § 150.3(a), as revised herein, are subject to the recordkeeping requirements of § 150.3(g), as well as requests from the Commission for additional information under § 150.3(h), each as proposed in the December 2013 position limits proposal. The Commission may request additional information, for example, in connection with review of an application.

iii. Proposed § 150.9(c)—Exchange Reporting

The Commission proposes, in § 150.9(c)(1), to require an exchange that elects to process NEBFH applications to submit a weekly report to the Commission. The proposed report would provide information regarding each commodity derivative position recognized by the exchange as an NEBFH during the course of the week. Information provided in the report would include the identity of the applicant seeking such recognition, the maximum size of the derivative position that is recognized by the exchange as an NEBFH, and, to the extent that the exchange determines that the size of such bona fide hedge position under the exchange’s own speculative position limits program, the size of any limit established by the exchange. The Commission envisions that the proposed report would specify the maximum size and/or size limitations by contract month and/or type of limit (e.g. spot month, single month, or all-months-combined), as applicable. The proposed report would also provide information regarding any revocation of, or a portion of, the commodity derivative position in respect of which an application for recognition has been submitted, as an NEBFH, provided that such determination is made in accordance with the requirements of proposed § 150.9 and is consistent with the Act and the Commission’s regulations.

As proposed in the December 2013 position limits proposal, § 150.9(c)(2)(iii) provides, inter alia, that for any commodity derivative contract that is subject to a speculative position limit under § 150.2, an exchange may limit bona fide hedging positions which the exchange determines are not in accord with sound commercial practices, or which exceed an amount that may be established and liquidated in an orderly fashion. Such proposal largely mirrors the second half of current § 150.5(d), although updated to specify DCMs instead of “contract markets” as well as to include SEFs.

An exchange could determine to recognize all, or a portion, of the commodity derivative position in respect of which an application for recognition has been submitted, as an NEBFH, for different contract months or different types of limits (e.g., a separate limit level for the spot month).
or modification to the terms and conditions of, a prior determination by the exchange to recognize a commodity derivative position as an NEBFH. In addition, the report would include any summary of a type of recognized NEBFH that was, during the course of the week, published or revised on the exchange’s Web site pursuant to proposed § 150.9(a)(7).

The proposed weekly report would support the Commission’s surveillance program by facilitating the tracking of NEBFHs recognized by exchanges,159 keeping the Commission informed of the manner in which an exchange is administering its procedures for recognizing such NEBFHs. For example, the report would make available to the Commission, on a regular basis, the summaries of types of recognized NEBFHs that an exchange posts to its Web site pursuant to proposed § 150.9(a)(7). This would facilitate any review by the Commission of such summaries, pursuant to proposed § 150.9(e), and would help to ensure, if the Commission determines that revisions to a summary are necessary, that such revisions are carried out in a timely manner by the exchange.

In certain instances, information included in the proposed weekly report may prompt the Commission to request records required to be maintained by an exchange pursuant to proposed § 150.9(b). For example, it is proposed that, for each derivative position recognized by the exchange as an NEBFH, or any revocation or modification of such recognition, the report would include a concise summary of the applicant’s activity in the cash markets for the commodity underlying the position. It is the Commission’s expectation that this summary would focus on the facts and circumstances upon which an exchange based its determination to recognize a commodity derivative position as an NEBFH, or to revoke or modify such recognition. In light of the information provided in the summary, or any other information included in the proposed weekly report regarding the position, the Commission may decide that it is appropriate to request the exchange’s complete record of the application for recognition of the position as an NEBFH—in order to determine, for example, whether the application presents novel or complex issues that merit additional analysis pursuant to proposed § 150.9(d)(2), or to evaluate whether the disposition of the application by the exchange was consistent with section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1.

Proposed § 150.9(d) would require an exchange to submit to the Commission any report made to the exchange by an applicant, pursuant to proposed § 150.9(a)(6), notifying the exchange that the applicant owns or controls a commodity derivative position that the exchange has recognized as an NEBFH.160 Unless the Commission instructs otherwise,161 the exchange would be required to submit such applicant reports to the Commission no less frequently than monthly.162 The exchange’s submission of these reports would provide the Commission with notice that an applicant has taken a commodity derivative position that the exchange has recognized as an NEBFH, and would also show the applicant’s offsetting positions in the cash markets. Requiring an exchange to submit these applicant reports to the Commission would therefore support the Commission’s surveillance program, by facilitating the

159 The Commission believes that the exchange’s assignment of a unique identifier to each of the non-enumerated bona fide hedge applications that the exchange receives, and, separately, the exchange’s assignment of a unique identifier to each type of commodity derivative position that the exchange recognizes as an NEBFH, would assist the Commission’s tracking process. Accordingly, the Commission suggests that, as a “best practice,” the exchange’s procedures for processing NEBFH applications contemplate the assignment of such unique identifiers. Pursuant to proposed § 150.9(c)(1)(i), an exchange that assigns such unique identifiers would be required to include the identifiers in the exchange’s weekly report to the Commission.

160 Proposed § 150.9(a)(6) would require an exchange to have an applicant to report to the exchange when the applicant owns, holds or controls a commodity derivative position that the exchange has recognized as an NEBFH.161 For the applicant to report its offsetting cash positions. Pursuant to proposed § 150.9(a)(6), such rules must require an applicant to update and maintain the accuracy of any such report to the exchange. Accordingly, a exchange’s submission to the Commission pursuant to proposed § 150.9(c)(2) would be expected to include any updates, corrections or other modifications made by an applicant to a report previously submitted to the exchange.

161 The Commission proposes, in § 150.9(f)(1)(ii), to delegate to the Director of the Commission’s Division of Market Oversight, or such other employee or employees as the Director may designate from time to time, the authority to provide instructions regarding the submission to the Commission of information required to be reported by an exchange pursuant to proposed § 150.9(c). To determine the format, coding structure and electronic data transmission procedures for submitting such information.

162 Proposed § 150.9(c)(2) would require reports submitted to an exchange pursuant to proposed § 150.9(c)(6), from applicants, such as NEBFHs, to file an exchange’s submission to the Commission and the analysis of the information contained therein, the Commission will establish reporting and transmission standards, and may require reports to be submitted to the Commission using an electronic data format, coding structure and electronic data transmission procedures approved in writing by the Commission, as specified on the Forms and Submissions page at www.cftc.gov.164 Proposed § 150.9(c)(3)(iii) would require such reports to be submitted to the Commission no later than 9:00 a.m. Eastern time on the third business day following the report date, unless the exchange is otherwise instructed by the Commission.

RFC 17. The Commission requests comment on all aspects of the proposed reporting requirements.

iv. Proposed § 150.9(d)—Review of Applications by the Commission

One participant at the June 19, 2014 Roundtable on Position Limits commented that if the Commission were to permit exchanges to administer a process for NEBFHs, the Commission should continue to do “a certain amount
of de novo analysis and review.” 166 The Commission agrees. Proposed § 150.9(d) provides for Commission review of applications to ensure that the processes administered by the exchange, as well as the results of such processes, are consistent with the requirements of CEA section 4a(c) of the Act and the Commission’s regulations thereunder. 167 The Commission proposes to review records required to be maintained by an exchange pursuant to proposed § 150.9(b); however, the Commission may request additional information to determine whether § 150.9(d)(1)(ii) if, for example, the Commission finds additional information is needed for its own review.

The Commission could decide to review a pending application prior to disposition by an exchange, but anticipates that it will most likely review applications after some action has already been taken by an exchange.

The Commission’s proposal in § 150.9(d)(2) and (3) requires the Commission to notify the exchange and the applicable applicant that they have 10 business days to provide any supplemental information. This approach provides the exchanges and the particular market participant with an opportunity to respond to any issues raised by the Commission.

During the period of any Commission review of an application, an applicant could continue to rely upon any recognition previously granted by the exchange. If the Commission determines that remediation is necessary, the Commission would provide for a commercially reasonable amount of time for the market participant to comply with limits after announcement of the Commission’s decision under proposed § 150.9(d)(4). In determining a commercially reasonable amount of time, the Commission may consider factors such as current market conditions and the protection of price discovery in the market. 168

RFC 18. The Commission requests comments on all aspects of the proposed review process.

v. Proposed § 150.9(e)—Commission Review of Summaries

While the Commission proposes to rely on the expertise of the exchanges to summarize and post executive summaries of NEBFHs to their respective Web sites under proposed § 150.9(a)(7), it also proposes, in § 150.9(e), to review such executive summaries to ensure they provide adequate disclosure to market participants of the potential availability of relief from speculative position limits. The Commission believes that an adequate disclosure would include generic facts and circumstances sufficient to allow similarly situated market participants to the possibility of receiving recognition of a NEBFH. Such market participants may use this information to help evaluate whether to apply for recognition of a NEBFH. Thus, adequate disclosure should help ensure fair and open access to the application process. Due to resource constraints, the Commission may not be able to pre-clear each summary, so the Commission proposes to spot check executive summaries after the fact.

E. Process for Exemption From Position Limits for Certain Spread Positions

1. Background

The Commission proposes to permit exchanges, by rule, to exempt from federal position limits certain spread transactions, as authorized by CEA section 4a(a)(1), 169 and in light of the provisions of CEA section 4a(a)(3)(B) and CEA section 4a(c)(2)(B). 170

In particular, CEA section 4a(a)(1) provides the Commission with authority to exempt from position limits transactions normally known to the trade as “spreads” or “straddles” or “arbitrage” or to fix limits for such transactions or positions different from limits fixed for other transactions or positions. The Dodd-Frank Act amended the CEA by adding section 4a(a)(3)(B), which now directs the Commission, in establishing position limits, to ensure, to the maximum extent practicable and in its discretion, “sufficient market liquidity for bona fide hedgers.” 171 In addition, the Dodd-Frank Act amendments to the CEA in section 4a(c)(2)(B) limited the definition of a bona fide hedge to only those positions (in addition to those included under CEA section 4a(c)(2)(A)) 172 resulting from a swap that was executed opposite a counterparty for which the transaction would qualify as a bona fide hedging transaction, in the event the party to the swap is not itself using the swap as a bona fide hedging transaction. In this regard, the Commission interprets this statutory definition to preclude spread exemptions for a swap position that was executed opposite a counterparty for which the transaction would not qualify as a bona fide hedging transaction.

Prior to the passage of the Dodd-Frank Act, the Commission exercised its exemptive authority pertaining to spread transactions in promulgating current § 150.3. Current § 150.3 provides that the position limits set in § 150.2 may be exceeded to the extent such positions are spread or arbitrage positions between single months of a futures contract and/or, on a futures-equivalent basis, outside of the month, in the same crop year; provided, however, that such spread or arbitrage positions, when combined with any other net positions in the single month, do not exceed the all-months limit set forth in § 150.2. In addition, the Commission has permitted DCMs, in setting their own position limits, to exceed the current § 150.3 spread limits set on futures transactions by

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167 See supra note 66 and accompanying text. As noted above, under the proposal, the SRO’s recognition is tentative, because the Commission would reserve the power to review the recognition, subject to the reasonably fixed statutory standards in CEA section 4a(c)(2) (directing the CFTC to define the term bona fide hedging position) that are incorporated into the Commission’s proposed general definition of bona fide hedging position in § 150.1. The SRO’s recognition would also be constrained by the SRO’s rules, which would be subject to CFTC review under the proposal. The SROs are parties subject to Commission authority, their rules are subject to Commission review and their actions are subject to Commission de novo analysis and review. Therefore, SRO rules and actions may be changed by the Commission at any time. In addition, it should be noted that the exchange is required to make its determination consistent with both CEA section 4a(c)(2) and the Commission’s general definition of bona fide hedging position in § 150.1. Further, the Commission notes that CEA section 4a(c)(1) requires a position to be shown to be bona fide as defined by the Commission.

168 In the December 2013 position limits proposal, when discussing the provision of a commercially reasonable time period as necessary to exit the market in an orderly manner, the Commission stated that, generally, it “believes such time period would be less than one business day.” 78 FR 75680 at 75713.

169 7 U.S.C. 6a(a)(1) (authorizing the Commission to exempt transactions normally known to the trade as “spreads”).

170 7 U.S.C. 6a(c)(2)(B) authorizing the Commission to exempt transactions normally known to the trade as “spreads”.

171 7 U.S.C. 6a(a)(1) (authorizing the Commission to define a bona fide hedging position as a position that in CEA section 4a(c)(2)(A); Meets three tests (a position (1) is a substitute for activity in the physical marketing channel, (2) is economically appropriate to the reduction of risk, and (3) arises from the potential change in value of current or anticipated assets, liabilities or services); or, in CEA section 4a(c)(2)(B), reduces the risk of a swap that was executed opposite a counterparty for which such swap would meet the three tests.
limits under the terms of current § 150.5(a), to exempt spread, straddle or arbitrage positions or to fix limits that apply to such positions which are different from limits fixed for other positions.\textsuperscript{173}

The December 2013 position limits proposal deleted the exemption in current § 150.3(a)(3) for spread or arbitrage positions between single months of a futures contract or options thereon, outside the spot month; the Commission instead proposed to maintain the current practice in § 150.2 of setting single-month limits at the same levels as all-months limits, rendering the “spread” exemption unnecessary.\textsuperscript{174} In particular, the spread exemption set forth in current § 150.3(a)(3) permits a spread trader to exceed single month limits only to the extent of the all months limit. Since § 150.2 as proposed in the December 2013 position limits proposal sets single month limits at the same level as all months limits, the existing spread exemption no longer provides useful relief.

Further, the December 2013 position limits proposal would codify guidance in proposed § 150.5(a)(2)(ii) to allow an exchange to grant exemptions from exchange-set position limits for intramarket and intermarket spread positions (as those terms are defined in § 150.1 as proposed in the December 2013 position limits proposal) involving commodity derivative contracts subject to the federal limits. To be eligible for exemption under § 150.5(a)(2)(ii) as proposed in the December 2013 position limits proposal, intermarket and intramarket spread positions would have to be outside of the spot month for physical delivery contracts, and intramarket spread positions could not exceed the federal all-months limit when combined with any other net positions in the single month. As proposed in the December 2013 position limits proposal, § 150.5(a)(2)(iii) would require traders to apply to the exchange for any exemption, including spread exemptions, from its speculative position limit rules.

Several commenters have requested that the Commission provide a spread exemption to federal position limits.\textsuperscript{175}

\textsuperscript{173}Current § 150.5 applies as non-exclusive guidance and acceptable practices for compliance with DCM core principle 5. See December 2013 position limits proposal, 78 FR at 75750–2.

\textsuperscript{174}December 2013 position limits proposal, 78 FR at 75736.


\textsuperscript{177}See CL–Olam–59658 at 7; CL–CME–59718 at 71; CL–ICEUS–59645 at 10.

Of these commenters, most urged the Commission to recognize spread exemptions in the spot month as well as non-spot months.\textsuperscript{176} Several of these commenters noted that the Commission’s proposal would permit exchanges to grant spread exemptions for exchange-set limits in commodity derivative contracts subject to Federal limits, and recommended that the Commission establish a process for granting such spread exemptions for purposes of Federal limits.\textsuperscript{177}

In response to these comments, the Commission now proposes to permit exchanges to process and grant applications for spread exemptions from federal position limits. Most, if not all, DCMs already have rules in place to process and grant applications for spread exemptions from exchange-set position limits pursuant to Part 38 of the Commission’s regulations (in particular, current §§ 38.300 and 38.301) and current § 150.5. As noted above, the Commission has a long history of overseeing the performance of the DCMs in granting appropriate spread exemptions under current exchange rules regarding exchange-set position limits and believes that it would be efficient, and in the best interest of the markets, in light of current resource constraints, to rely on the exchanges to process applications for spread exemptions from federal position limits. In addition, the Commission observes because many market participants may be familiar with current DCM practices regarding spread exemptions, permitting DCMs to build on current practice may lower the burden on market participants and reduce duplicative filings at the exchanges and the Commission. As noted, this plan would permit exemptions to provide market participants with spread exemptions, pursuant to exchange rules submitted to the Commission; however, the Commission would retain the authority to review—and, if necessary, reverse—the exchanges’ actions.

RFC 19. Would permitting exemptions to process applications for spread exemptions from federal limits, subject to Commission review, provide for an efficient implementation of the Commission’s statutory authority to exempt such spread positions?

2. Spread Exemption Proposal

\textsuperscript{178}See note 63, regarding Commission authority to recognize spreads under CEA section 4a(a)(3)[B]. The Commission expects that an individual exchange will describe how it will determine whether a particular component of a spread is actively traded in its rule submission, based on its familiarity with the specific needs and differing practices of the participants in those markets for which an individual exchange does not list any actively traded referenced contract in a particular commodity. If a component of a spread is not actively traded on an exchange that elects to process spread exemption applications, such exchange might not be incentivized to protect or manage the relevant commodity market, and the interests of such exchange might not be aligned with the policy objectives of the Commission as expressed in CEA section 4a(a)(3)[B]. The Commission expects that an individual exchange will describe how it will determine whether a particular component of a spread is actively traded in its rule submission, based on its familiarity with the specific needs and differing practices of the participants in the relevant market.
Consistent with the restrictions regarding the offset of risks arising from a swap position in CEA section 4a(c)(2)(B), proposed § 150.10(a)(1) would not permit an exchange to recognize a spread between a commodity index contract and one or more referenced contracts. That is, an exchange may not grant a spread exemption where a bona fide hedge position could not be recognized for a pass through swap offset of a commodity index contract.179

The Commission notes that for inter-commodity spreads in which different components of the spread are traded on different exchanges, the exemption granted by one exchange would be recognized by the Commission as an exemption from federal limits for the applicable referenced contract(s), but would not bind the exchange(s) that list the other components of the spread to recognize the exemption for purposes of that other exchange(s)’ position limits. In such cases, a trader seeking such inter-commodity spread exemptions would need to apply separately for a spread exemption from each exchange-set position limit.

Proposed § 150.10(a)(2) specifies the type of spreads that an exchange may exempt from position limits, including calendar spreads; quality differential spreads; processing spreads (such as energy “crack” or soybean “crush” spreads); and product or by-product differential spreads. This list is not exhaustive, but reflects common types of spread activity that may enhance liquidity in commodity derivative markets, thereby facilitating the ability of bona-fide hedgers to put on and offset positions in those markets. For example, trading activity in many commodity derivative markets is concentrated in the nearby contract month, but a hedger may need to offset risk in deferred months where derivative trading activity may be less active. A calendar spread trader could provide such liquidity without exposing himself or herself to the price risk inherent in an outright position in a deferred month. Processing spreads can serve a similar function. For example, a soybean processor may seek to hedge his or her processing costs by entering into a “crush” spread, i.e., going long soybeans and short soybean meal and oil. A speculator could facilitate the hedger’s ability to do such a transaction by entering into a “reverse crush” spread (i.e., going short soybeans and long soybean meal and oil). Quality differential spreads, and product or by-product differential spreads, may serve similar liquidity-enhancing functions when spreading a position in an actively traded commodity derivatives market such as CBOT Wheat against a position in another actively traded market, such as MGEX Wheat.

The Commission anticipates that a spread exemption request might include spreads that are “legged in,” that is, carried out in two steps, or alternatively are “combination trades,” that is, all components of the spread are executed simultaneously. This proposal would not limit the granting of spread exemptions to positions outside the spot month, unlike the existing spread exemption provisions in current § 150.3(a)(3), or in § 150.5(a)(2)(ii) as proposed in the December 2013 position limits proposal. The proposal herein responds to specific requests of commenters to permit spread exemptions in the spot month. For example, the CME recommended “the Commission reaffirm in DCMs the discretion to apply their knowledge of individual commodity markets and their judgement, as to whether allowing intermarket spread exemptions in the spot month for physical-delivery contracts is appropriate.” 180

The Commission proposes to revise the December 2013 position limits proposal to describe the concept of spreads described above because, as noted in the examples above, permitting spread exemptions in the spot month would further one of the four policy objectives set forth in section 4a(a)(3)(b) of the Act: To ensure sufficient market liquidity for bona fide hedgers.181 This policy objective is incorporated into the proposal in its requirements that: (i) The applicant provide detailed information demonstrating why the spread position should be exempted from position limits, including how the exemption would further the purposes of CEA section 4a(a)(3)(B);182 and (ii) the exchange determines whether the spread position (for which a market participant was seeking an exemption) would further the purposes of CEA section 4a(a)(3)(B).183 Moreover, the Commission retains the ability to review the exchange rules as well as to review how an exchange enforces those rules.184

The Commission, however, remains concerned, among other things, about protecting the price discovery process in the core referenced futures contracts, particularly as those contracts approach expiration. Accordingly, as an alternative, the Commission is also considering whether to prohibit an exchange from granting spread exemptions that would be applicable during the lesser of the last five days of trading or the time period for the spot month.

RFC 20: Are there concerns regarding the applicability of spread exemptions in the spot month that the Commission should consider? Should the Commission, parallel to the requirements of current § 1.3(z)(2), provide that such spread positions not be exempted during the lesser of the last five days of trading or the time period for the spot month?185

RFC 21: If the Commission permits exchanges to grant spread positions applicable in the spot month, should recognition of NERBH positions be conditioned upon additional filings similar to the proposed Form 504 that is required for the proposed conditional spot month limit exemption?186

Proposed Form 504 would require additional information on the market participant’s cash market holdings for each day of the spot month period. Under this alternative, market participants would submit daily cash position information to an exchange in a format determined by the exchange, which would then be required to forward that information to the Commission in a process similar to that proposed under § 150.10(c)(2).

RFC 22: Alternatively, if the Commission permits exchanges to grant

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179 This proposal is consistent with the Commission’s interpretation in the December 2013 position limits proposal that CEA section 4a(c)(2)(B) is a mandate from Congress to narrow the scope of what constitutes a bona fide hedge in the context of index trading activities. “Financial products are not substitutes for positions taken or to be taken in a physical marketing channel. Thus, the offset of financial risks from financial products is inconsistent with the proposed definition of bona fide hedging for physical commodities.” December 2013 position limits proposal, 78 FR at 75740. See also the discussion of the temporary substitute test. id. at 75768–9.


182 See proposed § 150.10(a)(3)(ii).

183 See proposed § 150.10(a)(4)(vi).

184 The Commission could, for example, revoke or confirm exchange-granted exemptions.

185 See also supra notes 56 and 132 and accompanying text.

186 The conditional spot month limit exemption and the related Form 504 were discussed in the December 2013 position limits proposal (78 FR 75680 at 75736–8). A copy of the proposed form was submitted to the Federal Register [id. at 75803–8] to ensure the public had the opportunity to comment on the information required by the proposed form. The Commission estimated the number of market participants that would be required to file the form in the December 2013 position limits proposal (id. at 75783). Commenters are encouraged to review and comment on proposed Form 504 in the context of this current proposal.
spread exemptions applicable in the spot month, should the Commission require market participants to file proposed Form 504 with the Commission? Under this alternative, the relevant cash market information would be submitted directly to the Commission, eliminating the need for the exchange to intermediate. The Commission would adjust the title of proposed Form 504 to clarify that the form would be used for all daily spot month cash position reporting purposes, not just the proposed requirements of the cash month limit exemption in proposed § 150.3(c).

Proposed § 150.10(a)(3) sets forth a core set of information and materials that all applicants must submit to enable an exchange to determine, and the Commission to verify, whether the facts and circumstances attendant to a position further the policy objectives of CEA section 4(a)(3)[B]. In particular, the applicant must demonstrate, and the exchange must determine, that exempting the spread position from position limits, to the maximum extent practicable, ensure sufficient market liquidity for bona fide hedgers, but not unduly reduce the effectiveness of position limits to diminish, eliminate or prevent excessive speculation; deter and prevent market manipulation, squeezes, and corners; and ensure that the price discovery function of the underlying market is not disrupted.\(^{187}\)

One DCM, ICE Futures U.S., currently grants certain types of spread exemptions that the Commission is concerned may not be consistent with these policy objectives.\(^{188}\) ICE Futures U.S. allows "cash-and-carry" spread exemptions to exchange-set limits, which permit a market participant to hold a long position greater than the speculative limit in the spot month and an equivalent short position in the following month in order to guarantee a return that, at minimum, covers its carrying charges, i.e., the cost of financing, insuring, and storing the physical inventory until the next expiration.\(^{189}\) Market participants are able to take physical delivery in the nearby month and re-deliver the same product in a deferred month, often at a profit. The Commission notes that while market participants are permitted to re-deliver the physical commodity, they are under no obligation to do so.

ICE Futures U.S.’s rules condition the cash-and-carry spread exemption upon the applicant’s agreement that “before the price of the nearby contract month rises to a premium to the second (2nd) contract month, it will liquidate all long positions in the nearby contract month.”\(^{190}\) The Commission understands that ICE Futures U.S. requires traders to provide information about their expected cost of carry, which is used by the exchange to determine the levels by which the trader has to reduce positions before exit points are then communicated to the applicant when the exchange responds to the trader’s hedge exemption request.

The Commission is considering whether to impose on the exchange a requirement to ensure exit points in cash-and-carry spread exemptions are appropriate to facilitate an orderly liquidation in the expiring futures contract. The Commission is concerned that a large demand for delivery on cash and carry positions may distort the price of the expiring futures price upwards. This may particularly be a concern in those commodity markets where the cash spot price is discovered in the expiring futures contract.

In a recent Rule Enforcement Review, ICE Futures U.S. opined that such exemptions are “beneficial for the market, particularly when there are plentiful warehouse stocks, which typically is the only time when the opportunity exists to utilize the exemption,” maintaining that the exchange’s rules and procedures are effective in ensuring orderly liquidations.\(^{191}\) The Commission remains concerned, however, about these exemptions and their impact on the spot month price. The Commission is still reviewing the effectiveness of the exchange’s cash-and-carry spread exemptions and the procedure by which they are granted.

As an alternative to providing exchanges with discretion to consider granting cash-and-carry spread exemptions, the Commission is considering prohibiting cash-and-carry spread exemptions to position limits. In this regard, the Commission does not grant such exemptions to current federal position limits. As another alternative, the Commission is considering permitting exchanges to grant cash-and-carry spread exemptions, but would require suitable safeguards be placed on such exemptions. For example, the Commission could require cash-and-carry spread exemptions be conditioned on a market participant reducing positions below speculative limit levels in a timely manner once current market prices no longer permit entry into a full carry transaction, rather than the less stringent condition of ICE Futures U.S. that a trader reduce positions "before the price of the nearby contract month rises to a premium to the second (2nd) contract month."

RFC 23: Do cash-and-carry spread exemptions further the policy objectives of the Act, as outlined in proposed § 150.10(a)(3)? Why or why not? Do cash and carry spread exemptions facilitate an orderly liquidation? Do these exemptions impede convergence or distort the price of the expiring futures contract?

RFC 24: If cash-and-carry spread exemptions are allowed, what conditions should be placed on the exemptions? For example, on what basis should a trader be required to exit futures positions above position limit levels? Should such exemptions be conditioned, for example, to require a market participant to reduce the positions below speculative limit levels in a timely manner once current market prices no longer permit entry into a full carry transaction? Are there other types of spread exemptions that may not further the policy objectives of CEA section 4a and, thus, should be prohibited or conditioned?

RFC 25: With cash-and-carry spread exemptions still under review by the Commission, should the proposed rules allow such exemptions to be granted under proposed § 150.10? Why or why not?

RFC 26: If the proposed rules do not prohibit such exemptions, an exchange could determine that cash-and-carry spread exemptions—or another type of spread exemption—further the policy objectives in proposed § 150.10(a)(3) and so begin to grant such exemptions from federal position limits. If, after finishing its review, the Commission

\(^{187}\) See also infra note 192 and accompanying text (describing the DCM’s responsibility under its application process to make this determination in a timely manner).

\(^{188}\) See ICE Futures U.S. Rule 6.29(e).

\(^{189}\) Carrying charges include insurance, storage fees, and financing costs, as well as other costs such as aging discounts that are specific to individual commodities. The ICE Futures U.S. rules require an applicant to provide: (i) Its cost of carry; (ii) the minimum spread at which the applicant will enter into a straddle position and which would result in an profit for the applicant; and (iii) the quantity of stocks in exchange-licensed warehouses that it already owns. The applicant’s entire long position carried into the notice period must have been put on as a spread at a differential that covers the applicant’s cost of carry. See Rule Enforcement Review of ICE Futures U.S., July 22, 2014 (“ICE Futures U.S. Rule Enforcement Review”), at 44–45, available at http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/icearuleenf.

\(^{190}\) ICE Futures U.S. Rule 6.29(e) at the time of the target period of the ICE Futures U.S. Rule Enforcement Review (June 15, 2011 to June 15, 2012), the cash-and-carry provision currently found in ICE Futures U.S. Rule 6.29(e) was found in ICE Futures U.S. Rule 6.27(e). Further, under the exchange’s rules, additional conditions may also apply.

\(^{191}\) ICE Futures U.S. Rule Enforcement Review, at 45.
disagrees with the exchange’s determination, is the proposed process in § 150.10(d) for reviewing exemptions sufficient to address any concerns raised?

Under the proposal, an exchange’s rules would require an applicant to submit to the exchange a core set of information and materials that would include, at a minimum: (i) A description of the spread position for which the application is submitted, including details on all components of the spread; (ii) detailed information to demonstrate why the spread position should be exempted from position limits, including how the exemption would further the purposes of CEA section 4a(a)(3)(B); and (iii) a statement concerning the maximum size of all gross positions in derivative contracts to be acquired by the applicant during the year after the application is submitted.

Further, an exchange would not be permitted to grant a spread exemption request that would be contrary to the requirements for a pass-through swap offset position in CEA section 4a(a)(3)(B), which the Commission interprets to preclude spread exemptions for a swap position that was executed opposite a counterparty for which the transaction would not qualify as a bona fide hedging transaction. The requirement that an applicant specify a maximum size of all gross positions to be acquired will enable an exchange to more effectively set a cap on a market participant’s spread position. Such a cap could reasonably take into account the specific liquidity needs of the marketplace and the ability of the spread position to be put on and offset in an orderly fashion and without causing market disruptions. The Commission expects that an exchange would be particularly attentive to the size of any component of a spread position it permits to be held in the spot month in light of its obligation to consider, in granting such spread exemptions, the goals of deterring and preventing market manipulation, squeezes, and corners.

RFC 27: Does the application process solicit sufficient information for an exchange to consider whether a spread exemption would, to the maximum extent practicable, further the policy objectives of CEA section 4a(a)(3)(B)? For example, how would an exchange determine whether an applicant for a spread exemption may provide liquidity, such that the goal of ensuring sufficient market liquidity for bona-fide hedgers would be furthered by the spread exemption?

RFC 28: How would exchanges oversee or monitor exemptions that have been granted, and, if the exchange determines it necessary, revoke the exemption?

Proposed § 150.10(a)(4) sets forth certain timing requirements that an exchange must include in its rules for the spread application process. While these timing requirements are similar to those under proposed § 150.9(a)(4), the exchange under proposed § 150.10(a)(4) must also determine in a timely manner whether the facts and circumstances attendant to a position further the policy objectives of CEA section 4a(a)(3)(B). Finally, the spread exemption application processes proposed in § 150.10(a)(5), (6), (7), and (8) are all substantially similar to those proposed under § 150.9(a)(5), (6), (7), and (8).

ii. Recordkeeping and Reporting Requirements, and Review of Applications and Summaries by Commission

The proposed processes under § 150.10(b) Recordkeeping, § 150.10(c) Reports to the Commission; § 150.10(d) Review of Applications by the Commission; § 150.10(e) Review of Summaries by the Commission; and § 150.10(f) Delegation of Authority to the Director of the Division of Market Oversight are substantially similar to the corresponding provisions in § 150.9(b) through (f), as described above. Hence, the Commission does not repeat the discussion here.

RFC 29: Is it appropriate to have the same processes under § 150.10(b) through (f) for spread exemptions as proposed for NEBFHs outlined under § 150.09(b) through (f)? If no, explain why and how those processes should differ.

F. Recognition of Positions as Enumerated Anticipatory Bona Fide Hedges

1. Background

In the December 2013 position limits proposal, the Commission proposed § 150.7, requirements for anticipatory bona fide hedging position exemptions, to replace current § 1.48, which provides requirements for classification of certain anticipatory bona fide hedge positions under current § 1.3(c)(3)(ii)(B) or (C) of the Commission’s regulations. As proposed in the December 2013 position limits proposal, § 150.7 would require market participants to file statements with the Commission regarding certain anticipatory hedges, which would become effective absent Commission action or inquiry ten days after submission. The Commission now proposes to supplement the process proposed in the December 2013 position limits proposal by allowing exchanges, as an alternative, to review requests for recognition of such enumerated anticipatory bona fide hedging exemptions pursuant to exchange rules submitted to the Commission.

In response to the December 2013 position limits proposal, the Commission has received comments that suggested that the exchanges would be better equipped to recognize non-enumerated hedge positions and anticipatory hedging positions. For example, one commenter noted that the exchanges have a long history of enforcing position limits and are in a much better position than the Commission to judge the applicant’s hedging needs and to set an appropriate level for the hedge. According to another commenter, providing the

193 See supra note 171 and accompanying text.

194 For example, proposed 150.9(a)(4) provides that: (i) A person intending to rely on an exchange’s exemption from position limits would be required to submit an application in advance and to reapply at least on an annual basis; (ii) the exchange would be required to notify an applicant in a timely manner whether the position was exempted, and reasons for any rejection; and (iii) the exchange would be able to revoke, at any time, an recognition previously issued pursuant to proposed § 150.9(f) if the exchange determined the recognition was no longer in accord with section 4a(a)(3)(B) of the Act.

195 As proposed in the December 2013 position limits proposal, § 150.7 provides a process for recognition as bona fide hedge positions for: Unfilled anticipated requirements, unsold anticipated production, anticipated royalties, anticipated service contract payments or receipts, or anticracy cross-hedging positions under the provisions of paragraphs (c)(iii), (iv)(i), (iv)(iii), (iv)(v), or (v), respectively, of the definition of bona fide hedging position in § 150.1. These types of anticipatory positions do not implicate commodity index contracts. In contrast to the positions discussed in notes 134 and 180 and the accompanying text.

196 17 CFR 1.48 (providing a process for persons to demonstrate NEBFH falls within the scope of § 1.3(c)(1)). As noted in the December 2013 position limits proposal, “On September 28, 2012, the District Court for the District of Columbia vacated the part 151 Rulemaking with the exception of the amendments to § 150.2. 878 F. Supp. 2d 253 (D.D.C. 2012). Vacating the part 151 Rulemaking, with the exception of the amendments to § 150.2, means that as things stand now, it is as if the Commission had never adopted any part of the part 151 Rulemaking other than the amendments to § 150.2.” December 2013 position limits proposal, 78 FR at 75747, note 478.

Current § 1.48 can be found at https://www.gpo.gov/fdsys/browse/collectionCrfr.action?collectionUri=CFR&searchPath=Title+17%2FChapter+I%2FPart+1&isCollapsed=true&selectedYearFrom=2010&ycord=594.

197 See December 2013 position limits proposal, 78 FR at 75747.

exchanges with the ability to grant hedge exemptions for federal limits in conjunction with the grant of an exchange hedge exemption would create consistency and efficiency, and take advantage of the expertise gained by exchanges in granting hedge exemptions from position limits over many years. A third asserted that the proposed requirement to file Form 704 is "unduly burdensome and commercially impracticable," and requests that the Commission "allow the exchanges to continue to grant annual hedge exemptions, which do not include onerous reporting requirements." A fourth commenter requested that the Commission consider incorporating the proposed position limits regime into the existing framework managed by the exchanges, stating that market participants and exchanges alike are comfortable and have a unique familiarity with the current futures-exchange-set position limits and aggregation processes, and have developed an effective working relationship.

This commenter also stated its belief that the current framework regarding hedge exemptions provides commercial market participants with the efficacy and the timeliness needed to ensure they are able to hedge their risks.

2. Enumerated Anticipatory Bona Fide Hedge Exemption Proposal

While the Commission continues to consider comments regarding proposed § 150.7, it is expected that a number of anticipatory bona fide hedging positions will be enumerated in the final rule, as proposed.

In this current proposal, the Commission proposes that exchanges, pursuant to exchange rules submitted to the Commission, could request applications for recognition of such enumerated anticipatory bona fide hedging exemptions, as an alternative to the process set forth in the December 2013 position limits proposal that required market participants to file a statement with the Commission. Similar to the current DCM rule framework and application process noted above for the recognition of NEBFH positions for purposes of exchange limits, most, if not all, DCMS already have some sort of framework and application process allowing market participants to request exemptions from exchange position limits for anticipatory bona fide hedge positions.

Proposed § 150.11 would permit exchanges to recognize certain anticipatory bona fide hedge positions, such as unfilled anticipated requirements, unsold anticipated production, anticipated royalties, anticipated service contract payments or receipts, or anticipatory cross-commodity hedges. Under proposed § 150.11, market participants could continue to work with exchanges to request the exemption. In addition, proposed § 150.11 would allow exchanges to adopt a shorter timeline for processing the exemption applications than under § 150.7 as proposed in the December 2013 position limits proposal. Under proposed § 150.11, an exchange could potentially recognize a position as a bona fide hedge in fewer than ten days after filing. In contrast, § 150.7 as proposed in the December 2013 position limits proposal, would provide the Commission with a full ten days after receipt of a filing to reject the position as a bona fide hedge before a filing would become effective.

The process under proposed § 150.11(a) is like the process under proposed § 150.9(a) described above. For example, an exchange with at least one year of experience and expertise administering position limits could elect to adopt rules to recognize commodity derivative positions as enumerated anticipatory bona fide hedges. However, it is different from the process under proposed § 150.9(a) in that the Commission does not propose to permit separate processes for applications based on novel versus non-novel facts and circumstances. The Commission determined to define certain anticipatory positions as enumerated bona fide hedges when it adopted current § 1.3(z)(2). The December 2013 position limits proposal does not change this determination. Consequently, the Commission does not anticipate that applications for recognition of enumerated anticipatory bona fide hedge positions would be based on novel facts and circumstances. For the same reason, proposed § 150.11(a) does not require exchanges to post summaries of any enumerated anticipatory bona fide hedge positions. Other simplifications follow from this difference.

In addition, the application process established by exchanges under proposed § 150.11(a) addresses the information exchanges should elicit in the application process by citing to the information required under § 150.7(d) as proposed in the December 2013 position limits proposal. Moreover, the reporting requirements for applicants under proposed § 150.11(a)(5) differ from the reporting requirements under proposed § 150.9(a)(6). Under proposed § 150.11(a)(5), applicants would be required to file a report with the Commission pursuant to § 150.7 as proposed in the December 2013 position limits proposal and a copy with the exchange. Proposed § 150.9(a)(6), on the other hand, requires the applicant to file reports with the exchange recognizing the position, and additionally requires under proposed § 150.9(c)(2) that the exchange would provide such information to the Commission on a monthly basis.

The Commission requests comments on all aspects of proposed § 150.11, including whether the Commission should consider any other factors in addition to those listed in proposed § 150.11(a)(1)(i), (ii), (iii), (iv) and (v).

Finally, in order to correct some errors, the Commission is proposing technical edits to § 150.7 as it was proposed in the December 2013 position limits proposal. The reference to paragraph (f) in the last sentence in § 150.7(b) as proposed in the December 2013 position limits proposal should instead be a reference to paragraph (h). And the introductory language to § 150.7(h) as proposed in the December 2013 position limits proposal, “Sales or purchases of commodity derivative contracts considered to be bona fide hedging positions under paragraphs 3(iii)(A) or 4(i) of the bona fide hedging position definition in § 150.1...” should instead read as “...under paragraphs 3(iii)(A), 4(i), 4(iii) or 4(iv) of the bona fide hedging position definition in § 150.1, or any cross-commodity hedges thereof, ...”

G. Delegation of Authority

The Commission proposes to delegate certain of its authorities under proposed § 150.9, § 150.10 and § 150.11 to the Director of the Commission’s Division of Market Oversight, or such other employee or employees as the Director may designate from time to time.

Proposed § 150.9(f)(1)(ii), § 150.10(f)(1)(ii) and § 150.11(e)(1)(ii)
would delegate the Commission’s authority to the Division of Market Oversight (“DMO”) to provide instructions regarding the submission of information required to be reported to the Commission by an exchange, and to specify the manner and determine the format, coding structure, and electronic data transmission procedures for submitting such information. Proposed § 150.9(f)(1)(v) and § 150.10(f)(1)(v) would delegate the Commission’s review authority under proposed § 150.9(e) and § 150.10(e), respectively, to DMO with respect to summaries of types of recognized non-enumerated bona fide hedges, and types of spread exemptions, that are required to be posted on an exchange’s Web site pursuant to proposed § 150.9(a)(7) and § 150.10(a)(7), respectively.

Proposed § 150.9(f)(1)(i), § 150.10(f)(1)(i) and § 150.11(e)(1)(i) would delegate the Commission’s authority to DMO to agree to or reject a request by an exchange to consider an application for recognition of an NEBFH or enumerated anticipatory bona fide hedge, or an application for a spread exemption. Proposed § 150.9(f)(1)(iii), § 150.10(f)(1)(iii) and § 150.11(e)(1)(iii) would delegate the Commission’s authority to review any application for recognition of an NEBFH or enumerated anticipatory bona fide hedge, or application for a spread exemption, and all records required to be maintained by an exchange in connection with such application. Proposed § 150.9(f)(1)(iii), § 150.10(f)(1)(iii) and § 150.11(e)(1)(iii) would delegate the Commission’s authority to request such records, and to request additional information in connection with such application from the exchange or from the applicant.

Proposed § 150.9(f)(1)(iv) and § 150.10(f)(1)(iv) would delegate the Commission’s authority, under proposed § 150.9(d)(2) and § 150.10(d)(2), respectively, to determine that an application for recognition of an NEBFH, or an application for a spread exemption, requires additional analysis or review, and to provide notice to the exchange and the particular applicant that they have 10 days to supplement such application.

H. Related Changes to § 150.3 and § 150.5—Exemptions and Exchange-Set Speculative Position Limits

In the December 2013 position limits proposal, the Commission proposed to replace both current § 150.3, which establishes exemptions from federal position limits, and current § 150.5(a), which provides guidance to DCMs for exchange-set position limits. The changes to § 150.3 as proposed in the December 2013 position limits proposal would have provided for recognition of enumerated bona fide hedge positions, but would not have exempted any spread positions from federal limits. For any commodity derivative contracts subject to federal position limits, § 150.5(a)(2) as proposed in the December 2013 position limits proposal would have established requirements under which exchanges could recognize exemptions from exchange-set position limits, including hedge exemptions and spread exemptions. Because the Commission is now proposing to permit exchanges to recognize NEBFH positions under proposed § 150.9, to grant spread exemptions from federal limits under proposed § 150.10, and to recognize certain enumerated anticipatory bona fide hedge positions under proposed § 150.11, the Commission proposes corresponding changes to § 150.3 and § 150.5(a)(2).

Further, in the December 2013 position limits proposal, the Commission proposed § 150.5(b) to establish requirements and acceptable practices for commodity derivative contracts not subject to federal position limits. The Commission now proposes to revise § 150.5(b)(5) as proposed in the December 2013 position limits proposal to permit exchanges to recognize NEBFHs, as well as spreads, to conform to the instant proposal. The Commission notes that it is no longer proposing to prohibit recognizing spreads during the spot month, although such exemptions would not have been permitted under §§ 150.5(a)(2) or (b)(5) as proposed in the December 2013 position limits proposal. Instead, this current proposal would, in part, maintain the status quo: Exchanges that currently recognize spreads in the spot month under current § 150.5(a) will be able to continue to do so. However, exchanges would be responsible for determining whether recognizing spreads, including spreads in the spot month, would further the policy objectives in section 4a(3) of the Act.

1. Changes to the Definition of Futures-Equivalent, Intermarket Spread Position, and Intra-market Spread Position

In the December 2013 position limits proposal, the Commission proposed to broaden the definition of the term “futures-equivalent” found in current § 150.1(f) of the Commission’s
The Commission proposes to clarify in proposed § 150.1 that the term “futures-equivalent” includes a futures contract which has been converted to an economically equivalent amount of an open position in a core referenced futures contract. This clarification mirrors the expanded definition of “futures-equivalent” in the December 2013 position limits proposal, as it would pertain to swaps.

Second, the Commission proposes to clarify the definition of the term “futures-equivalent” to provide that, for purposes of calculating futures equivalents, an option contract must also be converted to an economically equivalent amount of an open position in a core referenced futures contract. This clarification addresses situations, for example, where the unit of trading underlying an option contract (that is, the notional quantity underlying an option contract) may differ from the unit of trading underlying a core referenced futures contract.

These clarifications are consistent with the methodology the Commission used to provide its analysis of unique persons over percentages of the proposed position limit levels in the December 2013 position limits proposal.212

2. Changes to the Definitions of “Intermarket Spread Position” and “Intramarket Spread Position”

In the December 2013 position limits proposal, the Commission proposed to add to current § 150.1 new definitions of the terms “intermarket spread position” and “intraday spread position.”213 In connection with its proposal to permit exchanges to process applications for exemptions from federal position limits for certain spread positions, the Commission now proposes to expand the definitions of these terms as proposed in the December 2013 position limits proposal.

The Commission now proposes to define an “intermarket spread position” to mean “a long (short) position in one or more commodity derivative contracts in a particular commodity, or its products or by-products, at a particular designated contract market, and a short (long) position in one or more commodity derivative contracts in that same, or similar, commodity, or its products or by-products, away from that particular designated contract market.” Similarly, the Commission now proposes to define an “intraday spread position” to mean “a long position in one or more commodity derivative contracts in a particular commodity, or its products or by-products, and a short position in one or more commodity derivative contracts in the same, or similar, commodity, or its products or by-products, on the same designated contract market.”

The expanded definitions that the Commission now proposes would take into account that a market participant may take positions in multiple commodity derivative contracts to establish an intermarket spread position or an intraday spread position. The expanded definitions would also take into account that such spread positions may be established by taking positions in derivative contracts in the same commodity, in similar commodities, or in the products or by-products of the same or similar commodities. By way of example, the expanded definitions would include a short position in a crude oil derivative contract and long positions in a gasoline derivative contract and a diesel fuel derivative contract (collectively, a reverse crack spread).

RFC 32: The Commission invites comment on all aspects of its proposed expanded definitions of “intermarket spread position” and “intraday spread position.”

III. Related Matters

A. Cost-Benefit Considerations

Section 15(a) of the CEA requires the Commission to consider the costs and benefits of its actions before promulgating a regulation under the CEA.207

207 17 CFR 150.1(f) currently defines “futures-equivalent” only for an option contract, adjusting the position size by an economically reasonable and analytically supported risk factor, as calculated at the close of trading by the exchange.

The December 2013 position limits proposal defines “futures-equivalent” for: (1) An option contract, adjusting the position size by an economically reasonable and analytically supported risk factor, as calculated at the close of trading by the exchange; and (2) a swap contract, converting the position size to an economically equivalent amount of an open position in a core referenced futures contract. See December 2013 position limits proposal, 78 FR at 75688-89.

208 Amendments to CEA section 4a(1) authorize the Commission to extend position limits beyond futures and option contracts to swaps traded on an exchange and swaps not traded on an exchange that perform or affect a significant price discovery function with respect to regulated entities. 7 U.S.C. 6a(1). In addition, under new CEA sections 4a(a)(2) and 4a(a)(5), speculative position limits apply to commodity swaps and exempt commodity swaps that are “economically equivalent” to DCM futures and option contracts. 7 U.S.C. 6a(a)(2) and (5).

209 Under current § 150.2, for purposes of compliance with federal position limits, positions in regular sized and mini-sized contracts are aggregated. The Commission’s practice of aggregating futures contracts in DCM lists for trading two or more futures contracts with substantially identical terms, is to scale down a position in the mini-sized contract by the ratio of the unit of trading in the mini-sized contract to that of the regular sized contract. See paragraph (b)(2)(D) of app. C to part 38 of the Commission’s regulations for guidance regarding the contract size or trading unit for a futures or futures option contract.

211 For an example of a futures-equivalent conversion of a swaption, see example 6, WTI swaptions, app. A to part 20 of the Commission’s regulations.

212 See Table 11 in the December 2013 position limits proposal, 78 FR at 75731-3.

213 In the December 2013 position limits proposal, the Commission proposed to define an “intermarket spread position” as “a long position in a commodity derivative contract in a particular commodity at a particular designated contract market or swap execution facility and a short position in another commodity derivative contract in that same commodity away from that particular designated contract market or swap execution facility.” The Commission also proposed to define an “intraday spread position” as “a long position in a commodity derivative contract in a particular commodity and a short position in another commodity contract in the same commodity on the same designated contract market or swap execution facility.” See December 2013 position limits proposal, 78 FR at 75699-700.
As discussed earlier, the Commission proposed in December 2013 a new definition of bona fide hedging position in proposed § 150.1, to replace the current definition in § 1.3(z). The December 2013 position limits proposal proposed a general definition of bona fide hedging position that contained two requirements for a bona fide hedging position: An incidental test and an orderly trading requirement.217 The Commission is now proposing the following changes to proposed § 150.1. First, the Commission is proposing to strike the opening paragraph to the definition of bona fide hedging position in proposed § 150.1. By removing the opening paragraph, the Commission has eliminated the incidental test and orderly trading requirement from the general definition of bona fide hedging position.

Second, the Commission is proposing to add sub-part 150.12(ii)(D)(2) to the definition of bona fide hedging position. The proposed addition reiterates the Commission’s authority to permit exchanges to recognize bona fide positions and those positions are subject to CEA section 4a(c) standards as well as Commission review.

This supplemental proposal adds new provisions to and otherwise modifies some of the proposed rules identified and discussed in the December 2013 position limits proposal. The baseline against which the Commission considers the benefits and costs of this supplemental proposal is the same as that employed in the December 2013 position limits proposal: The statutory requirements of the CEA and the Commission regulations now in effect—
iii. Benefits and Costs

In the December 2013 position limits proposal, the Commission discussed the benefits and costs associated with the proposed amendments to the definition of bona fide hedging position.219 In this proposal, the Commission proposes changes that were not discussed in the December 2013 position limits proposal. The changes to the definition of bona fide hedging position discussed herein provide substantive benefits and costs.

In terms of benefits, the Commission has made the definition of bona fide hedging position conform more closely to the CEA’s statutory language by eliminating the incidental test. As explained in Section IIIB3(ii), the Commission considers the incidental test superfluous because the idea of commercial cash market activities is covered in the economically appropriate test. Therefore, by discarding the incidental test, market participants benefit from greater regulatory certainty and less redundancy.

By deleting the orderly trading requirement from the definition of bona fide hedging position, the Commission seeks to eliminate a source of potential confusion for exchanges and market participants. The Commission sets forth a definition that is consistent with the CEA. More directly, CEA 4c(a)(5) separately states that intentional or reckless disregard for orderly trading execution is unlawful. Thus, market participants benefit from having a definition that lessens or eliminates the confusion between having two different standards, that is, an orderly-trading requirement and an intentional or reckless disregard standard.

The addition of proposed sub-part 150.1(2)(i)(D)(2) to the definition of bona fide hedging position represents a non-substantive modification. The actual benefits and costs associated with this proposed sub-part arise from recognitions under proposed § 150.9(a).

iv. Request for Comment

RFC 34: The Commission requests comment on its consideration of the benefits and costs associated with the proposed revisions to the definition of “bona fide hedging position.” Are there additional costs and benefits that the Commission should consider? Has the Commission misidentified any costs or benefits? Commenters are encouraged to include both quantitative and qualitative assessments of benefits as well as data and other information of support for such assessments.

RFC 35: Futures contracts function to hedge price risk because they lock-in prices and quantities at designated points in time. Futures contracts, thereby, create price certainty for market participants.220 Thus, the Commission believes that bona fide hedging positions need to ultimately result in hedging against some form of price risk as discussed in Section IIIB3(i), above. Is the Commission reasonable in concluding that by eliminating the incidental test market participants will benefit from regulatory certainty and reduced compliance costs because they need only focus on price risk or other risks that can be transformed into price risk?

RFC 36: It is challenging to interpret the orderly-trading requirement in the context of the over-the-counter swaps market and permitted off-exchange transactions as discussed in Section IIIB3(ii), above. Given this challenge, is it reasonable for the Commission to conclude that by eliminating the orderly-trading requirement, market participants benefit from avoiding the compliance costs of an unclear requirement?

RFC 37: The Commission recognizes that there exist alternatives to the proposed definition of “bona fide hedging position.” These alternatives include: (i) Maintaining the status quo in current § 1.3(2), or (ii) pursuing the changes in the December 2013 position limits proposal.221 Are there additional alternatives that the Commission has not identified? If so, please describe these additional alternatives and provide a discussion of the associated quantitative and qualitative costs and benefits.

b. Futures Equivalent

i. Summary of Changes

In the December 2013 position limits proposal, the Commission proposed to expand the definition of “futures-equivalent” from the narrow scope of an option contract. The term “futures-equivalent,” as proposed in the December 2013 position limits proposal, would include certain options contracts and swaps, converted to economically equivalent amounts. The Commission now proposes two further revisions to the definition of “futures-equivalent.”

First, the Commission proposes to clarify that the term “futures-equivalent” includes a futures contract which has been converted to an economically equivalent amount of an open position in a core referenced futures contract. Second, the Commission proposes to clarify that, for purposes of calculating futures equivalents, an option contract must also be converted into an economically equivalent amount of an open position in a core referenced futures contract.

ii. Baseline

The baseline for this change to the definition of “futures-equivalent” is the current § 150.1(f) definition of “futures-equivalent.”

iii. Benefits and Costs

As explained in the December 2013 position limits proposal, the Commission’s view is that non-substantive changes to the definitional provisions of § 150.1 do not have any benefit or cost implications. With the exception of the term “bona fide hedging position,” any benefits or costs attributable to substantive definitional changes and additions to § 150.1 as proposed in the December 2013 position limits proposal were considered in the discussion of the rule in which such new or amended term was proposed to be operational.222

The Commission also explained in 2013 that the definition of “futures-equivalent” in current § 150.1(f) was too narrow in light of the Dodd-Frank Act amendments to CEA section 4a. To conform to the statutory changes and to fit within the broader position limits regime, the Commission proposed a more descriptive definition of “futures-equivalent” in the December 2013 position limits proposal. Upon further review, the Commission is now proposing to add more explanatory text to the “futures-equivalent” definition so that it comports better with the statutory changes. The proposed revisions reflect more clearly the Commission’s intent as discussed in the December 2013 position limits proposal. Thus, the Commission believes that there are no cost or benefit implications to these further clarifications.

iv. Request for Comment

RFC 38: Are there any benefits or costs associated with the proposed revisions to the definition of “futures-equivalent”? If yes, commenters are encouraged to include both quantitative and qualitative assessments of these
costs and benefits, as well as data or other information to support such assessments.

RFC 39: The Commission recognizes that one possible alternative to the clarifications made to the “futures-equivalent” definition is to retain the definition of “futures-equivalent” as proposed in the December 2013 position limits proposal. Additional alternatives may exist as well. The Commission requests comment on whether an alternative to what is proposed would result in a superior cost-benefit profile, with support for any such position provided.

c. Intermarket Spread Position and Intramarket Spread Position

i. Summary of Changes

Current part 150 does not contain definitions for the terms “intermarket spread position” or “intramarket spread position.” In the December 2013 position limits proposal, the Commission proposed definitions for both terms. The Commission now proposes to expand the scope of these two definitions. The expanded definitions would now include positions in multiple commodity derivative contracts so that market participants can establish an intermarket spread position or an intramarket spread position that would be taken into account under the proposed position limits regime and exemption processes. The expanded definitions also would cover spread positions established by taking positions in derivative contracts in the same commodity, in similar commodities, or in the products or by-products of the same or similar commodities.

ii. Baseline

Current § 150.1 does not include definitions for the terms “intermarket spread position” and “intramarket spread position.” Therefore, the baseline is a market where “intermarket” and “intramarket” spread positions are not explicitly exempted from federal position limits.

iii. Benefits and Costs

The proposed changes to “intermarket spread position” and “intramarket spread positions” broaden the scope of the two terms in comparison to the definitions proposed in the December 2013 position limits proposal. In the Commission’s view, the proposed changes are only operative in proposed §§ 150.3, 150.5, and 150.10, which address exemptions from position limits for certain spread positions. The two definitions operate in conjunction with proposed § 150.10, which sets forth a proposed process for exchanges to administer spread exemptions, because the proposed definitions and proposed § 150.10, together, will enable market participants to obtain relief from position limits for these types of spreads, among others.

iv. Request for Comment

RFC 40: Are there benefits or costs associated with the definitions of “intermarket spread position” and “intramarket spread position”? If yes, commenters are specifically encouraged to include both quantitative and qualitative assessments of these costs and benefits, as well as data or other information to support such assessments.

RFC 41: The Commission recognizes that one possible alternative to the proposed definitions of “intermarket spread position” and “intramarket spread position” is to retain the definitions proposed in the December 2013 position limits proposal. Additional alternatives may exist as well. The Commission requests comment on whether an alternative to what is proposed would result in a superior cost-benefit profile, with support for any such alternative provided.

3. Section 150.3—Exemptions

a. Rule Summary

CEA Section 4a(a)(7) authorizes the Commission to exempt, conditionally or unconditionally, any person, swap, futures contract, or option—as well as any class of the same—from the position limits requirements that the Commission establishes. In the December 2013 position limits proposal, the Commission proposed revisions to current § 150.3(a). The 2013 revisions would have provided for Commission recognition of enumerated bona fide hedge positions, and provided guidance about seeking relief from the Commission for non-enumerated positions, but would not have exempted any spread positions from federal limits. In this supplemental proposal, the Commission is proposing in § 150.3(a)(1) that commodity derivative positions recognized by exchanges as NEFFHs under § 150.9 or enumerated anticipatory bona fide hedge positions under § 150.11, and certain exempt spread positions under § 150.10, may exceed federal position limits established under § 150.2 as proposed in the December 2013 position limits proposal. Proposed § 150.3(a)(1) should not be read alone but in conjunction with proposed §§ 150.9, 150.10, and 150.11.

As discussed above in more detail, the Commission has proposed to delay the requirement that exchanges set position limits on swaps because, among other reasons, of the impracticability of exchanges being able to enforce swap position limits. As a result, the Commission believes that it would be unlikely that exchanges would establish exchange-set limits and, thus, market participants would not have a need for exemptions to exchange-set limits for swaps.

b. Baseline

The baseline is the same as it was in the December 2013 position limits proposal: Current § 150.3 of the Commission’s regulations.

c. Benefits and Costs

The costs and benefits associated with the changes to proposed § 150.3 will be considered in the sections that discuss proposed §§ 150.9, 150.10, and 150.11.

4. Section 150.5—Exemptions From Exchange-Set Limits

a. Rule Summary

In the December 2013 position limits proposal, the Commission proposed to replace current § 150.5(a), which provides guidance to exchanges for exchange-set limits. For any commodity derivative contracts subject to federal position limits, § 150.5(a)(2) as proposed in the December 2013 position limits proposal, would have established requirements under which exchanges could recognize exemptions from exchange-set position limits, including hedge exemptions and spread exemptions. Because the Commission is now proposing to permit exchanges to recognize NEFFHs positions under proposed § 150.9, to grant spread exemptions from federal limits under proposed § 150.10, and to recognize certain enumerated anticipatory bona fide hedge positions under proposed § 150.11, the Commission proposes related changes to § 150.5(a)(2). For commodity derivative contracts not subject to federal position limits, the Commission now proposes to revise § 150.5(b)(5), as proposed in the December 2013 position limits proposal, to permit exchanges to recognize NEFFHs, as well as spreads. The Commission notes that it is no longer proposing to prohibit recognizing spreads during the spot month, although such exemptions would not have been permitted under §§ 150.5(a)(2) or (b)(5), as proposed in the December 2013 position limits proposal.

223 See 17 CFR 150.3 (list of exemptions that may exceed position limits set forth in § 150.2).
b. Baseline
The baseline is the same as it was in the December 2013 position limits proposal: The current reasonable discretion afforded to exchanges to exempt market participant from their exchange-set position limits.

c. Benefits and Costs
The costs and benefits associated with the changes to proposed § 150.5 will be discussed in the sections that discuss proposed §§ 150.9, 150.10, and 150.11.

5. Section 150.9—Exchange Recognition of NEBFHs

In response to comments to the December 2013 position limits proposal, the Commission now proposes to permit exchanges to elect to administer a process to recognize certain commodity derivative positions as NEBFHs under proposed § 150.9. Subject to certain conditions set forth in proposed § 150.3(a)(1), positions recognized as NEBFHs by exchanges pursuant to the proposed § 150.9 application process would be exempt from federal position limits. Proposed § 150.9 works in concert with the following three proposed rules:

i. Proposed § 150.3(a)(1)(i), with the effect that recognized NEBFH positions may exceed federal position limits;

ii. Proposed § 150.5(a)(2), with the effect that recognized NEBFH positions may exceed exchange-set position limits for contracts subject to federal position limits; and

iii. Proposed § 150.5(b)(5), with the effect that recognized NEBFH positions may exceed exchange-set position limits for contracts not subject to federal position limits.

a. Rule Summary
The proposed NEBFH process has six sub-parts: (a) Through (f). The first three sub-parts—§ 150.9(a), (b), and (c)—require exchanges that elect to have a NEBFH process and market participants that seek relief under the NEBFH process to carry out certain duties and obligations. The latter three sub-parts—§ 150.9(d), (e), and (f)—delineate the Commission’s role and obligations in reviewing NEBFH recognition requests.

i. § 150.9(a)—Exchange-Administered NEBFH Application Process
In sub-part (a) of proposed § 150.9, the Commission identifies the process and information required for an exchange to assess whether it should grant a market participant’s request that its derivative position(s) be recognized as an NEBFH. As an initial step under proposed § 150.9(a)(1), exchanges that voluntarily elect to process NEBFH applications are required to notify the Commission of their intention to do so by filing new rules or rule amendments with the Commission under part 40 of the Commission’s regulations. In proposed § 150.9(a)(2), the Commission offers guidelines for exchanges to establish adaptable application processes by permitting different processes for “novel” versus “substantially similar” applications for NEBFH recognitions. Proposed § 150.9(a)(3) describes in general terms the type of information that exchanges should collect from applicants. Proposed § 150.9(a)(4) obliges applicants and exchanges to act timely in their submissions and notifications, respectively, and that exchanges retain revocation authority. Proposed § 150.9(a)(5) provides that the position will be deemed recognized as an NEBFH when an exchange recognizes it. Proposed § 150.9(a)(6) instructs exchanges to have rules requiring applicants that receive NEBFH recognitions to report those positions and offsetting cash positions. Proposed § 150.9(a)(7) requires an exchange to publish on their Web site descriptions of unique types of derivative positions recognized as NEBFHs based on novel facts and circumstances.

ii. § 150.9(b)—NEBFH Recordkeeping Requirements
Under proposed § 150.9(b), exchanges would be required to maintain complete books and records of all activities relating to the processing and disposition of NEBFH applications. As explained in proposed § 150.9(b)(1) through (b)(2), the Commission instructs exchanges to retain applicant-submission materials, exchange notes, and determination documents. Moreover, consistent with current § 1.31, the Commission expects that these records would be readily accessible until the termination, maturity, or expiration date of the bona fide hedge recognition and during the first two years of the subsequent, five-year retention period.

iii. § 150.9(c)—NEBFH Reporting Requirements
The Commission proposes weekly and monthly reporting obligations by exchanges for positions recognized as NEBFHs. Both reports also will be subject to the Commission’s proposed formatting requirements as explained in proposed § 150.9(c)(3). In addition to submitting reports to the Commission, proposed § 150.9(c)(4) provides that exchanges post NEBFH summaries on their Web sites.

iv. § 150.9(d) and (e)—Commission Review
The Commission proposes that under certain circumstances market participants and exchanges must respond to Commission requests.

b. Baseline
For the NEBFH process, the baseline for NEBFH subject to federal position limits is current § 1.47. For NEBFH exemptions to exchange-set position limits, the baseline is the current exchange regulations and practices as well as the Commission’s guidance to exchanges in current § 150.5(d), which provides, generally, that an exchange may recognize bona fide hedging positions in accordance with the general definition of bona fide hedging position in current § 1.3(z)(1).

iii. § 150.9(f)—Exemptive Relief

The costs and benefits associated with the changes to proposed § 150.5 will be discussed in the sections that discuss proposed §§ 150.9, 150.10, and 150.11.
Over time, retained records will help material in the future for similar bona records that may be used as reference.

§ 150.9 is the creation and retention of response time by exchanges. Reduced application-production time by processes, administrative certainty should be increased in the form of administrative efficiency, because the Commission would be able to initiate its review based on materials already submitted by the applicant under proposed § 150.9, as well as the analysis by the exchanges.

For applicants seeking recognition of an NEBFH, proposed § 150.9 should reduce duplicative efforts because applicants would be saved the expense of applying to both an exchange for relief from exchange-set position limits and to the Commission for relief from federal limits. Because many exchanges already possess similar application processes and market participants are probably somewhat accustomed to the exchanges’ existing application processes, administrative certainty should be increased in the form of reduced application-production time by market participants and reduced response time by exchanges.

Another probable benefit of proposed § 150.9 is the creation and retention of records that may be used as reference material in the future for similar bona fide hedge recognition requests either by relevant exchanges or the Commission. Over time, records will help the Commission to ensure that an exchange’s determinations are internally consistent and consistent with the Act and the Commission’s regulations thereunder. There is also the additional benefit that records would be accessible if they are needed for a potential enforcement action.

An exchange’s submission of reports under proposed § 150.9(c) would provide the Commission with notice that an applicant has taken a commodity derivative position that the exchange has recognized as an NEBFH, and also would show the applicant’s offsetting positions in the cash markets. This is beneficial to the public because such reports would support the Commission’s surveillance program. Reports would facilitate the tracking of NEBFHs recognized by the exchanges, and would assist the Commission in ensuring that a market participant’s activities conform to the exchange’s terms of recognition and to the Act. The web-posting of summaries also would benefit market participants in general by providing transparency and open access to the NEBFH recognition process. In addition, reporting and posting gives market participants seeking recognition of an NEBFH an understanding of the types of commodity derivative positions an exchange may recognize as an NEBFH, thereby providing greater administrative and legal certainty.

d. Costs

To a large extent, exchanges and market participants have incurred already many of the compliance costs associated with proposed § 150.9 because most, if not all, exchanges currently administer similar processes for recognizing NEBFHs. Nevertheless, the Commission has detailed a number of the readily-quantifiable costs for exchanges and market participants associated with processing NEBFH recognition under proposed § 150.9 in Tables A1 to G1, below. The Commission estimates that six entities would elect to process NEBFH applications and file new rules or rule amendments pursuant to part 40 of the Commission’s regulations. Even though the number of applicants and associated applications will likely vary based on the referenced contract, the Commission forecasts the number of applicants based on the Commission’s past experience. The costs are broken down in the tables below. In short, most of the quantified costs are related to the time, effort, and materials that will be spent on producing, processing, reviewing, granting, and retaining applications for NEBFH recognitions.

There are, however, other costs that are not easily quantified. These are qualitative costs that are related to the specific attributes and needs of individual market participants that are hedging. Given that qualitative costs are highly-specific, the Commission believes that market participants would choose to incur § 150.9-related costs only if doing so is less costly than complying with position limits and not executing the desired hedge position. Thus, by providing market participants with an option to apply for relief from speculative position limits under proposed § 150.9, the Commission believes it is offering market participants a way to ease overall compliance costs because it is reasonable to assume that entities would seek recognition of NEBFHs only if the outcome of doing so justifies the costs. The Commission also believes that market participants would consider how the costs of applying for recognition of an NEBFH under proposed § 150.9 would compare to the costs of requesting a staff interpretive letter under § 140.99, or seeking exemptive relief under CEA section 4(a)(7). Likewise, exchanges must consider qualitative costs in their decision to create an NEBFH application process or revise an existing program.

The Commission acknowledges that there may also be other costs to market participants if the Commission disagrees with an exchange’s decision to recognize an NEBFH under proposed § 150.9 or under an independent Commission request or review under proposed § 150.9(d) or (e). These costs would include time and effort spent by market participants associated with a Commission review. In addition, market participants would lose amounts that the Commission cannot predict nor quantify if it became necessary to unwind trades or reduce positions were the Commission to conclude that an exchange’s disposition of an NEBFH application is inconsistent with section 4(a)(c) of the Act and the general definition of bona fide hedging position in § 150.

The Commission recognizes that costs may result if the Commission disagrees with an exchange’s disposition of an NEBFH application under proposed § 150.9, the Commission, however, believes such situations would be limited based on the history of exchanges approving similar applications for exemptions to exchange-set limits. Exchanges have strong incentives to protect market participants from the harms that position limits are intended to prevent, such as manipulation, corners, and squeezes. In addition, an exchange that recognizes a market participant’s NEBFH that enables the participant to exceed position limits must then deter

224 See note 168 (for text of 17 CFR 1.47 and discussion). For a discussion on the history of exemptions, see December 2013 position limits proposal at 75763-66.
the same market participant from trading in a manner that causes adverse price impacts on the market. For example, this might mean that as part of recognizing a NEBFH, the exchange directs the market participant to execute no more than ten contracts per day over a five-day period rather than executing 50 contracts in one trading day. This approach may be necessary for the exchange to ensure sufficient market liquidity because the exchange believes that the particular contract market cannot absorb the execution of 50 contracts by one market participant in one day without an inordinately large price impact. If the exchange fails to deter (or instruct), other market participants will likely face greater costs in the form of transactions fees and other trading-implementation costs, which includes foregone trading opportunities because market prices moved against the trader and prevented the trader from executing at the desired prices. In other words, the exchange’s mismanagement of the market participant that took advantage of the NEBFH would cause the other market participants’ costs to implement trades to increase. Such an outcome would likely discredit the exchange and the proposed § 150.9 program, as well as reduce the exchange’s overall trading commissions. The Commission believes that the exchanges have little incentive to engage in such behavior because of reputational risk and economic incentives.

**TABLE A1**

<table>
<thead>
<tr>
<th>Proposed regulation/file or amend rules</th>
<th>Total average labor hours</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
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</thead>
<tbody>
<tr>
<td>§ 150.9(a)(1)</td>
<td>5</td>
<td>$122</td>
<td>$610 [5 × $122]</td>
</tr>
</tbody>
</table>

**TABLE B1**

<table>
<thead>
<tr>
<th>Proposed regulation/review applications</th>
<th>Total average applications processed per exchange</th>
<th>Total average labor hours per application</th>
<th>Average total hours for total applications reviewed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.9(a)(2)</td>
<td>185</td>
<td>5</td>
<td>925 [185 × 5]</td>
<td>$122</td>
<td>$112,850 [$122 × 925]</td>
</tr>
</tbody>
</table>

**ii. Costs To Review Applications Under Proposed Processes**

An exchange that elects to process applications also will incur costs related to the review and disposition of such applications pursuant to proposed § 150.9(a). For example, exchanges will need to expend resources on reviewing and analyzing the facts and circumstances of each application to determine whether the application meets the standards established by the Commission. Exchanges also will need to expend effort in notifying applicants of the exchanges’ disposition of recognition or exemption requests. The Commission believes that exchanges electing to process NEBFH applications under proposed § 150.9(a) are likely to have processes for the review and disposition of such applications currently in place. As such, an exchange’s cost to comply with the proposed rules are likely to be incrementally less costly than having to create process from inception because the exchange would already have staff, policies, and procedures established to accomplish its duties under the proposed rules. Thus, the Commission has forecast that the average annual cost for each exchange to process applications for NEBFH recognitions is $122,850.

**iii. Costs To Post Summaries for NEBFH Recognitions**

Exchanges that elect to process the applications under proposed § 150.9 will incur costs to publish on their Web sites summaries of the unique types of NEBFH positions. The Commission has estimated an average annual cost of $18,300 for the web-posting of NEBFH summaries.
iv. Costs To Market Participants Who Would Seek NEBFH Relief From Position Limits

Under proposed § 150.9(a)(3), market participants must submit applications that provide sufficient information to allow the exchanges to determine, and the Commission to verify, whether it is appropriate to recognize such position as an NEBFH. These applications would be updated annually. Proposed § 150.9(a)(6) would require applicants to file a report with the exchanges when an applicant owns, holds, or controls a derivative position that has been recognized as an NEBFH. The Commission estimates that each market participant seeking relief from position limits under proposed § 150.9 would likely incur approximately $2,440 annually in application costs.\(^{225}\)

\[\text{TABLE C1}\]

<table>
<thead>
<tr>
<th>Proposed regulation/web-posting</th>
<th>Total average summaries per exchange</th>
<th>Total average labor hours per application</th>
<th>Average total hours for total applications reviewed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
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<tbody>
<tr>
<td>§ 150.9(a)</td>
<td>30</td>
<td>5</td>
<td>$122</td>
<td>$122</td>
<td>$18,300</td>
</tr>
</tbody>
</table>

v. Costs for NEBFH Recordkeeping

The Commission believes that exchanges that currently process applications for spread exemptions and bona fide hedging positions maintain records of such applications as required pursuant to other Commission regulations, including § 1.31. The Commission, however, also believes that the proposed rules may confer additional recordkeeping obligations on exchanges that elect to process applications for NEBFHs. The Commission estimates that each exchange electing to administer the proposed NEBFH process would likely incur approximately $3,660 annually to retain records for each proposed process.

\[\text{TABLE D1}\]

<table>
<thead>
<tr>
<th>Proposed regulation/market participants seeking relief from position limits</th>
<th>Number of market participants</th>
<th>Total average applications per market participant</th>
<th>Total average labor hours per application</th>
<th>Average total hours for each application filed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per market participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.9(a)(3), (6)</td>
<td>222</td>
<td>5</td>
<td>4</td>
<td>20 [4 × 5]</td>
<td>$122</td>
<td>$2,440</td>
</tr>
</tbody>
</table>

vi. Costs for Weekly and Monthly NEBFH Reporting to the Commission

The Commission anticipates that exchanges that elect to process NEBFH applications will be required to file two types of reports. The Commission is aware that five exchanges currently submit reports each month, on a voluntary basis, which provide information regarding exchange-processed exemptions of all types. The Commission believes that the content of such reports is similar to the information required of the reports in proposed rule § 150.9(c), but the frequency of such required reports would increase under the proposed rule. The Commission estimates an average cost of approximately $19,032 per exchange for weekly reports under proposed § 150.9(c).

\[\text{TABLE E1}\]

<table>
<thead>
<tr>
<th>Proposed regulation/recordkeeping</th>
<th>Number of DCMs</th>
<th>Total average labor hours for recordkeeping</th>
<th>Total average labor costs per hour</th>
<th>Total average annual recordkeeping cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.9(b)</td>
<td>6</td>
<td>30</td>
<td>$122</td>
<td>$3,660 [30 × $122]</td>
</tr>
</tbody>
</table>

\(^{225}\) Assuming that exchanges administer exemptions to exchange-set limits, these costs are incrementally higher.
TABLE F1  

<table>
<thead>
<tr>
<th>Proposed regulation/weekly reporting</th>
<th>Estimated number of DCMs</th>
<th>Estimated number of hours per response</th>
<th>Average reports annually by each exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual reporting cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.9(c)</td>
<td>6</td>
<td>3</td>
<td>52</td>
<td>$122</td>
<td>$19,032 [3 × 52 × $122]</td>
</tr>
</tbody>
</table>

For the monthly report, the Commission anticipates a minor cost for exchanges because the proposed rules would require exchanges essentially to forward to the Commission notices received from applicants who own, hold, or control the positions that have been recognized or exempted. The Commission estimates an average cost of approximately $2,928 per exchange for monthly reports under proposed § 150.9(c).

TABLE G1  

<table>
<thead>
<tr>
<th>Proposed regulation/monthly reporting</th>
<th>Estimated number of DCMs</th>
<th>Estimated number of hours per response</th>
<th>Average reports annually by each exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual reporting cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.9(c)</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>$122</td>
<td>$2,928 [2 × 12 × $122]</td>
</tr>
</tbody>
</table>

vii. Costs Related to Subsequent Monitoring

Exchanges would have additional surveillance costs and duties with respect to NEBFH that the Commission believes would be integrated with their existing self-regulatory organization surveillance activities as an exchange.

e. Request for Comment

RFC 42. The Commission requests comment on its considerations of the benefits of proposed § 150.9. Are there additional benefits that the Commission should consider? Has the Commission misidentified any benefits? Commenters are encouraged to both quantitative and qualitative assessments of these benefits, as well as data or other information to support such assessments.

RFC 43. The Commission requests comment on its considerations of the costs of proposed § 150.9. Are there additional costs that the Commission should consider? Has the Commission misidentified any costs? What other relevant cost information or data, including alternative cost estimates, should the Commission consider and why? Commenters are encouraged to include both quantitative and qualitative assessments of these benefits, as well as data or other information to support such assessments.

RFC 44. The Commission requests comment on whether a Commission administered process promotes more consistent and efficient decision-making. Commenters are encouraged to include both quantitative and qualitative assessments, as well as data or other information to support such assessments.

RFC 45. The Commission recognizes there exist alternatives to proposed § 150.9. These include such alternatives as: (1) Not permitting exchanges to administer any process to recognize NEBFHs; or (2) maintaining the status quo. The Commission requests comment on whether an alternative to what is proposed would result in a superior cost-benefit profile, with support for any such position provided.

RFC 46. The Commission requests comment on whether the options for recognizing NEBFHs outlined in the December 2013 position limits proposal are superior to the process outlined in the supplemental proposal to permit spread exemptions from federal position limits, and, combined with changes to the definitions of “intermarket spread position” and “intramarket spread position,” authorized such spreads to exceed position limits during spot and non-spot months.

a. Rule Summary

The Commission proposes to authorize exchanges to exempt spread positions from federal position limits. The proposed § 150.10 process lists four types of spreads as defined and proposed in § 150.1 of the December 2013 positions limits proposal and modified in this supplemental proposal. Proposed § 150.10 works in concert with the following three proposed rules:

• Proposed § 150.3(a)(1)(iv), with the effect that exempt spread positions may exceed federal position limits;

• § 150.5(a)(2), with the effect that exempt spread positions may exceed exchange-set position limits for contracts subject to federal position limits; and

• § 150.5(b)(3)(ii)(C), with the effect that exempt spread positions may exceed exchange-set position limits for contracts not subject to federal position limits.

227 For cost-benefit discussion on spread exemptions, see December 2013 position limits proposal at 75774–76.
The proposed § 150.10 process is analogous to the application process for recognition of NEBFHs under proposed § 150.9. The proposed spread exemption process has six sub-parts: (a) Through (f). The first three sub-parts—§ 150.10(a), (b), and (c)—require exchanges that elect to have a spread exemption process, and market participants that seek relief under the spread exemption process, to carry out certain duties and obligations. The latter four sub-parts—§ 150.10(d), (e), and (f)—delineate the Commission’s role and obligations in reviewing requests for spread exemptions.

i. Section 150.10(a)—Exchange-Administered Spread Exemption

In sub-part (a) of proposed § 150.10, the Commission identifies the process and information required for an exchange to grant a market participant’s request that its derivative position(s) be recognized as an exempt spread position. As an initial step under proposed § 150.10(a)(1), exchanges that voluntarily elect to process spread exemption applications are required to notify the Commission of their intention to do so by filing new rules or rule amendments with the Commission under part 40 of the Commission’s regulations. In proposed § 150.10(a)(2), the Commission identifies four types of spreads that an exchange may approve. Proposed § 150.10(a)(3) describes in general terms the type of information that exchanges should collect from applicants. Proposed § 150.10(a)(4) obliges applicants and exchanges to act timely in their submissions and notifications, respectively, and require exchanges to retain revocation authority. Proposed § 150.10(a)(6) instructs exchanges to have rules requiring applicants who receive spread exemptions to report those positions, including each component of the spread. Proposed § 150.10(a)(7) requires exchanges to publish on its Web site a summary describing the type of spread position and explaining why it was exempted.

ii. Section 150.10(b)—Spread Exemption Recordkeeping Requirements

Exchanges must maintain complete books and records of all activities relating to the processing and disposition of spread exemption applications under proposed § 150.10(b). This is similar to the record retention obligations of exchanges for positions recognized as NEBFHs.

iii. Section 150.10(c)—Spread Exemption Reporting Requirements

Exchanges would have weekly and monthly reporting obligations for spread exemptions under proposed § 150.10(c). This is similar to the reporting obligations of exchanges for positions recognized as NEBFHs.

b. Baseline

For the proposed spread exemption process for positions subject to federal limits, the baseline is CEA section 4a(a)(1). In that statutory section, the Commission is authorized to recognize certain spread positions. That statutory provision is currently implemented in a limited calendar-month spread exemption in § 150.3(a)(3). For exchange-set position limits, the baseline for spread exemption is the guidance in current § 150.5(a), which provides generally that exchanges may recognize exemptions for positions that are normally known to the trade as spreads.

c. Benefits

CEA section 4a(a)(1) authorizes the Commission to exempt certain spreads from speculative position limits. In exercising this authority, the Commission recognizes that spreads can have considerable benefits for market participants and markets. The Commission now proposes a spread exemption framework that utilizes existing exchanges-resources and exchanges-expertise so that fair access and liquidity are promoted at the same time market manipulations, squeezes, corners, and any other conduct that would disrupt markets are deterred and prevented. Building on existing exchange processes preserves the ability of the Commission and exchanges to monitor markets and trading strategies while reducing burdens on exchanges that will administer the process, and market participants, who will utilize the process.

In addition to these benefits, there are other benefits related to proposed § 150.10 that would inure to markets and market participant. Yet, there is difficulty in quantifying these benefits because benefits are dependent on the characteristics, such as operation size and needs, of the market participants that would seek spread exemptions, and the markets in which the participants trade. Accordingly, the Commission considers the qualitative benefits of proposed § 150.10.

For both exchanges and market participants, proposed § 150.10 would likely alleviate compliance burdens to the status quo. Exchanges would be able to build on established procedures and infrastructure. As stated earlier, many exchanges already have rules in place to process and grant applications for spread exemptions from exchange-set position limits pursuant to Part 38 of the Commission’s regulations (in particular, current § 38.300 and § 38.301) and current § 150.5. In addition, exchanges may be able to use the same staff and electronic resources that would be used for proposed § 150.9 and § 150.11. Market participants also may benefit from spread-exemption reviews by exchanges that are familiar with the commercial needs and practices of market participants seeking exemptions. Market participants also might gain legal and regulatory clarity and consistency that would help in developing trading strategies.

Proposed § 150.10 would authorize exchanges to approve spread exemptions that permit market participants to continue to enhance liquidity, rather than being restricted by a position limit. For example, by allowing speculators to execute intermarket and intramarket spreads in accordance with proposed § 150.3(a)(1)(iv) and § 150.10, speculators would be able to hold a greater amount of open interest in underlying contract(s), and, therefore, bona fide hedgers may benefit from any increase in market liquidity. Spread exemptions might lead to better price continuity and price discovery if market participants who seek to provide liquidity (for example, through entry of resting orders for spread trades between different contracts) receive a spread exemption and, thus, would not otherwise be constrained by a position limit.

Here are two examples of positions that could benefit from the spread exemption in proposed § 150.10:
• Reverse crush spread in soybeans on the CBOT subject to an intermarket spread exemption. In the case where soybeans are processed into two different products, soybean meal and soybean oil, the crush spread is the difference between the combined value of the products and the value of soybeans. There are two actors in this scenario: The speculator and the soybean processor. The spread’s value approximates the profit margin from actually crushing (or mashing) soybeans into meal and oil. The soybean processor may want to lock in the spread value as part of its hedging strategy, establishing a long position in soybean futures and short positions in soybean oil futures and soybean meal futures, as the processor’s expected cash market transactions (purchase of the anticipated inputs for
processing and sale of the anticipated products). On the other side of the processor’s crush spread, a speculator takes a short position in soybean futures against long positions in soybean meal futures and soybean oil futures. The soybean processor may be able to lock in a higher crush spread, because of liquidity provided by such a speculator who may need to rely upon a spread exemption. It is important to understand that the speculator is accepting basis risk represented by the crush spread, and the speculator is providing liquidity to the soybean processor. The crush spread positions may result in greater correlation between the futures prices of soybeans and those of soybean oil and soybean meal, which means that prices for all three products may move up or down together in a closer manner.

- Wheat spread subject to intermarket spread exemptions. There are two actors in this scenario: The speculator and the wheat farmer. In this example, a farmer growing hard wheat would like to reduce the price risk of her crop by shorting a MGEX wheat futures. There, however, may be no hedger, such as a mill, that is immediately available to trade at a desirable price for the farmer. There may be a speculator willing to offer liquidity to the hedger; the speculator may wish to reduce the risk of an outright long position in MGEX wheat futures through establishing a short position in CBOT wheat futures (soft wheat). Such a speculator, who otherwise would have been constrained by a position limit at MGEX or CBOT, may seek exemptions from MGEX and CBOT for an intermarket spread, that is, for a long position in MGEX wheat futures and a short position in CBOT wheat futures of the same maturity. As a result of the exchanges granting an intermarket spread exemption to such a speculator, who otherwise may be constrained by limits, the farmer might be able to transact at a higher price for hard wheat than might have existed absent the intermarket spread exemptions. Under this example, the speculator is accepting basis risk between hard wheat and soft wheat, reducing the risk of a position on one exchange by establishing a position on another exchange, and potentially providing liquidity to a hedger. Further, spread transactions may aid in price discovery regarding the relative protein content for each of the hard and soft wheat contracts.

Finally, the Commission is no longer proposing to prohibit recognizing and exempting spreads during the spot and non-spot month as explained in the preamble. There may be considerable benefits that evolve from spreads exempted during the spot month, in particular. Besides enhancing the opportunity for market participants to use strategies involving spread trades into the spot month, this proposed relief may improve price discovery in the spot month for market participants. And, as in the intermarket wheat example above, the proposed spread relief in the spot month may better link prices between two markets, e.g., the price of MGEX wheat futures and the price of CBOT wheat futures. Put another way, the prices in two different but related markets for substitute goods may be more highly correlated, which benefits market participants with a price exposure to the underlying protein content in wheat generally, rather than that of a particular commodity.

d. Costs
Similar to proposed § 150.9, exchanges and market participants may have made already many of the financial outlays for administering the application process and applying for spread exemptions, respectively. Because of that history, the Commission is able to quantify some of the costs that will arise from proposed § 150.10 in Tables A3 through E3, below. Like the costs for proposed § 150.9, the Commission estimates that six entities would elect to process spread-exemption applications and file new rules or rule amendments pursuant to part 40 of the Commission’s regulations, and the number of spread exemption applicants and applications will likely vary based on the referenced contract. Relying on its past experience, the Commission forecasts the number of applicants and breaks down the annual costs in the tables below. Most of the monetary costs are related to the time, effort, and materials spent for administering and retaining records for spread exemptions.

Although the Commission is able to quantify some costs, other costs related to proposed § 150.10 are not easily quantifiable. As previously stated, other costs are more dependent on individual markets and market participants seeking a spread exemption, and are more readily considered qualitatively. Because costs, quantitative or qualitative, can be particular, the Commission believes that market participants will determine whether costs associated with seeking a proposed § 150.10 spread exemption are worth the benefits. If the costs are too high, then market participants may choose not to apply for a spread exemption and not to execute a spread transaction that would exceed position limits. For instance, speculators that execute exempted spreads would bear the risk of adverse price changes in the spread, but a speculator who does not receive an exemption may be unwilling to bear the higher risk of an outright position, if a position limit would restrict her ability to establish a risk reducing position in another contract. In general, the Commission believes that proposed § 150.10 should provide exchanges and market participants greater regulatory and administrative certainty and that costs will be small relative to the benefits of having an additional trading tool under proposed § 150.10.

Note: The activities that are priced in the following Tables A2 to G2 are similar, if not the same types of activities discussed in the section affiliated with Tables A1 through G1, for proposed § 150.9. Unless there is a significant difference in the anticipated acts to implement proposed § 150.10, the Commission will not re-describe the activities valued in Tables A2 through G2.

### Table A2—Costs To Create or Amend Exchange Rules for Spread-Exemption Application Reviews

<table>
<thead>
<tr>
<th>Proposed regulation/ file or amend rules</th>
<th>Total average labor hours</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.10(a)(1)</td>
<td>5</td>
<td>$122</td>
<td>$610 [5 × $122]</td>
</tr>
</tbody>
</table>
### TABLE B2—Costs to Review Spread-Exemption Applications

<table>
<thead>
<tr>
<th>Proposed regulation/review applications</th>
<th>Total average applications processed per exchange</th>
<th>Total average labor hours per application</th>
<th>Average total hours for total applications reviewed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
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</thead>
<tbody>
<tr>
<td>§ 150.10(a)(2) ..........................................................</td>
<td>50</td>
<td>5</td>
<td>250 [50 × 5]</td>
<td>$122</td>
<td>$30,500 [122 × 250]</td>
</tr>
</tbody>
</table>

### TABLE C2—Cost to Post Spread-Exemption Summaries

<table>
<thead>
<tr>
<th>Proposed regulation/web-posting</th>
<th>Total average summaries per exchange</th>
<th>Total average labor hours per application</th>
<th>Average total labor hours for total applications reviewed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.10(a) ..........................................................</td>
<td>10</td>
<td>5</td>
<td>50 [10 × 5]</td>
<td>$122</td>
<td>$6,100 [50 × 122]</td>
</tr>
</tbody>
</table>

Regarding the following Table D2, note that reports are also required to be sent to the Commission in the case of exempt spread positions under § 150.10(a)(5).

### TABLE D2—Costs to Market Participants Who Would Seek Spread-Exemption Relief from Position Limits

<table>
<thead>
<tr>
<th>Proposed regulation/market participants seeking relief from position limits</th>
<th>Number of market participants</th>
<th>Total average applications per market participant</th>
<th>Total average labor hours per application</th>
<th>Average total hours for each application filed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per market participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.10(a)(3), (6) ..........................................................</td>
<td>25</td>
<td>2</td>
<td>3</td>
<td>6 [2 × 3]</td>
<td>$122</td>
<td>$732 [6 × 122]</td>
</tr>
</tbody>
</table>

### TABLE E2—Costs for Spread-Exempt Recordkeeping

<table>
<thead>
<tr>
<th>Proposed regulation/recordkeeping</th>
<th>Number of DCMs</th>
<th>Total average labor hours for recordkeeping</th>
<th>Total average labor costs per hour</th>
<th>Total average annual recordkeeping cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.10(b) ..........................................................</td>
<td>6</td>
<td>30</td>
<td>$122</td>
<td>$3,660 [30 × 122]</td>
</tr>
</tbody>
</table>

### TABLE F2—Costs for Weekly Spread-Exemption Reporting

<table>
<thead>
<tr>
<th>Proposed regulation/reporting</th>
<th>Estimated number of DCMs</th>
<th>Estimated number of hours per response</th>
<th>Average reports annually by each exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual reporting cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.10(c) [weekly] .................</td>
<td>6</td>
<td>3</td>
<td>52</td>
<td>$122</td>
<td>$19,032 [3 × 52 × 122]</td>
</tr>
</tbody>
</table>
Exchanges would have additional surveillance costs and duties that the Commission believes would be integrated with their existing self-regulatory organization surveillance activities as an exchange. For example, exchanges that elect to grant spread exemptions will have to adapt and develop procedures to determine whether a particular spread exemption furthers the goals of CEA section 4a(a)(3)(B) as well as monitor whether applicant speculators are, in fact, providing liquidity to other market participants.

Other costs could arise from proposed § 150.11 if the Commission disagrees with an exchanges’ disposition of a spread application, or from costs from a Commission request or review under proposed § 150.11(d) or (e). These costs are not easily quantified because they depend on the specifics of the Commission’s request or review.

e. Request for Comment

RFC 47. The Commission requests comment on its considerations of the benefits of proposed § 150.10. Are there additional benefits that the Commission should consider? Has the Commission misidentified any benefits? Commenters are encouraged to include both quantitative and qualitative assessments of benefits as well as data or other information of support such assessments.

RFC 48. The Commission requests comment on its considerations of the costs of proposed § 150.10. Are there additional costs that the Commission should consider? Has the Commission misidentified any costs? What other relevant cost information or data, including alternative cost estimates, should the Commission consider and why? Commenters are encouraged to include both quantitative and qualitative assessments of costs as well as data or other information of support such assessments.

RFC 49. The Commission recognizes that there exist alternatives to proposed § 150.10. These alternatives include: (i) Maintaining the status quo, or (ii) pursuing the changes in the December 2013 position limits proposal. The Commission requests comment on whether retaining the framework for spread exemptions as proposed in the December 2013 position limits proposal is superior from a cost-benefit perspective to proposed § 150.10. If yes, please explain why. The Commission requests comment on whether any alternatives to proposed § 150.10 would result in a superior cost-benefit profile, with support for any such alternative provided.

7. Section 150.11—Enumerated Anticipatory Bona Fide Hedges

After reviewing comments in response to the December 2013 position limits proposal, the Commission is now proposing another method by which market participants may have enumerated anticipatory bona fide hedge positions recognized. As proposed in the December 2013 position limits proposal, § 150.7 would require market participants to file statements with the Commission regarding certain anticipatory hedges which would become effective absent Commission action or inquiry ten days after submission. The second method in proposed § 150.11 is an exchange-administered process to determine whether certain enumerated anticipatory bona fide hedge positions, such as unfilled anticipated requirements, unsold anticipated production, anticipated royalties, anticipated service contract payments or receipts, or anticipatory cross-commodity hedges should be recognized as bona fide hedge positions. Proposed § 150.11 works in concert with the following three proposed rules:

- Proposed § 150.3(a)(1)(i), with the effect that recognized anticipatory enumerated bona fide hedge positions may exceed federal position limits;
- Proposed § 150.5(a)(2), with the effect that recognized anticipatory enumerated bona fide hedge positions may exceed exchange-set position limits for contracts subject to federal position limits; and
- Proposed § 150.5(b)(5), with the effect that recognized anticipatory enumerated bona fide hedge positions may exceed exchange-set position limits for contracts not subject to federal position limits.

a. Rule Summary

The proposed § 150.11 process is somewhat analogous to the application process for recognition of NEBFHs under proposed § 150.9. The proposed § 150.11 recognition process for enumerated anticipatory bona fide hedge positions has five sub-parts: (a) through (e). The first three sub-parts—§ 150.11(a), (b), and (c)—require exchanges that elect to have a process for recognizing enumerated anticipatory bona fide hedge positions, and market participants that seek position-limit relief for such positions, to carry out certain duties and obligations. The fourth and fifth sub-parts—§ 150.11(d), and (e)—delineate the Commission’s role and obligations in reviewing requests for recognition of enumerated anticipatory bona fide hedge positions.

i. Section 150.11(a)—Exchange-Administered Enumerated Anticipatory Bona Fide Hedge Process

Under proposed § 150.11(a)(1), exchanges that voluntarily elect to process enumerated anticipatory bona-fide hedge applications are required to notify the Commission of their intention to do so by filing new rules or rule amendments with the Commission under part 40 of the Commission’s regulations. In proposed § 150.11(a)(2), the Commission identifies certain types of information necessary for the application, including information required under proposed § 150.7(d). In proposed § 150.11(a)(3), the Commission states that applications must be updated annually and that the exchanges have ten days in which to recognize an enumerated anticipatory bona fide hedge. In addition, exchanges must retain authority to revoke recognitions. Proposed § 150.11(a)(4) states that once an enumerated anticipatory bona fide hedge has been recognized by an exchange, the position will be deemed to be recognized. Proposed § 150.11(a)(5) discusses
reports that must be filed by applicants holding exempted an enumerated anticipatory bona fide hedge positions. Proposed 150.11(a)(6) explains that exchanges may choose to seek Commission review of an application and the Commission has ten days in which to respond.

ii. Section 150.11(b)—Enumerated Anticipatory Bona Fide Hedge Recordkeeping Requirements

Exchanges must maintain complete books and records of all activities relating to the processing and disposition of spread-exemption applications under proposed §150.11(b). This is similar to the record-retention obligations of exchanges for positions recognized as NEBFHs under proposed §150.9, and exempted as spreads under proposed §150.10.

iii. Section 150.11(c)—Enumerated Anticipatory Bona Fide Hedge Reporting Requirements

Exchanges would have weekly reporting obligations under proposed §150.11(c). Unlike NEBFHs and spreads, exchanges would have no monthly reporting or web-posting obligations for enumerated anticipatory bona fide hedges.

b. Baseline

The baseline is the same as it was in the December 2013 position limits proposal: The current filing process detailed in current §1.48.

c. Benefits

There are significant benefits that would likely accrue should proposed §150.11 be adopted. Similar to the benefits for recognizing positions as NEBFH positions under §150.9, recognizing anticipatory positions as bona fide hedges under §150.11 would provide market participants with potentially a more expeditious recognition process than the Commission proposal for a 10-day Commission recognition process under proposed 150.7. The benefit of prompter recognitions, though, is not readily quantifiable, and, in most circumstances, is subject to the characteristics and needs of markets as well as market participants. So while it is challenging to quantify the benefits that would likely be associated with proposed §150.11, there are qualitative benefits that the Commission can discuss.

For example, exchanges would be able to use existing resources and knowledge in the administration and assessment of enumerated anticipatory bona fide hedge positions. The Commission and exchanges have evaluated these types of positions for years (as discussed in the December position limits proposal). Utilizing this experience and familiarity would likely produce such benefits as prompt but reasoned decision making and streamlined procedures. In addition, proposed §150.11 permits exchanges to act in less than ten days—a timeframe that would be less than the Commission’s process under current §1.48, or under §150.7 as proposed in the December 2013 position limits proposal. This could potentially enable commercial market participants to pursue trading strategies in a more timely fashion to advance their commercial and hedging needs to reduce risk.

Proposed §150.11, similar to proposed §150.9 and §150.10, also would provide the benefit of enhanced record-retention and reporting of positions recognized as enumerated anticipatory bona fide hedges. As previously discussed, records retained for specified periods would enable exchanges to develop consistent practices and afford the Commission accessible information for review, surveillance, and enforcement efforts. Likewise, weekly reporting under §150.11 would facilitate the tracking of positions, provide transparency to the enumerated anticipatory bona fide hedge process to the public, and improve open access and administrative and legal certainty.

d. Costs

The costs for proposed §150.11 are similar to the costs for proposed §§150.9 and 150.10, with many of the cost considerations not changing. The costs that can be quantified are in Tables A3 through G3. Other costs associated with proposed §150.11, like those for proposed §§150.9 and 150.10, are more qualitative in nature and hinge on specific market and participant attributes. With this in mind, the Commission believes that exchanges and market participants will incur the costs related to §150.11 if they believe that administering the process under proposed §150.11, or applying for recognition under proposed §150.11 and establishing a recognized position, respectively, are less costly than not administering the process under proposed §150.11 recognitions, or not executing such trades, respectively.

Other costs could arise from proposed §150.11 if the Commission disagrees with an exchange’s disposition of an enumerated anticipatory bona fide hedge position application, or costs from a Commission request or review under proposed §150.11(d) These costs would include time and effort spent by market participants associated with a Commission review. In addition, market participants would lose amounts that the Commission can neither predict nor quantify if it became necessary to unwind trades or reduce positions were the Commission to conclude that an exchange’s disposition of an enumerated anticipatory bona fide hedge application is not appropriate or is inconsistent with the Act. The Commission believes that such disagreements will be rare based on the Commission’s past experience and review of exchanges’ efforts. Nevertheless, the Commission notes that assessing whether a position is for the reduction of risk arising from anticipatory needs or excessive speculation is complicated.

Note: For a general description of proposed rules identified in the following Tables A3 to E3, see Section IIIA5, above.

Table A3—Costs to Create or Amend Exchange Rules for Enumerated Anticipatory Bona Fide Hedge Applications

<table>
<thead>
<tr>
<th>Proposed regulation/file or amend rules</th>
<th>Total average labor hours</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§150.11(a)(1)</td>
<td>5</td>
<td>$122</td>
<td>$610 (5 \times $122)</td>
</tr>
</tbody>
</table>

Footnote: See discussion in December 2013 position limits proposal at 75745–46.
Exchanges would have additional surveillance costs and duties that the Commission believes would be integrated with their existing self-regulatory organization surveillance activities as an exchange.

f. Request for Comment

RFC 50. The Commission requests comment on its considerations of the benefits of proposed § 150.11. Are there additional benefits that the Commission should consider? Has the Commission misidentified any benefits? Commenters are encouraged to include both quantitative and qualitative assessments of these benefits, as well as data or other information to support such assessments.

RFC 51. The Commission requests comment on its considerations of the costs of proposed § 150.11. Are there additional costs that the Commission should consider? Has the Commission misidentified any costs? What other relevant cost information or data, including alternative cost estimates, should the Commission consider and why? Commenters are encouraged to include both quantitative and qualitative assessments of these costs, as well as data or other information to support such assessments.

8. CEA Section 15(a) Factors

CEA section 15(a) requires the Commission to consider the costs and benefits of its actions in light of five factors, which it proposes to do below. The Commission welcomes comments on its discussion of the proposed rules in this supplemental proposal and the CEA 15(a) factors.

i. Protection of Market Participants and the Public

The imposition of position limits is intended to protect the markets and market participants from manipulation and excessive speculation. Yet, there are

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TABLE B3—COSTS TO REVIEW ENUMERATED ANTICIPATORY BONA FIDE HEDGE APPLICATIONS

<table>
<thead>
<tr>
<th>Proposed regulation/review applications</th>
<th>Total average applications processed per exchange</th>
<th>Total average labor hours per application</th>
<th>Average total hours for total applications reviewed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.11(a)(2) .............................................</td>
<td>50</td>
<td>5</td>
<td>250</td>
<td>$122</td>
<td>$30,500 [$122 × 250]</td>
</tr>
</tbody>
</table>

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TABLE C3—COSTS TO MARKET PARTICIPANTS WHO WOULD SEEK ENUMERATED ANTICIPATORY BONA FIDE HEDGE RELIEF FROM POSITION LIMITS

<table>
<thead>
<tr>
<th>Proposed regulation/market participants seeking relief from position limits</th>
<th>Number of market participants</th>
<th>Total average applications per market participant</th>
<th>Total average labor hours per application</th>
<th>Average total hours for each application filed per exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual cost per market participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.11(a)(2), (6) .............................................................................</td>
<td>25</td>
<td>2</td>
<td>3</td>
<td>6 [2 × 3]</td>
<td>$122</td>
<td>$732 [$6 × $122]</td>
</tr>
</tbody>
</table>

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TABLE D3—COSTS FOR ENUMERATED ANTICIPATORY BONA FIDE HEDGE RECORDKEEPING

<table>
<thead>
<tr>
<th>Proposed regulation/recordkeeping</th>
<th>Number of DCMs</th>
<th>Total average labor hours for recordkeeping</th>
<th>Total average labor costs per hour</th>
<th>Total average annual recordkeeping cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.11(b) .................................................................</td>
<td>6</td>
<td>30</td>
<td>$122</td>
<td>$3,660 [$30 × $122]</td>
</tr>
</tbody>
</table>

---

TABLE E3—COSTS FOR ENUMERATED ANTICIPATORY BONA FIDE HEDGE WEEKLY REPORTING

<table>
<thead>
<tr>
<th>Proposed regulation/weekly reporting</th>
<th>Estimated number of DCMs</th>
<th>Estimated number of hours per response</th>
<th>Average reports annually by each exchange</th>
<th>Total average labor costs per hour</th>
<th>Total average annual reporting cost per exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 150.11(c) .................................................................</td>
<td>6</td>
<td>3</td>
<td>52</td>
<td>$122</td>
<td>$19,032 [$3 × 52 × $122]</td>
</tr>
</tbody>
</table>
circumstances where position limits may be exceeded by bona fide hedge positions or spread positions, as provided in the CEA. By proposing the rules in this supplemental proposal, the Commission is offering market participants several reasonable alternatives by which they may establish bona fide hedge positions or spread positions that exceed position limits. The proposed alternatives require, among other things, exchanges to document and record their decisions to recognize bona fide hedge positions or to exempt spread positions. The Commission believes that the discipline of having exchanges review and document such decisions protects hedgers, speculators, and markets from abuse of recognitions and exemptions. In general, exchanges have strong incentives, such as preserving the revenue from trading, maintaining credibility, and protecting markets and market participants from excessive speculation, manipulation, corners, and squeezes. In addition, the proposed rules would enable the Commission to protect markets and market participants because the Commission would be able to perform second-level reviews of exchange-administered processes regarding exemptions from speculative position limits, if necessary, and have available documentation for surveillance and enforcement actions.

RFc 53: Does permitting the exchanges to administer application processes for NEBFHs, spread exemptions, and enumerated anticipatory bona fide hedges further the goals of CEA section 45(a)(3)(B) and properly protect market participants and the public? Please explain.

RFC 54: Does permitting the exchanges to administer application processes for NEBFHs, spread exemptions, and enumerated anticipatory bona fide hedges affect excess speculation? Please explain.

RFC 55: Will the ability to assume larger positions by way of exemptions under this supplemental proposal facilitate effective market manipulation by markets availing themselves of such exemptions? Are existing safeguards and deterrents to market manipulation sufficient to prevent manipulation or does the Commission need to impose position limits without exchange-granted exemptions to prevent manipulation, prophylactically? Please explain.

ii. Efficiency, Competitiveness, and Financial Integrity of Futures Markets

Market manipulation and excessive speculation harm the efficiency, competitiveness, and financial integrity of markets. Position limits are intended to prevent market manipulation and excessive speculation. There are, however, positions that may exceed position limits, such as those permitted by proposed §§ 150.9, 150.10, and 150.11, that promote market efficiency and competitiveness. For example, the proposed rules require an exchange to consider the policy objectives of position limits, prior to granting a spread exemption. If a market participant exerts market power, it might adversely affect market integrity because other market participants might perceive the underlying pricing process to be unfair. The proposed rules are designed, in part, to give exchanges the ability and information to guard against accumulation and exercise of market power that may result from excessive speculation, and, therefore, promote financial integrity and confidence in the markets.

RFC 56: Is market integrity adversely affected by the proposed rules in this supplemental proposal? If so, how might the Commission mitigate any harmful impact?

RFC 57: Should the Commission provide more guidance to exchanges on how to assess recognitions under this supplemental proposal, for example, guidance on cash-and-carry spreads, or any other spreads involving the spot-month contract?

RFC 58: What costs and benefits would accrue to exchanges and market participants should the Commission provide additional guidance to exchanges on how to assess recognitions under this supplemental proposal? Please explain.

RFC 59: Are there any anti-competitive effects between exchanges, or exchanges and SEFs, because the rules proposed in this supplemental proposal have the practical effect of allowing exchanges to recognize and grant exemptions from position limits? If so, what are they? Please explain.

iii. Price Discovery

The Commission believes that the recognition and exemption processes proposed to be administered by exchanges in this supplemental proposal will foster liquidity and potentially improve price discovery. Because exchanges possess knowledge about the commercial needs of market participants and the needs of markets, the proposed rules will enable exchanges to recognize and exempt positions in a timely and reasonable manner to help facilitate more stable prices. With stable prices, market participants will have the ability to trade in and out of derivative positions more easily and with lower costs of execution.

RFC 60: How might the rules proposed in this supplemental proposal affect price discovery? Please explain.

RFC 61: How might the rules proposed in this supplemental proposal affect liquidity?

RFC 62: Will price discovery be improved on exchanges because of the exemptions outlined in this supplemental proposal?

RFC 63: How might spread exemptions that go into the spot month affect price discovery?

RFC 64: What price-discovery costs and benefits would accrue for spread exemptions that go into the spot month? Please explain.

iv. Sound Risk Management Practices

Under the proposed rules, market participants must explain and document the methods behind their hedging strategies to exchanges, and exchanges would have to evaluate them. As a result, the Commission believes that the exchange-administered processes discussed in this supplemental proposal should help market participants, exchanges, the Commission, and the public to understand better the risk management techniques and objectives of various market participants.

RFC 65: How might the rules proposed in this supplemental proposal affect sound risk management practices?

v. Other Public Interest Considerations

Except as discussed above, the Commission has not identified any other public interest considerations.

RFC 66: Are there any other public interest considerations that the Commission should consider?

RFC 67: The Commission seeks comments on all aspects of its cost and benefit considerations. To the extent that any of the proposed rules in this supplemental proposal have an impact on activities outside the United States, the Commission requests comment on whether the associated costs and benefits are likely to be different from those associated with their impact on activities within the United States, and on exchange-granted exemptions to prevent manipulation, prophylactically? Please explain.

ii. Efficiency, Competitiveness, and Financial Integrity of Futures Markets

Market manipulation and excessive speculation harm the efficiency, competitiveness, and financial integrity of markets. Position limits are intended to prevent market manipulation and excessive speculation. There are, however, positions that may exceed position limits, such as those permitted by proposed §§ 150.9, 150.10, and 150.11, that promote market efficiency and competitiveness. For example, the proposed rules require an exchange to consider the policy objectives of position limits, prior to granting a spread exemption. If a market participant exerts market power, it might adversely affect market integrity because other market participants might perceive the underlying pricing process to be unfair. The proposed rules are designed, in part, to give exchanges the ability and information to guard against accumulation and exercise of market power that may result from excessive speculation, and, therefore, promote financial integrity and confidence in the markets.

RFC 56: Is market integrity adversely affected by the proposed rules in this supplemental proposal? If so, how might the Commission mitigate any harmful impact?

RFC 57: Should the Commission provide more guidance to exchanges on how to assess recognitions under this supplemental proposal, for example, guidance on cash-and-carry spreads, or any other spreads involving the spot-month contract?

RFC 58: What costs and benefits would accrue to exchanges and market participants should the Commission provide additional guidance to exchanges on how to assess recognitions under this supplemental proposal? Please explain.

RFC 59: Are there any anti-competitive effects between exchanges, or exchanges and SEFs, because the rules proposed in this supplemental proposal have the practical effect of allowing exchanges to recognize and grant exemptions from position limits? If so, what are they? Please explain.

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RFC 67: The Commission seeks comments on all aspects of its cost and benefit considerations. To the extent that any of the proposed rules in this supplemental proposal have an impact on activities outside the United States, the Commission requests comment on whether the associated costs and benefits are likely to be different from those associated with their impact on activities within the United States; and, if so, in what particular ways and to what extent. While at this point in time the Commission does not foresee any other costs or benefits that might be associated with the cross-border implications of this proposal, it seeks further any comment on this topic. For instance, would price discovery move to a foreign board of trade because of this proposed rulemaking? On all issues, commenters are encouraged to supply data and quantify where practical.
RFC 68: The Commission requests comment on whether there will be any lost benefits related to position limits because of the recognitions and exemptions in the proposed rules in this supplemental proposal.

9. CEA Section 15(b) Considerations

Section 15(b) of the CEA requires the Commission to consider the public interest to be protected by the antitrust laws and to endeavor to take the least anticompetitive means of achieving the objectives, policies and purposes of the CEA, before promulgating a regulation under the CEA or issuing certain orders. The Commission preliminarily believes that the rules and guidance proposed in this supplemental notice of proposed rulemaking are consistent with the public interest protected by the antitrust laws.

The Commission acknowledges that, with respect to exchange qualifications to recognize or grant NEBFHs, spread exemptions, and anticipatory bona fide hedges for federal position limit purposes, the threshold experience requirements that it proposes will advantage certain more-established incumbent DCMs (“incumbent DCMs”) over smaller DCMs seeking to expand or future entrant DCMs (collectively “entrant DCMs”) or SEFs.230 Specifically, incumbent DCMs—based on their past track records of listing actively traded reference contracts and setting and administering exchange-set limits applicable to those contracts for at least a year—will be immediately eligible to submit rules to the Commission under part 40 to process applications for recognition of NEBFHs, spread exemptions,231 and anticipatory bona fide hedges; in contrast, entrant DCMs and SEFs will be foreclosed until such time as they have met the eligibility criteria to do so. However, subject to consideration of any comments supporting a contrary view, the Commission does not perceive that an ability to process applications for NEBFHs, spread exemptions and/or anticipatory bona fide hedges is a necessary function for a DCM or SEF to compete effectively as a trading facility. In the event an incumbent DCM declines to process a trader’s request for hedging recognition or a spread exemption,232 the trader may seek the recognition or exemption directly from the Commission in order to trade on an entrant DCM or SEF. Accordingly, the Commission does not view the proposed threshold experience requirements as establishing a barrier to entry or competitive restraint likely to facilitate anticompetitive effects in any relevant antitrust market for contract trading.233

The Commission requests comment on any considerations related to the public interest to be protected by the antitrust laws and potential anticompetitive effects of the proposal, as well as data or other information to support such considerations. Is the Commission correct that the proposed threshold criteria for an exchange to qualify to process applications for recognition of NEBFHs, spread exemptions, and enumerated anticipatory bona fide hedges is unlikely to create a competitive barrier to entry or expansion that will insulate incumbent DCMs from competition for contract trading or otherwise contribute to anticompetitive effects in any relevant antitrust market(s) for contract trading?

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (“RFA”) requires that agencies consider whether the rules they propose will have a significant economic impact on a substantial number of small entities and, if so, provide a regulatory flexibility analysis respecting the impact. A regulatory flexibility analysis or certification typically is required for “any rule for which the agency publishes a general notice of proposed rulemaking pursuant to” the notice-and-comment provisions of the Administrative Procedure Act, 5 U.S.C. 553(b). The requirements related to the proposed amendments fall mainly on registered entities, exchanges, FCMs, swap dealers, clearing members, foreign brokers, and large traders. The trader’s application for hedge recognition or a spread exemption. For example, this might occur in a circumstance in which a trader has reached the exchange-set limit and the exchange determines that liquidity is insufficient to maintain a fair and orderly contract market if the trader’s position increases.

The Paperwork Reduction Act (“PRA”), 44 U.S.C. 3501 et seq., imposes certain requirements on Federal agencies in connection with their conducting or sponsoring any collection of information as defined by the PRA. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number issued by the Office of Management and Budget (“OMB”). Certain provisions of the proposed rules would result in amendments to previously-approved collection of information requirements within the meaning of the PRA. Therefore, the Commission is submitting to OMB for review in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11 the information collection requirements proposed in this rulemaking proposal as an amendment to the previously-approved collection associated with OMB control number 3038–0013. If adopted, responses to this collection of information would be mandatory. The Commission will protect proprietary information according to the Freedom of Information Act and 17 CFR part 145, titled “Commission Records and Information.” In addition, the Commission emphasizes that section 8(a)(1) of the Act strictly prohibits the Commission, unless specifically authorized by the Act, from making public “data and information that would separately disclose the business transactions or market positions of any person and trade secrets or names of customers.” The Commission also is required to protect certain information contained in a government system of
participants not currently active in the market may elect to incur the estimated burdens in the future. These limitations notwithstanding, the Commission has made best-effort estimations regarding the likely number of affected entities for the purposes of calculating burdens under the PRA. The Commission used data currently provided by designated contract markets to estimate the number of respondents for each of the proposed obligations subject to the PRA. The Commission estimated the number of exchanges that may elect to process applications for recognition of NEBFHs, exempt spread positions, or enumerated anticipatory bona fide hedges, and the number of market participants who may file for relief from position limit requirements under the proposed processes. The Commission also used information from testimony given at Commission advisory committee meetings. Further, the Commission asked several questions of the five exchanges that, in the Commission’s knowledge, currently process applications for exemptions to exchange-set position limits, to ascertain the burdens on the exchanges that may arise should such exchanges elect to process applications under proposed §§150.9, 150.10, and/or 150.11. The Commission received responses to its questions regarding the administration of current exchange processes for approving exemptions from position limits from representatives of four exchanges. The Commission preliminarily believes that the burden estimates provided by these four exchanges are sufficiently representative of all potentially affected entities, and is providing average estimates in order to estimate the potential impact on all entities, particularly those which do not currently process exemption applications. Thus, the Commission proposes to use these estimates, as well as figures provided in testimony from the Energy and Environmental Markets Advisory Committee and Agricultural Advisory Committee meetings, to calculate burdens for the purposes of the Paperwork Reduction Act. The Commission welcomes comment on its estimates and the methodology described above.

The Commission’s estimates concerning wage rates are based on 2013 salary information for the securities industry compiled by the Securities Industry and Financial Markets Association (“SIFMA”). The Commission is using a figure of $122 per hour, which is derived from a weighted average of salaries across different professions from the SIFMA Report on Management & Professional Earnings in the Securities Industry 2013, modified to account for an 1800-hour work-year, adjusted to account for the average rate of inflation in 2013. This figure was then multiplied by 1.33 to account for benefits, and further by 1.5 to account for overhead and administrative expenses. The Commission anticipates that compliance with the provisions would require the work of an information technology professional; a compliance manager; an accounting professional; and an associate general counsel. Thus, the wage rate is a weighted national average of salary for professionals with the following titles (and their relative weight): “programmer (average of senior and non-senior)” (15% weight), “senior accountant” (15%) “compliance manager” (30%), and “assistant/associate general counsel” (40%). All monetary estimates below have been rounded to the dollar.

The Commission welcomes comment on its assumptions and estimates.

3. Collections of Information—Information Provided by Reporting Entities and Recordkeeping Duties

(a) Requirements for Designated Contract Markets and Swaps Execution Facilities Filing New or Amended Rules Pursuant to Part 40

Proposed §§150.9(a), 150.10(a), and 150.11(a) require that designated contract markets and swap execution facilities file new rules or rule amendments pursuant to Part 40 of this chapter, establishing or amending its application process for recognition of NEBFHs, exempt spread positions, or enumerated anticipatory bona fide hedges, respectively, consistent with the requirements of proposed §§150.9, 150.10, and 150.11. Further, proposed §§150.9(a), 150.10(a), and 150.11(a) require that designated contract markets and swap execution facilities post to their Web sites a summary describing the type of derivative positions that are recognized as exempt non-enumerated hedge positions.

The Commission estimates that, at most, 6 entities will file new rules or rule amendments pursuant to Part 40 to elect to process NEBFH applications. The Commission determined this estimate by analyzing how many exchanges currently list actively traded contracts for the 28 commodities for which federal position limits will be set, because proposed §§150.9(a), 150.10(a), and 150.11(a) require a referenced contract to be listed by and actively traded on any exchange that elects to process NEBFH applications for...
recognition of positions in such referenced contract. The Commission anticipates that the exchanges that elect to process NEBFH applications under proposed § 150.9(a) are likely to have processes for recognizing such exemptions currently, and so would need to file amendments to existing exchange rules rather than adopt new rules. This filing would be required only once. Thus, the Commission estimates an average cost of approximately $610 per entity for filings under proposed § 150.9(a).

Similarly, the Commission anticipates that the exchanges that elect to process spread exemption applications under proposed § 150.10(a) are likely to have processes for recognizing such exemptions currently, and so would need to file amendments to existing exchange rules rather than adopt new rules. This filing would be required only once. Thus, the Commission estimates an average per entity burden of 5 labor hours. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $610 per entity for filings under proposed § 150.10(a).

In addition, the Commission anticipates that the exchanges that elect to process enumerated anticipatory bona fide hedge applications under proposed § 150.11(a) are likely to have processes for recognizing such exemptions currently, and so would need to file amendments to existing exchange rules rather than adopt new rules. This filing would be required only once. Thus, the Commission estimates an average per entity burden of 5 labor hours. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $610 per entity for filings under proposed § 150.11(a).

Review and Disposition of Applications

An exchange that elects to process applications may incur a burden related to the review and disposition of such applications pursuant to proposed §§ 150.9(a), 150.10(a), and 150.11(a). The review of an application is required to include analysis of the facts and circumstances of such application to determine whether the application meets the standards established by the Commission. Exchanges are required to notify the applicant regarding the disposition of the application, including whether the application was approved, denied, referred to the Commission, or requires additional information.

The Commission anticipates that the exchanges that elect to process NEBFH applications under proposed § 150.9(a) are likely to have processes for the review and disposition of such applications currently in place. The Commission preliminarily believes that in such cases, complying with the proposed rules is likely to be less burdensome because the exchange would already have staff, policies, and procedures established to accomplish its duties under the proposed rules. Thus, the Commission estimates that each exchange would process an average of 185 NEBFH applications per year and that each application would require 5 hours to process, for an average per entity burden of 925 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $112,850 per entity under proposed § 150.9(a).

The Commission anticipates that the exchanges that elect to process spread exemption applications under proposed § 150.10(a) are likely to have processes for the review and disposition of such applications currently in place. The Commission preliminarily believes that in such cases, complying with the proposed rules is likely to be less burdensome because the exchange would already have staff, policies, and procedures established to accomplish its duties under the proposed rules. Thus, the Commission estimates that each exchange would process about 50 spread exemption applications per year and that each application would require 5 hours to process, for an average per entity burden of 250 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $30,500 per entity under proposed § 150.10(a).

The Commission anticipates that the exchanges that elect to process enumerated anticipatory bona fide hedge applications under proposed § 150.11(a) are likely to have processes for the review and disposition of such applications currently in place. The Commission preliminarily believes that in such cases, complying with the proposed rules is likely to be less burdensome because the exchange would already have staff, policies, and procedures established to accomplish its duties under the proposed rules. Thus, the Commission estimates that each exchange would process about 50 anticipatory hedging applications per year and that each application would require 5 hours to process, for an average per entity burden of 250 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $30,500 per entity under proposed § 150.11(a).

Publication of Summaries

Further, exchanges that elect to process the applications under proposed §§ 150.9 and 150.10 may incur burdens to publish on their Web sites summaries of the unique types of NEBFH positions and spread positions, respectively. Although this requirement is new even for exchanges that already have a similar process under exchange-set limits, the Commission preliminarily believes that the proposed summaries will not be overly burdensome in part because they are anticipated to be concise.

The Commission preliminarily believes that complying with the requirements under proposed § 150.9(a) for summaries of recognized NEBFHs would require the work of an analyst to write and a supervisor to approve a summary. The summary would also need to be published on the exchange’s Web site. The Commission estimates that a single summary would require 5 hours to write, approve, and post. The Commission notes that exchanges likely would need to post more summaries in the first year of the process, as over time the applications may become more routine. The Commission thus estimates that each exchange would post approximately 30 summaries per year, for an average per entity burden of 5 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $18,300 per entity under proposed § 150.9(a).

The Commission preliminarily believes that complying with the requirements under proposed § 150.10(a) for summaries of recognized spread exemptions would require the work of an analyst to write and a supervisor to approve the summary. The summary would also need to be published on the exchange’s Web site. The Commission estimates that a single summary would require 5 hours to write, approve, and post. The Commission notes that exchanges likely would need to post more summaries in the first year of the process, as over time the applications may become more routine. The Commission thus estimates that each entity would post approximately 10 summaries per year, for an average per entity burden of 50 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $6,100 per entity under proposed § 150.10(a).

(b) Requirements for Market Participants

Proposed §§ 150.9(a)(3), 150.10(a)(3), and 150.11(a)(2), would require electing
designated contract markets and swap execution facilities to establish an application process that elicits sufficient information to allow the designated contract market or swap execution facility to determine, and the Commission to verify, whether it is appropriate to recognize a commodity derivative position as an NEBFH, exempt spread position or enumerated anticipatory bona fide hedge. Pursuant to §§ 150.9(a)(4)(i), 150.10(a)(4), and 150.11(a)(3), an applicant would be required to update an application at least on an annual basis. Further, §§ 150.9(a)(6), 150.10(a)(6), and 150.11(a)(5) require that any such applicant file a report with the designated contract market or swap execution facility (and with the Commission in the case of 150.10(a)(5)) when such applicant owns or controls a derivative position that such has been recognized as an NEBFH, exempt spread, or enumerated anticipatory bona fide hedge, respectively.

The Commission anticipates that market participants would be mostly familiar with the NEBFH application provided by exchanges that currently process such applications, and thus preliminarily believes that the burden for applying to an exchange would be minimal. Information included in the application is required to be sufficient to allow the exchange to determine, and the Commission to verify, whether the position meets the requirements of CEA section 4a(a)(3)(B), but specific data fields are left to the exchanges to determine. The Commission believes that there would be a slight additional burden for market participants to submit the notice that must be filed when such participant owns or controls the spread position that has been exempted from position limits. The Commission estimates that 25 entities will file an average of 2 applications each year to obtain an exemption for certain spread positions and that each application, including the notice filing when the participant owns or controls such positions, would require approximately 3 burden hours to complete and file. Thus, the Commission approximates an average per entity burden of 6 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $732 per entity for applications under proposed § 150.10(a)(2).

The Commission anticipates that market participants would be mostly familiar with the enumerated anticipatory bona fide hedge application provided by exchanges that currently process such applications, and thus preliminarily believes that the burden for applying to an exchange would be minimal. The application is required to include, at minimum, the information required under proposed § 150.7(d). The Commission estimates that 25 entities will file an average of 2 applications each year to obtain recognition that certain positions are enumerated anticipatory bona fide hedges and that each application would require approximately 3 burden hours to complete and file. Thus, the Commission estimates an average per entity burden of 6 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $732 per entity for applications under proposed § 150.11(a)(2).

(c) Recordkeeping and Reporting

Proposed §§ 150.9(b), 150.10(b), and 150.11(b), would require electing designated contract markets and swap execution facilities to keep full, complete, and systematic records, which include all pertinent data and memoranda, of all activities relating to the processing and disposition of applications for recognition of NEBFHs, exempt spread positions, and enumerated anticipatory bona fide hedges. Further, proposed §§ 150.9(c), 150.10(c), and 150.11(c), would require designated contract markets and swap execution facilities that elect to process NEBFH applications to submit to the Commission a report for each week as of the close of business on Friday showing various information concerning the derivative positions that have been recognized by the designated contract market or swap execution facility as an NEBFH, exempt spread position, or enumerated anticipatory bona fide hedge position, and for any revocation, modification or rejection of such recognition. Finally, proposed §§ 150.9(c) and 150.10(c) also require a designated contract market or swap execution facility that elects to process applications for NEBFHs and exempt spread positions to submit to the Commission (i) a summary of any NEBFH and exempt spread position newly published on the designated contract market or swap execution facility’s Web site; and (ii) no less frequently than monthly, any report submitted by an applicant to such designated contract market or swap execution facility pursuant to rules required under proposed §§ 150.9(a)(6) and 150.10(a)(6), respectively.

The Commission preliminarily believes that exchanges that currently process applications for recognition of NEBFHs, exempt spread positions, and enumerated anticipatory bona fide hedges maintain records of such applications as required pursuant to other Commission regulations, including § 1.31. However, the Commission also believes that the proposed rules may confer additional recordkeeping obligations on exchanges that elect to process applications for recognition of NEBFHs, exempt spread positions, and enumerated anticipatory bona fide hedges. The Commission estimates that 6 entities will have recordkeeping obligations pursuant to proposed § 150.9. Thus, the Commission approximates an average per entity burden of 30 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $3,660 per entity for records and filings under proposed § 150.9.

The Commission estimates that 6 entities will have recordkeeping obligations pursuant to proposed § 150.10. Thus, the Commission estimates an average per entity burden of 30 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $3,660 per entity for
The Commission estimates that 6 entities will have recordkeeping obligations pursuant to proposed § 150.11. Thus, the Commission estimates an average per entity burden of 30 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $3,660 per entity for records and filings under proposed § 150.11.

Finally, the Commission anticipates that exchanges that elect to process applications for recognition of NEBFHs, spread exemptions, and enumerated anticipatory bona fide hedges will be required to file two types of reports, as stated above. The Commission understands that 5 exchanges currently submit reports, on a voluntary basis each month, which provide information regarding exchange-recognized exemptions of all types. The Commission preliminarily believes that the content of such reports is similar to the information required of the reports in proposed §§ 150.9(c), 150.10(c), and 150.11(c), but the frequency of such reports would increase under the proposed rules.

The Commission estimates that 6 entities will have weekly reporting obligations pursuant to proposed § 150.9(c). The Commission also estimates that the weekly report will require a burden of approximately 3 hours to complete and submit. Thus, the Commission approximates an average per entity burden of 156 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $19,032 per entity for weekly reports under proposed § 150.10(c).

The Commission estimates that 6 entities will have weekly reporting obligations pursuant to proposed § 150.11(c). The Commission also estimates that the weekly report will require a burden of approximately 3 hours to complete and submit. Thus, the Commission approximates an average per entity burden of 156 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $19,032 per entity for weekly reports under proposed § 150.11(c).

For the monthly report, the Commission anticipates a minor burden for exchanges because the proposed rules require exchanges essentially to forward to the Commission notices received from applicants who own or control the positions that have been recognized or exempted.

The Commission estimates that 6 entities will have monthly reporting obligations pursuant to proposed § 150.9(c). The Commission also estimates that the monthly report will require a burden of approximately 2 hours to complete and submit. Thus, the Commission approximates an average per entity burden of 24 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $2,928 per entity for monthly reports under proposed § 150.9(c).

The Commission estimates that 6 entities will have monthly reporting obligations pursuant to proposed § 150.10(c). The Commission also estimates that the monthly report will require a burden of approximately 2 hours to complete and submit. Thus, the Commission approximates an average per entity burden of 24 labor hours annually. At an estimated labor cost of $122, the Commission estimates an average cost of approximately $2,928 per entity for monthly reports under proposed § 150.10(c). The above estimates are summarized in the following table:

<table>
<thead>
<tr>
<th>Type of respondent</th>
<th>Estimated number of respondents</th>
<th>Report or record</th>
<th>Average reports annually by each respondent</th>
<th>Total annual responses</th>
<th>Estimated number of hours per response</th>
<th>Annual burden in fiscal year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchanges ..........</td>
<td>6 ..................................</td>
<td>§ 150.9(a) Rule Filing ......</td>
<td>1 ..................................</td>
<td>6 ..........................</td>
<td>5 ..................................</td>
<td>30 ..................................</td>
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<tr>
<td>..........................</td>
<td>§ 150.10(a) Rule Filing ......</td>
<td>1 ..................................</td>
<td>6 ..................................</td>
<td>30 ..........................</td>
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<td>1,500 ..........................</td>
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<td>..........................</td>
<td>§ 150.11(a) Rule Filing ......</td>
<td>1 ..................................</td>
<td>5 ..................................</td>
<td>1,110 ..........................</td>
<td>5 ..................................</td>
<td>5,550 ..........................</td>
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<td>..........................</td>
<td>§ 150.9(a) Review ............</td>
<td>185 ..........................</td>
<td>50 ..................................</td>
<td>300 ..........................</td>
<td>1,110 ..........................</td>
<td>1,500 ..........................</td>
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<td>..........................</td>
<td>§ 150.11(a) Review ............</td>
<td>50 ..................................</td>
<td>300 ..........................</td>
<td>1,500 ..........................</td>
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<td>900 ..........................</td>
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<td>180 ..........................</td>
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<td>§ 150.9(a) Recordkeeping ....</td>
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<td>..........................</td>
<td>§ 150.10(a) Recordkeeping ....</td>
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<td>..........................</td>
<td>§ 150.9(a) Weekly Report .....</td>
<td>52 ..................................</td>
<td>312 ..........................</td>
<td>936 ..........................</td>
<td>3 ..................................</td>
<td>936 ..........................</td>
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<tr>
<td>..........................</td>
<td>§ 150.10(a) Weekly Report .....</td>
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<td>312 ..........................</td>
<td>936 ..........................</td>
<td>3 ..................................</td>
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<td>§ 150.11(a) Weekly Report .....</td>
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<td>12 ..................................</td>
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<td>144 ..........................</td>
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<td>72 ..................................</td>
<td>144 ..........................</td>
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<td>144 ..........................</td>
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<td>Market Participants</td>
<td>222 ..........................</td>
<td>§ 150.9(a)(3) Application &amp; Notice.</td>
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<td>1,110 ..........................</td>
<td>4 ..................................</td>
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<td>..........................</td>
<td>§ 150.10(a)(3) Application &amp; Notice.</td>
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<td>50 ..................................</td>
<td>150 ..........................</td>
<td>3 ..................................</td>
<td>150 ..........................</td>
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<tr>
<td>..........................</td>
<td>§ 150.11(a)(2) Application &amp; Notice.</td>
<td>2 ..................................</td>
<td>50 ..................................</td>
<td>150 ..........................</td>
<td>3 ..................................</td>
<td>150 ..........................</td>
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<td>Total ..................</td>
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<td>..................................</td>
<td>4,276 ..........................</td>
<td>4.26 (average number of hours per response)</td>
<td>18216 ..........................</td>
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</tbody>
</table>
4. Information Collection Comments

The Commission invites the public and other federal agencies to comment on any aspect of the reporting and recordkeeping burdens discussed above. Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission solicits comments in order to: (1) Evaluate whether the proposed collections of information are necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) evaluate the accuracy of the Commission’s estimate of the burden of the proposed collections of information; (3) determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected; and (4) minimize the burden of the collections of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.

Comments may be submitted directly to the Office of Information and Regulatory Affairs, by fax at (202) 395–6556 or by email at OIRA-submissions@omb.eop.gov. Please provide the Commission with a copy of comments submitted so that all comments can be summarized and addressed in the final regulation preamble. Refer to the Addresses section of this notice for comment submission instructions to the Commission. A copy of the supporting statements for the collection of information discussed above may be obtained by visiting RegInfo.gov. OMB is required to make a decision concerning the collection of information between 30 and 60 days after publication of this release. Consequently, a comment to OMB is most assured of being fully considered if received by OMB (and the Commission) within 30 days after the publication of this notice of proposed rulemaking.

List of Subjects

17 CFR Part 37

Registered entities, Registration application, Reporting and recordkeeping requirements, Swaps, Swap execution facilities.

17 CFR Part 38

Block transaction, Commodity futures, Designated contract markets, Reporting and recordkeeping requirements, Transactions off the centralized market.

17 CFR Part 150

Bona fide hedging, Commodity futures, Cotton, Grains, Position limits, Referenced Contracts, Swaps.

For the reasons stated in the preamble, the Commodity Futures Trading Commission proposes to amend 17 CFR chapter I as follows:

PART 37—SWAP EXECUTION FACILITIES

1. The authority citation for part 37 continues to read as follows:

Authority: 7 U.S.C. 1a, 2, 6a, 6c, 6d, 6e, 6f, 6g, 6i, 6j, 6k, 6l, 6m, 7a–2, 7b, 7b–1, 7b–3, 8, 9, 15, and 21, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111–203, 124 Stat. 1376.

2. In Appendix B to part 37, under the heading Core Principle 6 of Section 5h of the Act—Position Limits or Accountability, revise paragraphs (A) and (B) to read as follows:

Appendix B to Part 37—Guidance on, and Acceptable Practices in, Compliance With Core Principles

Core Principle 6 of Section 5h of the Act—Position Limits or Accountability

(A) In general. To reduce the potential threat of market manipulation or congestion, especially during trading in the delivery month, a swap execution facility that is a trading facility shall adopt for each of the contracts of the facility, as is necessary and appropriate, position limitations or position accountability for speculators.

(B) Position limits. For any contract that is subject to a position limitation established by the Commission pursuant to section 4a(a), the swap execution facility shall:

(1) Set its position limitation at a level not higher than the Commission limitation; and

(2) Monitor positions established on or through the swap execution facility for compliance with the limit set by the Commission and the limit, if any, set by the swap execution facility.

(a) Guidance. (1) Until a swap execution facility has access to sufficient swap position information, a swap execution facility that is a trading facility need not demonstrate compliance with Core Principle 6(B). A swap execution facility has access to sufficient swap position information if, for example:

(i) It has access to daily information about its market participants’ open swap positions; or

(ii) It knows, including through knowledge gained in surveillance of heavy trading activity occurring on or pursuant to the rules of the designated contract market, that its market participants regularly engage in large volumes of speculative trading activity that would cause reasonable surveillance personnel at a swap execution facility to inquire further about a market participant’s intentions or open swap positions.

(2) When a swap execution facility has access to sufficient swap position information, this guidance is no longer applicable. At such time, a swap execution facility is required to demonstrate compliance with Core Principle 6(B).

(b) Acceptable practices. [Reserved]

* * * * *

PART 38—DESIGNATED CONTRACT MARKETS

3. The authority citation for part 38 continues to read as follows:

Authority: 7 U.S.C. 1a, 2, 6a, 6c, 6d, 6e, 6f, 6g, 6i, 6j, 6k, 6l, 6m, 7a–2, 7b, 7b–1, 7b–3, 8, 9, 15, and 21, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111–203, 124 Stat. 1376.

4. In Appendix B to part 38, under the heading Core Principle 5 of section 5(d) of the Act: Position Limitations or Accountability, revise paragraphs (A) and (B) to read as follows:

Appendix B to Part 38—Guidance on, and Acceptable Practices in, Compliance With Core Principles

Core Principle 5 of section 5(d) of the Act: POSITION LIMITATIONS OR ACCOUNTABILITY

(A) IN GENERAL.—To reduce the potential threat of market manipulation or congestion (especially during trading in the delivery month), the board of trade shall adopt for each contract of the board of trade, as is necessary and appropriate, position limitations or position accountability for speculators.

(B) MAXIMUM ALLOWABLE POSITION LIMITATION.—For any contract that is subject to a position limitation established by the Commission pursuant to section 4a(a), the board of trade shall set the position limitation of the board of trade at a level not higher than the position limitation established by the Commission.

(a) Guidance. (1) Until a board of trade has access to sufficient swap position information, a board of trade need not demonstrate compliance with Core Principle 5(B) with respect to swaps. A board of trade has access to sufficient swap position information if, for example:

(i) It has access to daily information about its market participants’ open swap positions; or

(ii) It knows, including through knowledge gained in surveillance of heavy trading activity occurring on or pursuant to the rules of the designated contract market, that its market participants regularly engage in large volumes of speculative trading activity that would cause reasonable surveillance personnel at a board of trade to inquire further about a market participant’s intentions or open swap positions.

(2) When a board of trade has access to sufficient swap position information, this guidance is no longer applicable. At such time, a board of trade is required to demonstrate compliance with Core Principle 5(B) with respect to swaps.

234 Column b times column d.
235 Column e times column f. Burdens have been rounded to the nearest whole number where appropriate.
(b) Acceptable Practices. [Reserved]

**PART 150—LIMITS ON POSITIONS**

§ 150.1 Definitions.

As used in this part—

**Bona fide hedging position** means—

(1) **Hedges of an excluded commodity.**

For a position in commodity derivative contracts in an excluded commodity, as that term is defined in section 1a(19) of the Act:

(i) Such position is economically appropriate to the reduction of risks in the conduct and management of a commercial enterprise; and

(ii)(A) Is enumerated in paragraph (3), (4) or (5) of this definition; or

(B) Is recognized as a bona fide hedging position by the designated contract market or swap execution facility that is a trading facility, pursuant to such market’s rules submitted to the Commission, which rules may include risk management exemptions consistent with Appendix A of this part; and

(2) **Hedges of a physical commodity.**

For a position in commodity derivative contracts in a physical commodity:

(i) Such position:

(A) Represents a substitute for transactions made or to be made, or positions taken or to be taken, at a later time in a physical marketing channel;

(B) Is economically appropriate to the reduction of risks in the conduct and management of a commercial enterprise;

(C) Arises from the potential change in the value of—

(1) Assets which a person owns, produces, manufactures, processes, or merchandises or anticipates owning, producing, manufacturing, processing, or merchandising;

(2) Liabilities which a person owes or anticipates incurring; or

(3) Services that a person provides, purchases, or anticipates providing or purchasing; and

(D) Is—

(1) Enumerated in paragraph (3), (4) or (5) of this definition; or

(2) Recognized as shown to be a non-enumerated bona fide hedges by either a designated contract market or swap execution facility, each in accordance with § 150.9(a); or by the Commission; or

(ii)(A) **Pass-through swap offsets.** Such position reduces risks attendant to a position resulting from a swap in the same physical commodity that was executed opposite a counterparty for which the position at the time of the transaction would qualify as a bona fide hedging position pursuant to paragraph (2)(i) of this definition (a pass-through swap counterparty), provided that no such risk-reducing position is maintained in any physical-delivery commodity derivative contract during the lesser of the last five days of trading or the time period for the spot month in such physical-delivery commodity derivative contract; and

(B) **Pass-through swaps.** Such swap position was executed opposite a pass-through swap counterparty and to the extent such swap position has been offset pursuant to paragraph (2)(ii)(A) of this definition.

(3) **Enumerated hedging positions.** A bona fide hedging position includes any of the following specific positions:

(i) **Hedges of inventory and cash commodity purchase contracts.** Short positions in commodity derivative contracts that do not exceed in quantity ownership or fixed-price purchase contracts in the contract’s underlying cash commodity by the same person.

(ii) **Hedges of cash commodity sales contracts.** Long positions in commodity derivative contracts that do not exceed in quantity the fixed-price sales contracts in the contract’s underlying cash commodity by the same person and the quantity equivalent of fixed-price sales contracts of the cash products and by-products of such commodity by the same person.

(iii) **Hedges of unfilled anticipated requirements.** Provided that such positions in a physical-delivery commodity derivative contract, during the lesser of the last five days of trading or the time period for the spot month in such physical-delivery contract, do not exceed the person’s unfilled anticipated requirements of the same cash commodity for that month and for the next succeeding month:

(A) Long positions in commodity derivative contracts that do not exceed in quantity unfilled anticipated requirements of the same cash commodity, and that do not exceed twelve months for an agricultural commodity, by the same person.

(B) Long positions in commodity derivative contracts that do not exceed in quantity unfilled anticipated requirements of a cash commodity for resale by a utility that is required or encouraged to hedge by its public utility commission on behalf of its customers’ anticipated use.

(iv) **Hedges by agents.** Long or short positions in commodity derivative contracts by an agent who does not own or has not contracted to sell or purchase the offsetting cash commodity at a fixed price, provided that the agent is responsible for merchandising the cash positions that are being offset in commodity derivative contracts and the agent has a contractual arrangement with the person who owns the commodity or holds the cash market commitment being offset.

(4) **Other enumerated hedging positions.** A bona fide hedging position also includes the following specific positions, provided that no such position is maintained in any physical-delivery commodity derivative contract during the lesser of the last five days of trading or the time period for the spot month in such physical-delivery contract:

(i) **Hedges of unsold anticipated production.** Short positions in commodity derivative contracts that do not exceed in quantity unsold anticipated production of the same commodity, and that do not exceed twelve months of production for an agricultural commodity, by the same person.

(ii) **Hedges of offsetting unfixed-price cash commodity sales and purchases.** Short and long positions in commodity derivative contracts that do not exceed in quantity that amount of the same cash commodity that has been bought and sold by the same person at unfixed prices:

(A) Basis different delivery months in the same commodity derivative contract; or

(B) Basis different commodity derivative contracts in the same commodity, regardless of whether the commodity derivative contracts are in the same calendar month.

(iii) **Hedges of anticipated royalties.** Short positions in commodity derivative contracts offset by the anticipated change in value of mineral royalty rights that are owned by the same person, provided that the royalty rights arise out of the production of the commodity underlying the commodity derivative contract.

(iv) **Hedges of services.** Short or long positions in commodity derivative contracts offset by the anticipated change in value of receipts or payments due or expected to be due under an executed contract for services held by the same person, provided that the contract for services arises out of the production, manufacturing, processing, use, or transportation of the commodity.
underlying the commodity derivative contract, and which may not exceed one year for agricultural commodities.

(5) Cross-commodity hedges. Positions in commodity derivative contracts described in paragraphs (2)(ii), (3)(i) through (iv), and (4)(i) through (iv) of this definition may also be used to offset the risks arising from a commodity other than the same cash commodity underlying a commodity derivative contract, provided that the fluctuations in value of the position in the commodity derivative contract, or the commodity underlying the commodity derivative contract, are substantially related to the fluctuations in value of the actual or anticipated cash position or pass-through swap and no such position is maintained in any physical-delivery commodity derivative contract during the lesser of the last five days of trading or the time period for the spot month in such physical-delivery contract.

Futures-equivalent means—

(1) An option contract, whether an option on a future or an option that is a swap, which has been adjusted by an economically reasonable and analytically supported risk factor, or delta coefficient, for that option computed as of the previous day’s close or the current day’s close or contemporaneously during the trading day, and converted to an economically equivalent amount of an open position in a core referenced futures contract;

(2) A futures contract which has been converted to an economically equivalent amount of an open position in a core referenced futures contract; and

(3) A swap which has been converted to an economically equivalent amount of an open position in a core referenced futures contract.

Intermarket spread position means a long (short) position in one or more commodity derivative contracts in a particular commodity, or its products or its by-products, at a particular designated contract market or swap execution facility, and a short (long) position in one or more commodity derivative contracts in that same, or similar, commodity, or its products or its by-products, away from that particular designated contract market or swap execution facility.

Intramarket spread position means a long position in one or more commodity derivative contracts in a particular commodity, or its products or its by-products, and a short position in one or more commodity derivative contracts in the same, or similar, commodity, or its products or its by-products, on the same designated contract market or swap execution facility.

7. Revise §150.3 to read as follows:

§150.3 Exemptions.

(a) Positions which may exceed limits. The position limits set forth in §150.2 may be exceeded to the extent that:

(1) Such positions are:

(i) Bona fide hedging positions that either:

(A) Comply with the definition in §150.1; or

(B) Are recognized by a designated contract market or swap execution facility as:

(1) Non-enumerated bona fide hedges in accordance with the general definition in §150.1 and the process in §150.9(a), provided that the person has not otherwise been notified by the Commission under §150.9(d)(4) or by the designated contract market or swap execution facility under rules adopted pursuant to §150.9(a)(4)(iv)(B); or

(2) Anticipatory bona fide hedge positions under paragraphs (3)(iii), (4)(ii), (4)(iii), (4)(iv) and (5) of the bona fide hedging position definition in §150.1, provided that for anticipatory bona fide hedge positions under this paragraph the person complies with the filing requirements found in §150.7 or the filing requirements adopted by a designated contract market or swap execution facility in accordance with §150.11(a)(3), as applicable;

(ii) [Reserved];

(iii) [Reserved];

(iv) Spread positions recognized by a designated contract market or swap execution facility in accordance with §150.10(a), provided that the person has not otherwise been notified by the Commission under §150.10(d)(4) or by the designated contract market or swap execution facility under rules adopted pursuant to §150.10(a)(4)(iv)(B); or

(v) Other positions exempted under paragraph (e) of this section; and that

(2) [Reserved]

(b) [Reserved]

(c) [Reserved]

(d) [Reserved]

(e) [Reserved]

(f) [Reserved]

8. Revise §150.5 to read as follows:

§150.5 Exchange-set speculative position limits.

(a) Requirements and acceptable practices for futures and futures option contracts subject to federal position limits. (1) For any commodity derivative contract that is subject to a speculative position limit under §150.2, a designated contract market or swap execution facility that is a trading facility shall set a speculative position limit that is no higher than the level specified in §150.2.

(2) Exemptions under §150.3—(i) Grant of exemption. Any designated contract market or swap execution facility that is a trading facility may grant exemptions from any speculative position limits it sets under paragraph [a](1) of this section, provided that such exemptions conform to the requirements specified in §150.3.

(ii) Application for exemption. Any designated contract market or swap execution facility that grants exemptions under paragraph (a)(2)(i) of this section:

(A) Must require traders to file an application requesting such exemption;

(B) Must require, for any exemption granted, that the trader reapply for the exemption at least on an annual basis; and

(C) May deny any such application, or limit, condition, or revoke any such exemption, at any time, including if it determines such positions would not be in accord with sound commercial practices, or would exceed an amount that may be established and liquidated in an orderly fashion.

(3) through (6) [Reserved]

(b) Requirements and acceptable practices for futures and future option contracts that are not subject to the limits set forth in §150.2, including derivative contracts in a physical commodity as defined in §150.1 and in an excluded commodity as defined in section 1a(19) of the Act—

(1) through (4) [Reserved]

(5) Exemptions—(i) Hedge exemption. Any hedge exemption rules adopted by a designated contract market or swap execution facility that is a trading facility must conform to the definition of bona fide hedging position in §150.1 and provide for recognition as a non-enumerated bona fide hedge in a manner consistent with the process described in §150.9(a).

(ii) Other exemptions. A designated contract market or swap execution facility may grant exemptions for:

(A) [Reserved];

(B) [Reserved];

(C) Intragrimarket spread positions and intermarket spread positions, each as defined in §150.1, provided that the designated contract market or swap execution facility, in considering whether to grant an application for such exemption, should take into account whether exempting the spread position from position limits would, to the maximum extent practicable, ensure sufficient market liquidity for bona fide hedges, and not unreasonably reduce the effectiveness of position limits to:

(1) Diminish, eliminate, or prevent excessive speculation;

(2) Deter and prevent market manipulation, squeezes, and corners; and
(3) Ensure that the price discovery function of the underlying market is not disrupted.

[D] For excluded commodities, a designated contract market or swap execution facility may grant, in addition to the exemptions under paragraphs (b)(5)(i) and (b)(5)(ii)(A) through (C) of this section, a limited risk management exemption pursuant to rules submitted to the Commission, consistent with the guidance in Appendix A of this part.

(iii) [Reserved]

(iv) [Reserved]

(c) [Reserved]

§ 150.9 Process for recognition of positions as non-enumerated bona fide hedges.

(a) Requirements for a designated contract market or swap execution facility to recognize non-enumerated bona fide hedge positions. (1) A designated contract market or swap execution facility that elects to process non-enumerated bona fide hedge applications to demonstrate why a derivative position satisfies the requirements of this section, a limited risk management exemption pursuant to rules submitted to the Commission, consistent with the guidance in Appendix A of this part.

(iii) [Reserved]

(v) Any other information necessary to enable the designated contract market or swap execution facility to determine, and the Commission to verify, whether it is appropriate to recognize such position as a non-enumerated bona fide hedge.

(b) Applications for positions in commodity derivative contracts to be acquired by persons to demonstrate why a derivative position constitutes a non-enumerated bona fide hedge under novel facts and circumstances and under facts and circumstances substantially similar to a position for which a summary has been published on such designated contract market's or swap execution facility's Web site, pursuant to paragraph (a)(7) of this section.

(3) Any application process that is established by a designated contract market or swap execution facility shall elicit sufficient information to allow the designated contract market or swap execution facility to determine, and the Commission to verify, whether the facts and circumstances in respect of a derivative position satisfy the requirements of section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1, and whether it is appropriate to recognize such position as a non-enumerated bona fide hedge, including at a minimum:

(i) A description of the position in the commodity derivative contract for which the application is submitted and the offsetting cash positions;

(ii) Detailed information to demonstrate why the position satisfies the requirements of section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1;

(iii) A statement concerning the maximum size of all gross positions in derivative contracts to be acquired by the applicant during the year after the application is submitted;

(iv) Detailed information regarding the applicant’s activity in the cash markets for the commodity underlying the position for which the application is submitted during the past three years; and

(v) Any other information necessary to enable the designated contract market or swap execution facility to determine, and the Commission to verify, whether it is appropriate to recognize such position as a non-enumerated bona fide hedge.

(4) Under any application process established under this section, a designated contract market or swap execution facility shall:

(i) Require each person intending to exceed position limits to submit an application, to reapply at least on an annual basis by updating that application, and to receive notice of recognition from the designated contract market or swap execution facility of a position as a non-enumerated bona fide hedge in advance of the date that such position would be in excess of the limits then in effect pursuant to section 4a of the Act;

(ii) Notify an applicant in a timely manner if a submitted application is not complete. If an applicant does not amend or resubmit such application within a reasonable amount of time after such notice, a designated contract market or swap execution facility may reject the application;

(iii) Determine in a timely manner whether a derivative position for which a complete application has been submitted satisfies the requirements of section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1, and whether it is appropriate to recognize such position as a non-enumerated bona fide hedge;

(iv) Have the authority to revoke, at any time, any recognition issued pursuant to this section if it determines the recognition is no longer in accord with section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1;

(v) Notify an applicant in a timely manner:

(A) That the derivative position for which a complete application has been submitted has been recognized by the designated contract market or swap execution facility as a non-enumerated bona fide hedge under this section, and the details and all conditions of such recognition;

(B) That its application is rejected, including the reasons for such rejection; or

(C) That the designated contract market or swap execution facility has asked the Commission to consider the application under paragraph (a)(6) of this section.

(5) An applicant’s derivatives position shall be deemed to be recognized as a non-enumerated bona fide hedge exempt from federal position limits at the time that a designated contract market or swap execution facility notifies an applicant that such designated contract market or swap execution facility will recognize such position as a non-enumerated bona fide hedge.

(6) A designated contract market or swap execution facility that elects to process non-enumerated bona fide hedge applications shall file new rules or rule amendments pursuant to part 40 of this chapter, establishing or amending requirements for an applicant to file a report with such designated contract market or swap execution facility when such applicant owns or controls a derivative position that such designated contract market or swap execution facility has recognized as a non-enumerated bona fide hedge, and for such applicant to report the offsetting cash positions. Such rules
shall require an applicant to update and maintain the accuracy of any such report.

(7) After recognition of each unique type of derivative position as a non-enumerated bona fide hedge, based on novel facts and circumstances, a designated contract market or swap execution facility shall publish on its Web site, on at least a quarterly basis, a summary describing the type of derivative position and explaining why it was recognized as a non-enumerated bona fide hedge.

(8) If a non-enumerated bona fide hedge application presents novel or complex issues or is potentially inconsistent with section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1, a designated contract market or swap execution facility may ask the Commission to consider the application under the process set forth in paragraph (d) of this section. The Commission may, in its discretion, agree to or reject any such request by a designated contract market or swap execution facility.

(b) Recordkeeping. (1) A designated contract market or swap execution facility that elects to process non-enumerated bona fide hedge applications shall keep full, complete, and systematic records, which include all pertinent data and memoranda, of all activities relating to the processing of such applications and the disposition thereof, including the recognition by the designated contract market or swap execution facility of any derivative position as a non-enumerated bona fide hedge, the revocation or modification of any such recognition, the rejection by the designated contract market or swap execution facility of an application, or the withdrawal, supplementation or updating of an application by the applicant. Included among such records shall be:

(i) All information and documents submitted by an applicant in connection with its application;
(ii) Records of oral and written communications between such designated contract market or swap execution facility and such applicant in connection with such application; and
(iii) All information and documents in connection with such designated contract market’s or swap execution facility’s analysis of and action on such application.

(2) All books and records required to be kept pursuant to this section shall be kept in accordance with the requirements of § 1.31 of this chapter.

(c) Reports to the Commission. (1) A designated contract market or swap execution facility that elects to process non-enumerated bona fide hedge applications shall submit to the Commission a report for each week as of the close of business on Friday showing the following information:

(i) For each commodity derivative position that has been recognized by the designated contract market or swap execution facility as a non-enumerated bona fide hedge, and for any revocation or modification of such a recognition:
(A) The date of disposition,
(B) The effective date of the disposition,
(C) The expiration date of any recognition,
(D) Any unique identifier assigned by the designated contract market or swap execution facility to track the application,
(E) Any unique identifier assigned by the designated contract market or swap execution facility to a type of recognized non-enumerated bona fide hedge,
(F) The identity of the applicant,
(G) The listed commodity derivative contract to which the application pertains,
(H) The underlying cash commodity,
(I) The maximum size of the commodity derivative position that is recognized by the designated contract market or swap execution facility as a non-enumerated bona fide hedge,
(J) Any size limitation established for such commodity derivative position on the designated contract market or swap execution facility, and
(K) A concise summary of the applicant’s activity in the cash markets for the commodity underlying the commodity derivative position; and
(ii) The summary of any non-enumerated bona fide hedge published pursuant to paragraph (a)(7) of this section, or revised, since the last summary submitted to the Commission.

(2) Unless otherwise instructed by the Commission, a designated contract market or swap execution facility that elects to process non-enumerated bona fide hedge applications shall submit to the Commission, no less frequently than monthly, any report submitted by an applicant or any non-enumerated bona fide hedge published pursuant to rules required under paragraph (a)(6) of this section.

(3) Unless otherwise instructed by the Commission, a designated contract market or swap execution facility that elects to process non-enumerated bona fide hedge applications shall submit to the Commission the information required by paragraphs (c)(1) and (2) of this section, as follows:
(i) As specified by the Commission on the Forms and Submissions page at www.cftc.gov;
(ii) Using the format, coding structure, and electronic data transmission procedures approved in writing by the Commission; and
(iii) Not later than 9:00 a.m. Eastern time on the third business day following the date of the report.

(d) Review of applications by the Commission. (1) The Commission may in its discretion at any time review any non-enumerated bona fide hedge application submitted to a designated contract market or swap execution facility, and all records required to be kept by such designated contract market or swap execution facility pursuant to paragraph (b) of this section in connection with such application, for any purpose, including to evaluate whether the disposition of the application is consistent with section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1.

(i) The Commission may request from such designated contract market or swap execution facility records required to be kept by such designated contract market or swap execution facility pursuant to paragraph (b) of this section in connection with such application.

(ii) The Commission may request additional information in connection with such application from such designated contract market or swap execution facility or from the applicant.

(2) If the Commission preliminarily determines that any non-enumerated bona fide hedge application or the disposition thereof by a designated contract market or swap execution facility presents novel or complex issues that require additional time to analyze, or that an application or the disposition thereof by such designated contract market or swap execution facility is potentially inconsistent with section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1, the Commission shall:

(i) Notify such designated contract market or swap execution facility and the applicable applicant of the issues identified by the Commission; and
(ii) Provide them with 10 business days in which to provide the Commission with any supplemental information.

(3) The Commission shall determine whether it is appropriate to recognize the derivative position for which such application has been submitted as a non-enumerated bona fide hedge, or whether the disposition of such application by such designated contract market or swap execution facility is consistent with section 4a(c) of the Act and the general definition of bona fide hedging position in § 150.1.
(4) If the Commission determines that the disposition of such application is inconsistent with section 4(a)(c) of the Act and the general definition of bona fide hedging position in § 150.1, the Commission shall notify the applicant and grant the applicant a commercially reasonable amount of time to liquidate the derivative position or otherwise come into compliance. This notification will briefly specify the nature of the issues raised and the specific provisions of the Act or the Commission’s regulations with which the application is, or appears to be, inconsistent.

(e) Review of summaries by the Commission. The Commission may in its discretion at any time review any summary of a type of non-enumerated bona fide hedge required to be published on a designated contract market’s or swap execution facility’s Web site pursuant to paragraph (a)(7) of this section for any purpose, including to evaluate whether the summary promotes transparency and fair and open access by all market participants to information regarding bona fide hedges. If the Commission determines that a summary is deficient in any way, the Commission shall notify such designated contract market or swap execution facility, and grant to the designated contract market or swap execution facility a reasonable amount of time to revise the summary.

(f) Delegation of authority to the Director of the Division of Market Oversight. (1) The Commission hereby delegates, until it orders otherwise, to the Director of the Division of Market Oversight or such other employee or employees as the Director may designate from time to time, the authority:

(i) In paragraph (a)(8) of this section to agree to or reject a request by a designated contract market or swap execution facility to consider a non-enumerated bona fide hedge application;

(ii) In paragraph (c) of this section to provide instructions regarding the submission to the Commission of information required to be reported by a designated contract market or swap execution facility, to specify the manner for submitting such information on the Forms and Submissions page at www.cftc.gov, and to determine the format, coding structure, and electronic data transmission procedures for submitting such information;

(iii) In paragraph (d)(1) of this section to review any non-enumerated bona fide hedge application and all records required to be kept by a designated contract market or swap execution facility in connection with such application, to request such records from such designated contract market or swap execution facility, and to request additional information in connection with such application from such designated contract market or swap execution facility or from the applicant;

(iv) In paragraph (d)(2) of this section to preliminarily determine that a non-enumerated bona fide hedge application or the disposition thereof by a designated contract market or swap execution facility presents novel or complex issues that require additional time to analyze, or that such application or the disposition thereof is potentially inconsistent with section 4(a)(c) of the Act and the general definition of bona fide hedging position in § 150.1, to notify the designated contract market or swap execution facility and the applicable applicant of the issues identified, and to provide them with 10 business days in which to file supplemental information; and

(v) In paragraph (e) of this section to review any summary of a type of non-enumerated bona fide hedge required to be published on a designated contract market’s or swap execution facility’s Web site, to determine that any such summary is deficient, to notify a designated contract market or swap execution facility of a deficient summary, and to grant such designated contract market or swap execution facility a reasonable amount of time to revise such summary.

(2) The Director of the Division of Market Oversight may submit to the Commission for its consideration any matter which has been delegated in this section.

(3) Nothing in this section prohibits the Commission, at its election, from exercising the authority delegated in this section.

10. Add § 150.10 to read as follows:

§ 150.10 Process for designated contract market or swap execution facility exemption from position limits for certain spread positions.

(a) Requirements for a designated contract market or swap execution facility to exempt from position limits certain positions normally known to the trade as spreads. (1) A designated contract market or swap execution facility that elects to process applications for exemptions from position limits for certain positions normally known to the trade as spreads shall maintain rules, submitted to the Commission pursuant to part 40 of this chapter, establishing an application process for exempting positions normally known to the trade as spreads consistent with the requirements of this section. A designated contract market or swap execution facility may elect to process applications for such spread exemptions only if, in each case:

(i) Such designated contract market or swap execution facility lists for trading at least one contract that is either a component of the spread or a referenced contract that is a component of the spread; and

(ii) The contract in paragraph (a)(1)(i) of this section is actively traded and has been subject to position limits of the designated contract market or swap execution facility for at least one year. A designated contract market or swap execution facility shall not approve a spread exemption involving a commodity index contract and one or more referenced contracts.

(2) Spreads that a designated contract market or swap execution facility may approve under this section include:

(i) Calendar spreads;

(ii) Quality differential spreads;

(iii) Processing spreads; and

(iv) Product or by-product differential spreads.

(3) Any application process that is established by a designated contract market or swap execution facility under this section shall elicit sufficient information to allow the designated contract market or swap execution facility to determine, and the Commission to verify, whether the facts and circumstances demonstrate that it is appropriate to exempt a spread position from position limits, including at a minimum:

(i) A description of the spread position for which the application is submitted;

(ii) Detailed information to demonstrate why the spread position should be exempted from position limits, including how the exemption would further the purposes of section 4a(a)(3)(B) of the Act;

(iii) A statement concerning the maximum size of all gross positions in derivative contracts to be acquired by the applicant during the year after the application is submitted; and

(iv) Any other information necessary to enable the designated contract market or swap execution facility to determine, and the Commission to verify, whether it is appropriate to exempt such spread position from position limits.

(4) Under any application process established under this section, a designated contract market or swap execution facility shall:

(i) Require each person requesting an exemption from position limits for its spread position to submit an application, to reapply at least on an annual basis by updating that application, and to receive approval in
advance of the date that such position would be in excess of the limits then in effect pursuant to section 4a of the Act; 
(ii) Notify an applicant in a timely manner if a submitted application is not complete. If an applicant does not amend or resubmit such application within a reasonable amount of time after such notice, a designated contract market or swap execution facility may reject the application;
(iii) Determine in a timely manner whether a spread position for which a complete application has been submitted satisfies the requirements of paragraph (a)(4)(vi) of this section, and whether it is appropriate to exempt such spread position from position limits;
(iv) Have the authority to revoke, at any time, any spread exemption issued pursuant to this section if it determines the spread exemption no longer satisfies the requirements of paragraph (a)(4)(vi) of this section and it is no longer appropriate to exempt the spread from position limits;
(v) Notify an applicant in a timely manner:
(A) That a spread position for which a complete application has been submitted has been exempted by the designated contract market or swap execution facility from position limits, and the details and all conditions of such exemption;
(B) That its application is rejected, including the reasons for such rejection; or
(C) That the designated contract market or swap execution facility has asked the Commission to consider the application under paragraph (a)(8) of this section; and
(vi) Determine whether exempting the spread position from position limits would, to the maximum extent practicable, ensure sufficient market liquidity for bona fide hedgers, and not unreasonably reduce the effectiveness of position limits to:
(A) Diminish, eliminate or prevent excessive speculation;
(B) Deter and prevent market manipulation, squeezes, and corners; and
(C) Ensure that the price discovery function of the underlying market is not disrupted.
(5) An applicant’s derivatives position shall be deemed to be recognized as a spread position exempt from federal position limits at the time that a designated contract market or swap execution facility notifies an applicant that such designated contract market or swap execution facility will exempt such spread position.
(6) A designated contract market or swap execution facility that elects to process applications to exempt spread positions from position limits shall file new rules or rule amendments pursuant to part 40 of this chapter, establishing or amending requirements for an applicant to file a report with such designated contract market or swap execution facility when such applicant owns, holds, or controls a spread position that such designated contract market or swap execution facility has exempted from position limits, including for such applicant to report each component of the spread. Such rules shall require such applicant to update and maintain the accuracy of any such report.
(7) After exemption of each unique type of spread position, a designated contract market or swap execution facility shall publish on its Web site, on at least a quarterly basis, a summary describing the type of spread position and explaining why it was exempted.
(8) If a spread exemption application presents complex issues or is potentially inconsistent with the purposes of section 4a(a)(3)(B) of the Act, a designated contract market or swap execution facility may ask the Commission to consider the application under the process set forth in paragraph (d) of this section. The Commission may, in its discretion, agree to or reject any such request by a designated contract market or swap execution facility.
(b) Recordkeeping. (1) A designated contract market or swap execution facility that elects to process spread exemption applications shall keep full, complete, and systematic records, which include all pertinent data and memorandum, of all activities relating to the processing of such applications and the disposition thereof, including the exemption of any spread position, the revocation or modification of any exemption, the rejection by the designated contract market or swap execution facility of an application, or the withdrawal, supplementation or updating of an application by the applicant. Included among such records shall be:
(i) All information and documents submitted by an applicant in connection with its application:
(ii) Records of oral and written communications between such designated contract market or swap execution facility and such applicant in connection with such application; and
(iii) All information and documents in connection with such designated contract market’s or swap execution facility’s analysis of and action on such application;
(2) All books and records required to be kept pursuant to this section shall be kept in accordance with the requirements of § 1.31 of this chapter.
(c) Reports to the Commission. (1) A designated contract market or swap execution facility that elects to process spread exemption applications shall submit to the Commission a report for each week as of the close of business on Friday showing the following information:
(i) The disposition of any spread exemption application, including the exemption of any spread position, the revocation or modification of any exemption, or the rejection of any application, as well as the following details:
(A) The date of disposition,
(B) The effective date of the disposition,
(C) The expiration date of any exemption,
(D) Any unique identifier assigned by the designated contract market or swap execution facility to track the application,
(E) Any unique identifier assigned by the designated contract market or swap execution facility to a type of exempt spread position,
(F) The identity of the applicant,
(G) The listed commodity derivative contract to which the application pertains,
(H) The underlying cash commodity,
(I) The size limitations on any exempt spread position, specified by contract month if applicable, and
(J) Any conditions on the exemption; and
(ii) The summary of any exempt spread position newly published pursuant to paragraph (a)(7) of this section, or revised, since the last summary submitted to the Commission.
(2) Unless otherwise instructed by the Commission, a designated contract market or swap execution facility that elects to process applications to exempt spread positions from position limits shall submit to the Commission, no less frequently than monthly, any report submitted by an applicant to such designated contract market or swap execution facility pursuant to rules required by paragraph (a)(6) of this section.
(3) Unless otherwise instructed by the Commission, a designated contract market or swap execution facility that elects to process applications to exempt spread positions from position limits shall submit to the Commission the information required by paragraphs (c)(1) and (2) of this section, as follows:
(i) As specified by the Commission on the Forms and Submissions page at www.cftc.gov;
(ii) Using the format, coding structure, and electronic data transmission.
procedures approved in writing by the Commission; and
(iii) Not later than 9:00 a.m. Eastern time on the third business day following the date of the report.

(d) Review of applications by the Commission. (1) The Commission may in its discretion at any time review any spread exemption application submitted to a designated contract market or swap execution facility, and all records required to be kept by such designated contract market or swap execution facility pursuant to paragraph (b) of this section in connection with such application, for any purpose, including to evaluate whether the disposition of the application is consistent with the purposes of section 4a(a)(3)(B) of the Act.

(i) The Commission may request from such designated contract market or swap execution facility records required to be kept by such designated contract market or swap execution facility pursuant to paragraph (b) of this section in connection with such application.

(ii) The Commission may request additional information in connection with such application from such designated contract market or swap execution facility or from the applicant.

(2) If the Commission preliminarily determines that any application to exempt a spread position from position limits, or the disposition thereof by a designated contract market or swap execution facility, presents novel or complex issues that require additional time to analyze, or that an application or the disposition thereof by such designated contract market or swap execution facility is potentially inconsistent with the Act, the Commission shall:

(i) Notify such designated contract market or swap execution facility and the applicable applicant of the issues identified by the Commission; and

(ii) Provide them with 10 business days in which to provide the Commission with any supplemental information.

(3) The Commission shall determine whether it is appropriate to exempt the spread position for which such application has been submitted from position limits, or whether the disposition of such application by such designated contract market or swap execution facility is consistent with the purposes of section 4a(a)(3)(B) of the Act.

(4) If the Commission determines that it is not appropriate to exempt the spread position for which such application has been submitted from position limits, or that the disposition of such application is inconsistent with the Act, the Commission shall notify the applicant and grant the applicant a commercially reasonable amount of time to liquidate the spread position or otherwise come into compliance. This notification will briefly specify the nature of the issues raised and the specific provisions of the Act or the Commission’s regulations with which the application is, or appears to be, inconsistent.

(e) Review of summaries by the Commission. The Commission may in its discretion at any time review any summary of a type of spread position required to be published on a designated contract market’s or swap execution facility’s Web site pursuant to paragraph (a)(7) of this section for any purpose, including to evaluate whether the summary promotes transparency and fair and open access by all market participants to information regarding spread exemptions. If the Commission determines that a summary is deficient in any way, the Commission shall notify such designated contract market or swap execution facility, and grant to the designated contract market or swap execution facility a reasonable amount of time to revise the summary.

(f) Delegation of authority to the Director of the Division of Market Oversight. (1) The Commission hereby delegates, until it orders otherwise, to the Director of the Division of Market Oversight or such other employee or employees as the Director may designate from time to time, the authority:

(i) In paragraph (a)(8) of this section to agree to or reject a request by a designated contract market or swap execution facility to provide instructions regarding the format, coding structure, and electronic data transmission procedures for submitting such information;

(ii) In paragraph (c) of this section to provide instructions regarding the submission to the Commission of information required to be reported by a designated contract market or swap execution facility, to specify the manner for submitting such information on the Forms and Submissions page at www.cftc.gov, and to determine the format, coding structure, and electronic data transmission procedures for submitting such information;

(iii) In paragraph (d)(1) of this section to review any spread exemption application and all records required to be kept by a designated contract market or swap execution facility in connection with such application, to request such records from such designated contract market or swap execution facility, and to request additional information in connection with such application from such designated contract market or swap execution facility, or from the applicant;

(iv) In paragraph (d)(2) of this section to preliminarily determine that a spread exemption application or the disposition thereof by a designated contract market or swap execution facility presents complex issues that require additional time to analyze, or that such application or the disposition thereof is potentially inconsistent with the Act, to notify the designated contract market or swap execution facility and the applicable applicant of the issues identified, and to provide them with 10 business days in which to file supplemental information; and

(v) In paragraph (e) of this section to review any summary of a type of spread exemption required to be published on a designated contract market’s or swap execution facility’s Web site, to determine that any such summary is deficient, to notify a designated contract market or swap execution facility of a deficient summary, and to grant such designated contract market or swap execution facility a reasonable amount of time to revise such summary.

(2) The Director of the Division of Market Oversight may submit to the Commission for its consideration any matter which has been delegated in this section.

(3) Nothing in this section prohibits the Commission, at its election, from exercising the authority delegated in this section.

11. Add §150.11 to read as follows:

§150.11 Process for recognition of positions as bona fide hedges for unfilled anticipated requirements, anticipated production, anticipated royalties, anticipated service contract payments or receipts, or anticipatory cross-commodity hedge positions.

(a) Requirements for a designated contract market or swap execution facility to recognize certain enumerated anticipatory bona fide hedge positions.

(1) A designated contract market or swap execution facility that elects to process applications for recognition of positions as hedges of unfilled anticipated requirements, unsold anticipated production, anticipated royalties, anticipated service contract payments or receipts, or anticipatory cross-commodity hedges under the provisions of paragraphs (3)(iii), (4)(ii), (iii), (iv), or (5), respectively, of the definition of bona fide hedging position in §150.1 shall maintain rules, submitted to the Commission pursuant to part 40 of this chapter, establishing an application process for such anticipatory bona fide hedges consistent with the requirements of this section. A designated contract market or swap execution facility may elect to process
such anticipatory hedge applications for positions in commodity derivative contracts only if, in each case:

(i) The commodity derivative contract is a referenced contract;

(ii) Such designated contract market or swap execution facility lists such commodity derivative contract for trading;

(iii) Such commodity derivative contract is actively traded on such derivative contract market;

(iv) Such designated contract market or swap execution facility has established position limits for such commodity derivative contract; and

(v) Such designated contract market or swap execution facility has at least one year of experience and expertise administering position limits for such commodity derivative contract.

(2) Any application process that is established by a designated contract market or swap execution facility shall require, at a minimum, the information required under §150.7(d).

(3) Under any application process established under this section, a designated contract market or swap execution facility shall:

(i) Require each person intending to exceed position limits to submit an application, and to reapply at least on an annual basis by updating that application, to file the supplemental reports required under §150.7(e), and to receive notice of recognition from the designated contract market or swap execution facility of a position as a bona fide hedge in advance of the date that such position would be in excess of the limits then in effect pursuant to section 4a of the Act:

(ii) Notify an applicant in a timely manner if a submitted application is not complete. If the applicant does not amend or resubmit such application within a reasonable amount of time after notification from the designated contract market or swap execution facility, the designated contract market or swap execution facility may reject the application;

(iii) Inform an applicant within ten days of receipt of such application by the designated contract market or swap execution facility that:

(A) The derivative position for which a complete application has been submitted has been recognized by the designated contract market or swap execution facility as a bona fide hedge, and the details and all conditions of such recognition;

(B) The application is rejected, including the reasons for such rejection; or

(C) The designated contract market or swap execution facility has asked the Commission to consider the application under paragraph (a)(6) of this section; and

(iv) Have the authority to revoke, at any time, any recognition issued pursuant to this section if it determines the position no longer complies with the filing requirements under paragraph (a)(2) of this section.

(4) An applicant’s derivatives position shall be deemed to be recognized as a bona fide hedge at the time that a designated contract market or swap execution facility notifies an applicant that such designated contract market or swap execution facility will recognize such position as a bona fide hedge.

(5) A designated contract market or swap execution facility that elects to process bona fide hedge applications shall file new rules or rule amendments pursuant to part 40 of this chapter, establishing or amending requirements for an applicant to file a report with the Commission pursuant to §150.7, and file a copy of such report with such designated contract market or swap execution facility when such applicant owns or controls a derivative position that such designated contract market or swap execution facility has recognized as a bona fide hedge, and for such applicant to report the offsetting cash positions. Such rules shall require an applicant to update and maintain the accuracy of any such report.

(6) A designated contract market or swap execution facility may ask the Commission to consider any application made under this section. The Commission may, in its discretion, agree to or reject any such request by a designated contract market or swap execution facility; provided that, if the Commission agrees to the request, it will have 10 business days from the time of the request to carry out its review.

(b) Recordkeeping.

(1) A designated contract market or swap execution facility that elects to process bona fide hedge applications under this section shall keep full, complete, and systematic records, which include all pertinent data and memoranda, of all activities relating to the processing of such applications and the disposition thereof, including the recognition of any derivative position as a bona fide hedge, the revocation or modification of any recognition, the rejection by the designated contract market or swap execution facility of an application, or withdrawal, supplementation or updating of an application. Included among such records shall be:

(i) All information and documents submitted by an applicant in connection with its application;

(ii) Records of oral and written communications between such designated contract market or swap execution facility and such applicant in connection with such application; and

(iii) All information and documents in connection with such designated contract market’s or swap execution facility’s analysis of and action on such application.

(2) All books and records required to be kept pursuant to this section shall be kept in accordance with the requirements of §1.31 of this chapter.

(c) Reports to the Commission.

(1) A designated contract market or swap execution facility that elects to process bona fide hedge applications under this section shall submit to the Commission a report for each week as of the close of business on Friday showing the following information:

(i) The disposition of any application, including the recognition of any position as a bona fide hedge, the revocation or modification of any recognition, as well as the following details:

(A) The date of disposition,

(B) The effective date of the disposition,

(C) The expiration date of any recognition,

(D) Any unique identifier assigned by the designated contract market or swap execution facility to track the application,

(E) Any unique identifier assigned by the designated contract market or swap execution facility to a bona fide hedge recognized under this section;

(F) The identity of the applicant,

(G) The listed commodity derivative contract to which the application pertains,

(H) The underlying cash commodity,

(I) The maximum size of the commodity derivative position that is recognized by the designated contract market or swap execution facility as a bona fide hedge,

(J) Any size limitation established for such commodity derivative position on the designated contract market or swap execution facility, and

(K) A concise summary of the applicant’s activity in the cash market for the commodity underlying the position for which the application was submitted.

(2) Unless otherwise instructed by the Commission, a designated contract market or swap execution facility that elects to process bona fide hedge applications shall submit to the Commission the information required by paragraph (c)(1) of this section, as follows:
(i) As specified by the Commission on the
Forms and Submissions page at
www.cftc.gov;
(ii) Using the format, coding structure,
and electronic data transmission
procedures approved in writing by the
Commission; and
(iii) Not later than 9:00 a.m. Eastern
time on the third business day following
the date of the report.

(d) Review of applications by the
Commission. (1) The Commission may
in its discretion at any time review any
bona fide hedge application submitted
inconsistent with the filing
application is, or appears to be,
§ 150.11(a)(2), with which the
Commission shall notify the applicant
in compliance. This notification
requirements of § 150.11(a)(2), the
Commission shall notify the applicant
inconsistent with the Act.
(i) The Commission may request from
such designated contract market or
swap execution facility records required
to be kept by such designated contract
market or swap execution facility
pursuant to paragraph (b) of this section
in connection with such application.
(ii) The Commission may request
additional information in connection
with such application from such
designated contract market or swap
execution facility or from the applicant.
(2) If the Commission preliminarily
determines that any anticipatory hedge
application is inconsistent with the
filing requirements of § 150.11(a)(2), the
Commission shall:
(i) Notify such designated contract
market or swap execution facility and
the applicable applicant of the
deficiencies identified by the
Commission; and
(ii) Provide them with 10 business
days in which to provide the
Commission with any supplemental
information.
(3) If the Commission determines that
the anticipatory hedge application is
inconsistent with the filing
requirements of § 150.11(a)(2), the
Commission shall notify the applicant
and grant the applicant a commercially
reasonable amount of time to liquidate
the derivative position or otherwise
come into compliance. This notification
will briefly specify the specific
provisions of the filing requirements of
§ 150.11(a)(2), with which the
application is, or appears to be,
inconsistent.
(e) Delegation of authority to the
Director of the Division of Market
Oversight. (1) The Commission hereby
delegates, until it orders otherwise, to
the Director of the Division of Market
Oversight or such other employee or
employees as the Director may designate
from time to time, the authority:
(i) In paragraph (a)(6) of this section
to agree to or reject a request by a
designated contract market or swap
execution facility to consider a bona
fide hedge application;
(ii) In paragraph (c) of this section to
provide instructions regarding the
submission to the Commission of
information required to be reported by
a designated contract market or swap
execution facility, to specify the manner
for submitting such information on the
Forms and Submissions page at
www.cftc.gov, and to determine the
format, coding structure, and electronic
data transmission procedures for
submitting such information;
(iii) In paragraph (d)(1) of this section
to review any bona fide hedge
application and all records required to
be kept by a designated contract market
or swap execution facility in connection
with such application, to request such
records from such designated contract
market or swap execution facility, and
to request additional information in
connection with such application from
such designated contract market or
swap execution facility or from the
applicant; and
(iv) In paragraph (d)(2) of this section
to determine that it is not appropriate to
recognize a derivative position for
which an application for recognition
has been submitted as a bona fide hedge,
or that the disposition of such application
by a designated contract market or swap
execution facility is inconsistent with
the Act, and, in connection with such a
determination, to grant the applicant a
reasonable amount of time to liquidate
the derivative position or otherwise
come into compliance.
(2) The Director of the Division of
Market Oversight may submit to the
Commission for its consideration any
matter which has been delegated in this
section.
(3) Nothing in this section prohibits the
Commission, at its election, from
exercising the authority delegated in
this section.

Appendices A Through D to Part 150
[Reserved]

12. Add reserved appendices A
through D to part 150.
13. Add appendix E to part 150 to
read as follows:

Appendix E to Part 150—Guidance
Regarding Exchange-Set Speculative
Position Limits

This appendix provides guidance
regarding § 150.5, as follows:

Guidance for designated contract
markets. (1) Until a board of trade has
access to sufficient swap position
information, a board of trade need not
demonstrate compliance with Core
Principle 5(B) with respect to swaps. A
board of trade has access to sufficient
swap position information if, for
example:
(i) It has access to daily information
about its market participants' open swap
positions; or
(ii) It knows, including through
knowledge gained in surveillance of
heavy trading activity occurring on or
pursuant to the rules of the designated
contract market, that its market
participants regularly engage in large
volumes of speculative trading activity,
that would cause reasonable
surveillance personnel at an exchange to
inquire further about a market
participant's intentions or open swap
positions.

(2) When a board of trade has access to
sufficient swap position information,
this guidance is no longer applicable. At
such time, a board of trade is required
to demonstrate compliance with Core
Principle 5(B) with respect to swaps.

Guidance for swap execution
facilities. (1) Until a swap execution
facility that is a trading facility has
access to sufficient swap position
information, the swap execution facility
need not demonstrate compliance with
Core Principle 6(B). A swap execution
facility has access to sufficient swap
position information if, for example:
(i) It has access to daily information
about its market participants' open swap
positions; or
(ii) It knows, including through
knowledge gained in surveillance of
heavy trading activity occurring on or
pursuant to the rules of the swap
exection facility, that its market
participants regularly engage in large
volumes of speculative trading activity,
that would cause reasonable
surveillance personnel at an exchange to
inquire further about a market
participant's intentions or open swap
positions.

(2) When a swap execution facility has
access to sufficient swap position
information, this guidance is no longer
applicable. At such time, a swap
execution facility that is a trading
facility is required to file rules with the
Commission to demonstrate compliance
with Core Principle 6(B).
Commissioner in office when these rules were proposed, and therefore we have taken the time to listen to market participants and consider the proposals very carefully. I thank our staff for their excellent work on this proposal. I also thank my fellow Commissioners Bowen and Giancarlo for their input and support. And I look forward to hearing the views of market participants and to completing a position limits rule this year.

Appendix 3—Statement of Commissioner J. Christopher Giancarlo

I support issuing for public comment today’s proposal to supplement and revise the Commission’s 2013 proposal to establish federal position limits for certain core referenced futures, options and swaps contracts. The supplemental proposal appears responsive to a broad range of public comments. I believe it is a positive step forward in devising a final rule that will take into account certain practical realities associated with administering a workable position limits regime.

The proposal appropriately recognizes that most exchanges do not have access to sufficient swap position information to effectively monitor swap position limits. If adopted, it would seem to relieve designated contract markets (DCMs) and swap execution facilities (SEFs) from setting and monitoring exchange limits on swaps until such time as DCMs and SEFs have access to data that is necessary to be able to do so. Position limits for swaps would still be set and monitored by the CFTC. The proposal simply acknowledges that the Commission cannot require exchanges to do the impossible.

The proposal also recommends changes to the definitions of “bona fide hedging position,” “futures equivalent,” “intermarket spread position” and “intramarket spread position.” The elimination of the incidental spread position and the orderly trading requirement in the context of exchange-set limits. Moreover, the CFTC has a long history of overseeing the performance of DCMs in doing so. In addition, DCMs already have a long-existing framework in place for recognizing exemptions from exchange-set limits with which market participants are well familiar. The supplemental proposal, when incorporated into a final rule, would build upon the existing framework for exchange-set limits. It also would lower unreasonable burdens on market participants.

In short, the supplemental proposal leverages exchange expertise and resources to enable exemptions to be granted in an efficient and timely manner without sacrificing market integrity. The Commission would remain the ultimate arbiter of exemptions from position limits by retaining the authority to review and reverse any exchange-granted exemptions.

I commend Commission staff for their responsiveness to broad-based concerns of market participants. I appreciate the professionalism of my fellow commissioners in persevering to make this rule more workable. I look forward to taking additional steps to ensure that the practical issues raised by the agricultural and end-user communities are addressed in the final rule.

Now and always, prosperity requires durable and vibrant markets. We must balance regulatory burdens with clear economic benefits if we are to maintain liquid commodity hedging markets that support our American way of life.

[PR Doc. 2016–12964 Filed 6–10–16; 8:45 am]

BILLING CODE 6351–01–P
DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 219

[38516 Federal Register / Vol. 81, No. 113 / Monday, June 13, 2016 / Proposed Rules]

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Northwest Fisheries Science Center Fisheries Research

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS’ Office of Protected Resources has received a request from NMFS’ Northwest Fisheries Science Center (NWFSC) for authorization to take marine mammals incidental to fisheries research conducted in the Pacific Ocean off the northwest United States, over the course of five years from the date of issuance. As required by the Marine Mammal Protection Act (MMPA), NMFS is proposing regulations to govern that take, and requests comments on the proposed regulations.

DATES: Comments and information must be received no later than July 13, 2016.

ADDRESSES: You may submit comments on this document, identified by NOAA–NMFS–2016–0060, by any of the following methods:

• Electronic submission: Submit all electronic public comments via the federal e-Rulemaking Portal. Go to www.regulations.gov, enter 0648–BF47 in the “Search” box, click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.

• Mail: Comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East West Highway, Silver Spring, MD 20910.

Instructions: NMFS is not responsible for comments sent by any other method, to any other address or individual, or received after the end of the comment period. Attachments to electronic comments will be accepted in Microsoft Word or Excel or Adobe PDF file formats only. To help NMFS process and review comments more efficiently, please use only one method to submit comments. All comments received are a part of the public record and will generally be posted on www.regulations.gov without change. All personal identifying information (e.g., name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter N/A in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: Ben Laws, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION:

Availability

A copy of NWFSC’s application and any supporting documents, as well as a list of the references cited in this document, may be obtained by visiting the Internet at: www.nmfs.noaa.gov/pr/permits/incidental/research.htm. In case of problems accessing these documents, please call the contact listed above (see FOR FURTHER INFORMATION CONTACT).

Purpose and Need for Regulatory Action

This proposed rule, to be issued under the authority of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 et seq.), would establish a framework for authorizing the take of marine mammals incidental to the NWFSC’s fisheries research activities in the California Current and Pacific Northwest.

The NWFSC collects a wide array of information necessary to evaluate the status of exploited fishery resources and the marine environment. NWFSC scientists conduct fishery-independent research onboard NOAA-owned and operated vessels or on chartered vessels. A few surveys are conducted onboard commercial fishing vessels, but the NWFSC designs and executes the studies and funds vessel time.

We received an application from the NWFSC requesting five-year regulations and authorization to take multiple species of marine mammals. Take would occur by Level B harassment incidental to the use of active acoustic devices, as well as by visual disturbance of pinnipeds, and by Level A harassment, serious injury, or mortality incidental to the use of fisheries research gear. The regulations would be valid from 2016 to 2021. Please see “Background” below for definitions of harassment.

Legal Authority for the Proposed Action

Section 101(a)(5)(A) of the MMPA (16 U.S.C. 1371(a)(5)(A)) directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region for up to five years if, after notice and public comment, the agency makes certain findings and issues regulations that set forth permissible methods of taking pursuant to that activity, as well as monitoring and reporting requirements. Section 101(a)(5)(A) of the MMPA and the implementing regulations at 50 CFR part 216, subpart I provide the legal basis for issuing this proposed rule containing five-year regulations, and for any subsequent Letters of Authorization. As directed by this legal authority, this proposed rule contains mitigation, monitoring, and reporting requirements.

Summary of Major Provisions Within the Proposed Rule

The following provides a summary of some of the major provisions within the proposed rulemaking for the NWFSC fisheries research activities. We have preliminarily determined that the NWFSC’s adherence to the proposed mitigation, monitoring, and reporting measures listed below would achieve the least practicable adverse impact on the affected marine mammals. They include:

• Required monitoring of the sampling areas to detect the presence of marine mammals before deployment of certain research gear.

• Required use of acoustic deterrent devices on surface trawl nets.

• Required implementation of the mitigation strategy known as the “move-on rule mitigation protocol” which incorporates best professional judgment, when necessary during certain research fishing operations.

Background

Paragraphs 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1371(a)(5)(A) and (D)) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact
on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined “negligible impact” in 50 CFR 216.103 as “an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.”

Except with respect to certain activities not pertinent here, the MMPA defines “harassment” as: Any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Summary of Request

On August 10, 2015, we received an adequate and complete request from NWFSC for authorization to take marine mammals incidental to fisheries research activities. We received an initial draft of the request on January 2, 2015, followed by a revised draft on April 28, 2015. On August 28, 2015 (80 FR 52256), we published a notice of receipt of NWFSC’s application in the Federal Register, requesting comments and information related to the NWFSC request for thirty days. We received comments jointly from The Humane Society of the United States and Whale and Dolphin Conservation, which we considered in development of this proposed rule and which are available on the Internet at: www.nmfs.noaa.gov/pr/permits/incidental/research.htm.

NWFSC proposes to conduct fisheries research using trawl gear used at various levels in the water column, hook-and-line gears (including longlines with multiple hooks, rod and reel, and troll deployments), purse seine/tangle net gear, and other gear. If a marine mammal interacts with gear deployed by NWFSC, the outcome could potentially be Level A harassment, serious injury (i.e., any injury that will likely result in mortality), or mortality. Therefore, NWFSC has pooled the estimated number of incidents of take that could reasonably result from gear interactions, and we have assessed the potential impacts accordingly. NWFSC also uses various active acoustic devices in the conduct of fisheries research, and use of these devices has the potential to result in Level B harassment of marine mammals. Level B harassment of pinnipeds hauled out may also occur, as a result of visual disturbance from vessels conducting NWFSC research. The proposed regulations would be valid for five years from the date of issuance.

NWFSC requests authorization to take individuals of sixteen species by Level A harassment, serious injury, or mortality (hereafter referred to as M/SI + Level A) and of 34 species by Level B harassment.

Description of the Specified Activity

Overview

The NWFSC collects a wide array of information necessary to evaluate the status of exploited fishery resources and the marine environment. NWFSC scientists conduct fishery-independent research onboard NOAA-owned and operated vessels or on chartered vessels. A few surveys are conducted onboard commercial fishing vessels, but the NWFSC designs and executes the studies and funds vessel time. The NWFSC proposes to administer and conduct approximately 36 survey programs over the five-year period. The gear types used fall into several categories: Towed nets fished at various levels in the water column, longline and other hook and line gear, seine nets, traps, and other gear. Only use of trawl nets, hook and line gears, and purse seine nets are likely to result in interaction with marine mammals. Many of these surveys also use active acoustic devices.

The federal government has a responsibility to conserve and protect living marine resources in U.S. waters and has also entered into a number of international agreements and treaties related to the management of living marine resources in international waters outside the United States. NOAA has the primary responsibility for managing marine finfish and shellfish species and their habitats, with that responsibility delegated within NOAA to NMFS.

In order to direct and coordinate the collection of scientific information needed to make informed fishery management decisions, Congress created six regional fisheries science centers, each a distinct organizational entity and the scientific focal point within NMFS for region-based federal fisheries-related research. This research is aimed at monitoring fish stock recruitment, abundance, survival and productivity, distribution of species and stocks, ecosystem process changes, and marine ecological research. The NWFSC is the research arm of NMFS in the northwest region of the United States. The NWFSC conducts research and provides scientific advice to manage fisheries and conserve protected species in the geographic research area described below and provides scientific information to support the Pacific Fishery Management Council and numerous other domestic and international fisheries management organizations.

Dates and Duration

The specified activity may occur at any time during the five-year period of validity of the proposed regulations. Dates and duration of individual surveys are inherently uncertain, based on congressional funding levels for the NWFSC, weather conditions, or ship contingencies. In addition, cooperative research is designed to provide flexibility on a yearly basis in order to address issues as they arise. Some cooperative research projects last multiple years or may continue with modifications. Other projects only last one year and are not continued. Most cooperative research projects go through an annual competitive selection process to determine which projects should be funded based on proposals developed by many independent researchers and fishing industry participants.

Specified Geographical Region

The NWFSC conducts research in the Pacific Northwest and California Current within three research areas: The California Current Research Area (CCRA), Puget Sound Research Area (PSRA), and Lower California River Research Area (LCRRA). Please see Figures 1–2 through 1–4 in the NWFSC application for maps of the three research areas. We note here that, while the NWFSC specified geographical region extends outside of the U.S. Exclusive Economic Zone (EEZ), from the Mexican EEZ (not including Mexican territorial waters) north into the Canadian EEZ (not including Canadian territorial waters), the MMPA’s authority does not extend into foreign territorial waters. In addition to general knowledge and other citations contained herein, this section relies upon the descriptions found in Sherman and Hempel (2009) and Wilkinson et al. (2009). As referred to here, productivity refers to fixed carbon (i.e., g C/m²/yr) and can be related to the carrying capacity of an ecosystem.

The NWFSC conducts research surveys off the Pacific coast within the California Current Region, and the California Current Ecosystem (CCE). This region is considered to be of moderately high

\[ \text{g C/m}^2/\text{yr} \]
productivity. Sea surface temperature (SST) is fairly consistent, ranging from 9–14 °C in winter and 13–15 °C in summer. Major biogeographic breaks are found at Point Conception and Cape Mendocino, and the region includes major estuaries such as San Francisco Bay, the Columbia River, and Puget Sound. The latter two are areas of research focus for NWFSC and are described in further detail below. The shelf is generally narrow in the CCE, and shelf-break topography (e.g., underwater canyons) creates localized upwelling conditions that concentrate nutrients into areas of high topographic relief.

The California Current determines the general hydrography off the coast of California. The current is part of the North Pacific Gyre, related to the anticyclonic circulation of the central North Pacific and brings cool waters southward. In general, an area of divergence parallels the coast of California, with a zone of convergence 200–300 km from the coastline. The current moves south along the western coast of North America, beginning off southern British Columbia and flowing southward past Washington, Oregon and California, before ending off southern Baja California (Bograd et al., 2010). Extensive seasonal upwelling of colder, nutrient-rich subsurface waters is predominant in the area south of Cape Mendocino and supports large populations of whales, seabirds and important fisheries. Significant interannual variation in productivity results from the eddies of this coastal upwelling as well as from the El Niño-Southern Oscillation and the Pacific Decadal Oscillation. Both oscillations involve transitions from cooler, more productive conditions to warmer, less productive conditions, but over different timescales.

On the shoreward side of the California Current, the California Current Front separates cold, low-salinity upwelled waters from the warmer, saltier waters closer to shore. Offshore frontal filaments transport the frontal water across the entire ecosystem. In winter, the wind-driven Davidson Current is the dominant nearshore system, and its associated front forms along the boundary between inshore subtropical waters and colder offshore temperate and subarctic waters. Surface flow of the California Current appears to be diverted offshore at Point Conception and again at Punta Eugenia, while semi-permanent eddies exist south of these headlands.

NWFSC conducts research programs specific to two major estuaries of the CCE: Puget Sound and the Columbia River. Offshore of these estuaries, the CCE is affected by the Heceta Bank, which rises to within 80 m of the ocean surface and causes coastal eddies, and underwater canyons (e.g., Juan de Fuca Canyon), which create upwelling conditions driving high biologic productivity. This portion of the region is also affected by high amounts of runoff from the Columbia and Fraser Rivers (the latter being the largest freshwater input to Puget Sound). The river plumes stimulate primary productivity, with the Columbia River plume creating a large surface lens of lower-salinity water in the spring and summer and the Fraser River plume carrying nutrients northwards past Vancouver Island year-round.

Puget Sound, with more than 8,000 km² of marine waters and estuarine environment and a watershed of more than 33,000 km², is one of the largest estuaries in the United States and is the only inland sea with fjords in the continental United States. Puget Sound is a place of great physical and ecological complexity and productivity, with many diverse and important habitat types. Kelp beds and eelgrass meadows cover almost 1,000 km², while other major habitat types include subtidal and intertidal wetlands, mudflats, and sandflats (Gustafson et al., 2000). Concentrations of nutrients (i.e., nitrates and phosphates) are consistently high throughout most of Puget Sound, largely due to the flux of oceanic water into the basin (Harrison et al., 1994), with circulation driven by tides, gravity, and freshwater influx. The average surface water temperature is 12.8 °C in summer and 7.2 °C in winter (Staubitz et al., 1997), but surface waters frequently exceed 20 °C in the summer and fall. With nearly six million people (doubled since the 1960s), Puget Sound is also heavily influenced by human activity.

The Columbia River is the largest in the Pacific Northwest, draining a watershed of 671,000 km². The Columbia River estuary encompasses more than 33,330 km² and is one of the largest on the west coast. Dams, diking, and dredging have dramatically altered hydrologic processes that historically shaped the wetlands of the lower Columbia River. Prior to these alterations, many of the riverine islands and much of the floodplain were inundated for several times a year, typically in December and again in May or June. Operation of dams has substantially reduced peak river flows and has nearly eliminated flooding in many low-lying areas. Breeding of shipping channels has required disposal of massive quantities of sediments, resulting in creation of new islands, filling of many former wetlands, and changing shoreline sediment types (OWJV, 1994).

The LCRRA includes the Columbia River from its mouth, west of Astoria, OR, to the Bonneville Dam at river mile (RM) 145. Downstream of approximately RM 120, the river widens to include a broad floodplain and elongated islands that divide the river and form sloughs and side-channels in the formerly marshy lowlands. The floodplain expands around the confluence with the Willamette River (which accounts for approximately fifteen percent of Columbia River flow) at RM 101. Downstream of approximately RM 35 the channel is dotted with low islands of deposited sediments and widens into several broad bays (OWJV, 1994).

Detailed Description of Activities

The federal government has a trust responsibility to protect living marine resources in waters of the United States. These waters extend 200 nm from the shoreline and include the EEZ. The U.S. government has also entered into a number of international agreements and treaties related to the management of living marine resources in international waters outside of the EEZ (i.e., the high seas). To carry out its responsibilities over U.S. and international waters, Congress has enacted several statutes authorizing certain federal agencies to administer programs to manage and protect living marine resources. Among these federal agencies, NOAA has the primary responsibility for protecting marine finfish and shellfish species and their habitats. Within NOAA, NMFS has been delegated primary responsibility for the science-based management, conservation, and protection of living marine resources under statutes including the Magnuson-Stevens Fishery Conservation and Management Act, the Pacific Salmon Treaty Act, and the Endangered Species Act, as well as under treaties with Native American tribes inside the EEZ off the Washington Coast.

Within NMFS, six regional fisheries science centers direct and coordinate the collection of scientific information needed to inform fisheries management decisions. Each Fisheries Science Center is a distinct entity and is the scientific focal point for a particular region. NWFSC conducts research and provides scientific advice to manage fisheries and conserve protected species along the U.S. west coast, including estuaries and freshwater systems of Puget Sound and the major rivers in Washington and Oregon. NWFSC provides scientific information to support the Pacific Fishery Management Council and other
domestic and international fisheries management organizations.

The NWFSC collects a wide array of information necessary to evaluate the status of exploited fishery resources and the marine environment. NWFSC scientists conduct fishery-independent research onboard NOAA-owned and operated vessels or on chartered vessels. A few surveys are conducted onboard commercial fishing vessels, but the NWFSC designs and executes the studies and funds vessel time. The NWFSC proposes to administer and conduct approximately 36 survey programs over the five-year period.

The gear types used fall into several categories: Towed nets fished at various levels in the water column, longline and other hook and line gear, seine nets, traps, and other gear. Only use of trawl nets, hook and line gears, and purse seine nets are likely to result in interaction with marine mammals. Many of these surveys also use active acoustic devices. These surveys may be conducted on NOAA-operated research vessels (R/V), including the Bell M. Shimada, Reuben Lasker, and assorted other small vessels owned by NWFSC, aboard vessels owned and operated by cooperating agencies and institutions, or aboard charter vessels.

In the following discussion, we first summarize various survey gear types used by NWFSC and then describe specific fisheries and ecosystem research activities conducted by the NWFSC. This is not an exhaustive list of gear and/or devices that may be utilized by NWFSC but is representative of gear categories and is complete with regard to all gears with potential for interaction with marine mammals. Additionally, relevant active acoustic devices, which are commonly used in NWFSC survey activities, are described separately in a subsequent section. Please see Appendix A of NWFSC’s draft EA for further description, pictures, and diagrams of research gear and vessels.

Trawl nets—A trawl is a funnel-shaped net towed behind a boat to capture fish. The codend (or bag) is the fine-meshed portion of the net most distant from the towing vessel where fish and other organisms larger than the mesh size are retained. In contrast to commercial fishery operations, which generally use larger mesh to capture marketable fish, research trawls often use smaller mesh to enable estimates of the size and age distributions of fish in a particular area. The body of a trawl net is generally constructed of relatively coarse mesh to gather schooling fish so that they can be collected in the codend. The opening of the net, called the mouth, is extended horizontally by large panels of wide mesh called wings. The mouth of the net is held open by hydrodynamic force exerted on the trawl doors attached to the wings of the net. As the net is towed through the water, the force of the water spreads the trawl doors horizontally apart. The top of a net is called the headrope, and the bottom is called the footrope.

The trawl net is usually deployed over the stern of the vessel and attached with two cables (or warps) to winches on the deck of the vessel. The cables are played out until the net reaches the fishing depth. Commercial trawl vessels travel at speeds of 2–5 kn while towing the net for time periods up to several hours. The duration of the tow depends on the purpose of the trawl, the catch rate, and the target species. At the end of the tow the net is retrieved and the contents of the codend are emptied onto the deck. For research purposes, the speed and duration of the tow and the characteristics of the net must be standardized to allow meaningful comparisons of data collected at different times and locations. Active acoustic devices (described later) incorporated into the research vessel and the trawl gear monitor the position and status of the net, speed of the tow, and other variables important to the research design. NWFSC research trawling activities utilize pelagic (or midwater) and surface trawls, which are designed to operate at various depths within the water column but not to contact the seafloor, as bottom trawls.

NWFSC also uses beam trawls, a type of bottom trawl in which the horizontal opening of the net is provided by a heavy beam mounted at each end on guides or skids that travel along the seabed. On sandy or muddy bottoms, a series of ‘tickler’ chains are strung between the skids ahead of the net to stir up the fish from the seabed and chase them into the net. On rocky grounds, these ticklers may be replaced with chains for matting. Several trawls are towed, one on each side of the vessel. NWFSC attaches video camera systems to some beam trawls. The trawls are towed along the seafloor at speeds of 1–1.5 kn.

Longline—Longline vessels fish with baited hooks attached to a mainline (or groundline). The length of the longline and the number of hooks depend on the species targeted, the size of the vessel, and the purpose of the fishing activity. Hooks are attached to the mainline by another thinner line called a gangion. The length of the gangion and the distance between gangions depends on the purpose of the fishing activity. Depending on the fishery, longline gear can be deployed on the seafloor (bottom longline), in which case weights are attached to the mainline, or near the surface of the water (pelagic longline), in which case buoys are attached to the mainline to provide flotation and keep the baited hooks suspended in the water. Radar reflectors, radio transmitters, and light sources are often used to help fishers determine the location of the longline gear prior to retrieval.

A commercial pelagic longline can be over 100 km long and have thousands of hooks attached, although longlines used for research surveys are shorter. The pelagic longline gear used for NWFSC research surveys typically use 500 hooks attached to a mainline less than 2 km long, with snap-on gangions less than 1 m long spaced at intervals of approximately 3 m. There are no internationally-recognized standard measurements for hook size, and a given size may be inconsistent between manufacturers. Larger hooks, as are used in longlining, are referenced by increasing whole numbers followed by a slash and a zero as size increases (e.g., 1/0 up to 20/0). The numbers represent relative sizes, normally associated with the gap (the distance from the point tip to the shank). Because pelagic longline gear is not anchored to the seafloor, it floats freely in the water and may drift considerable distances between the time of deployment and the time of retrieval. Bottom longlines used for commercial fishing can be up to several miles long, but those used for NWFSC research use shorter lines with approximately thirty hooks per line.

The time period between deployment and retrieval of the longline gear is the soak time. Soak time is an important parameter for calculating fishing effort. For commercial fisheries the goal is to optimize the soak time in order to maximize catch of the target species while minimizing the bycatch rate and minimizing damage to target species that may result from predation by sharks or other predators.

Other hook and line gear—Hook and line is a general term used for a range of fishing methods that employ short fishing lines with hooks in one form or another (as opposed to longlines). This gear is similar to methods commonly used by recreational fishers and may generally include handlines, hand reels, powered reels, rod/pole and line, drop lines, and troll lines, all using bait or lures in various ways to attract target species. NWFSC uses barbed or barbless circle hooks used depending on the needs of the research (i.e., to retain fish
or release them with minimal injury and would typically deploy multiple lines at once.

Other nets—NWFSC surveys utilize various small, fine-mesh, towed nets designed to sample small fish and pelagic invertebrates. These nets can be broadly categorized as small trawls (which are separated from large trawl nets due to accountable potential for interaction with marine mammals; see “Potential Effects of the Specified Activity on Marine Mammals and Their Habitat”) and plankton nets.

1. The Tucker trawl is a medium-sized single-warp net used to study pelagic fish and zooplankton. The Tucker trawl consists of a series of nets that can be opened and closed sequentially via stepping motor without retrieving the net from the fishing depth. It is designed for deep oblique tows where up to three replicate nets can be sequentially operated by a double release mechanism and is typically equipped with a full suite of instrumented nets, including inside and outside flow meters, CTD, and pitch sensor.

2. NWFSC also uses various neuston nets, which are frame trawls towed horizontally at the top of the water column in order to capture neuston (i.e., organisms that inhabit the water’s surface).

3. An epibenthic sled is an instrument designed to collect organisms that live on bottom sediments. It consists of a fine mesh net, typically 1 m x 1 m opening with 1-mm mesh, attached to a rigid frame with runners to help it move along the substrate.

The remainder of nets described here are plankton nets, which usually consist of fine mesh attached to a weighted frame which spreads the mouth of the net to cover a known surface area in order to sample plankton and fish eggs from various parts of the water column. Plankton nets used by NWFSC generally employ 20 to 500-µm mesh.

4. Ring nets are used to capture plankton with vertical tows. These nets consist of a circular frame and a cone-shaped net with a collection jar at the codend. The net, attached to a labeled droplines, is lowered into the water while maintaining the net’s vertical position. When the desired depth is reached, the net is pulled straight up through the water column to collect the sample.

5. Bongo nets are towed through the water at an oblique angle to sample plankton over a range of depths. Similarly to ring nets, they typically have a cylindrical section coupled to a conical portion that tapers to a detachable codend constructed of nylon mesh. During each plankton tow, the bongo nets are deployed to depth and are then retrieved at a controlled rate so that the volume of water sampled is uniform across the range of depths. In shallow areas, sampling protocol is adjusted to prevent contact between the bongo nets and the seafloor. A collecting bucket, attached to the codend of the net, is used to contain the plankton sample. Some bongo nets can be opened and closed using remote control to enable the collection of samples from particular depth ranges. A group of depth-specific bongo net samples can be used to establish the vertical distribution of zooplankton species in the water column at a site. Bongo nets are generally used to collect zooplankton for research purposes and are not used for commercial harvest.

Seine nets—Seine nets typically hang vertically in the water with the bottom edge held down by weights and the top edge buoyed by floats. Seine nets can be deployed from the shore as a beach seine or from a boat and are actively fished, in comparison with gillnets which may be similar but fish passively. NWFSC uses both purse seines and beach seines. Beach seines are deployed from shore to surround all fish in the nearshore area, and typically have one end fastened to the shore while the other end is set out in a wide arc and brought back to the beach. This may be done by hand or with a small boat. The beach seines used in NWFSC research are 1.8–2.4 m in depth and 36–45 m in length, with mesh sizes of less than 25 mm. A pole seine is a type of beach seine deployed by hand. The net is pulled along the bottom by hand as two or more people hold the poles and walk through the water. Fish and other organisms are captured by walking the net towards shore or tilting the poles backwards and lifting the net out of the water. The NWFSC pole seine is 12 x 2 m, with mesh smaller than 25 mm. Purse seines are typically much larger and are deployed from vessels. Commercial fishers use these seines to capture schooling pelagic species by encircling the fish and then using a line at the bottom that enables the net to be closed like a purse. Commercial purse seines may be more than 2,000 m in length and 200 m in depth, varying in size according to vessel, mesh size, and target species. The purse seines employed by NWFSC are between 150–450 m in length, between 9–27 m in depth and have mesh sizes ranging from 11–33 mm depending on the location in the net.

Tangle net—Tangle nets are similar to gillnets (i.e., vertical panels of netting buoyed with floats at top and weighted at bottom) but are typically considered to be more selective and less lethal than gillnets, using smaller mesh sizes to allow fish to be caught by nose or jaw and thus able to be resuscitated. NWFSC uses a 180 x 12 m tangle net with 108-mm mesh.

Traps and pots—Traps and pots are submerged, three-dimensional devices, often baited, that permit organisms to enter the enclosure but make escape extremely difficult or impossible. Most traps are attached by a rope to a buoy on the surface of the water and may be deployed in series. The trap entrance can be regulated to control the maximum size of animal that can enter, and the size of the mesh in the body of the trap can regulate the minimum size that is retained. In general, the species caught depends on the type and characteristics of the pot or trap used. NWFSC uses fyke traps and sablefish (Anoplopoma fimbria) pots.

Fyke traps are bag-shaped nets held open by frames or hoops often outfitted with wings and/or leaders to guide fish towards the entrance of the actual trap. Fyke trap wings can be set up to form a barrier across a channel, trapping fish that attempt to proceed through the channel. As the tide ebbs, fish eventually seek to leave the wetland channel and are then trapped. NWFSC sets fyke traps with 6.4-mm mesh in estuarine channels that are approximately 1–5 m wide. NWFSC uses conical sablefish pots to catch fish. These pots consist of conical-frustum-shaped frame covered in nylon netting with one or more funnel-shaped entrance tunnels and are 1.2 m in diameter.

Conductivity, temperature, and depth profilers (CTD)—A CTD profiler is the primary research tool for determining chemical and physical properties of seawater (see Figure A–22 of NWFSC’s EA for a photograph). A shipboard CTD is made up of a set of small probes attached to a large (1–2 m diameter) metal rosette wheel. The rosette is lowered through the water column on a cable, and CTD data are observed in real time via a conducting cable connecting the CTD to a computer on the ship. The rosette also holds a series of sampling bottles that can be triggered to close at different depths in order to collect a suite of water samples that can be used to determine additional properties of the water over the depth of the CTD cast. A standard CTD cast, depending on water depth, requires two to five hours to complete. The data from a suite of samples collected at these depths are often called a depth profile. Depth profiles for different variables can be
compared in order to glean information about physical, chemical, and biological processes occurring in the water column. Salinity, temperature, and depth data measured by the CTD instrument are essential for characterization of seawater properties.

Other instruments—NWFSC uses a continuous water pump with a thermosalinograph to measure sea surface conductivity and temperature. The pump continuously pumps seawater from a depth of 3 m near the bow of the research vessel to the thermosalinograph which sends the temperature and conductivity data to a shipboard computer. To collect physical environmental data in riverine and estuarine habitats, NWFSC uses water level and temperature loggers. These devices are placed underwater at fixed locations where they continuously record data.

Video cameras—The NWFSC uses several apparatuses to collect underwater videos of benthic habitats and organisms. These include a CamPod, a video camera sled, video beam trawls and a remotely operated vehicle (ROV). Each apparatus includes a video camera system consisting of a digital video camera, lights, and a power source. The CamPod is a lightweight, three-legged platform equipped with a video system and adequate illumination. The frame holds a 35-mm stills camera system and two video cameras—one that provides a forward-looking oblique view and a high-resolution video camera that faces downward primarily for making images of the benthic environment, the configuration of the device focuses on minimizing its hydrodynamic presence in the field of view of the cameras. The CamPod is deployed vertically through the water column on a cable and is intended to view one point on the bottom.

A video camera sled consists of a video camera system mounted on a metal frame with runners to allow it to move along the benthic substrate. A research vessel tows the sled along the seafloor, allowing the camera to capture video footage of the benthic environment. NWFSC uses a video ROV to capture underwater footage of the benthic environment. The ROV is controlled and powered from a surface vessel. Electrical power is supplied through an umbilical or tether which also has fiber optics which carry video and data signals between the operator and the ROV. This enables researchers on the vessel to control the ROV’s position in the water with joysticks while they view the video feed on a monitor.

Section 1.6 of the NWFSC’s application provides a detailed account of all surveys planned by NWFSC in the CCRA, PSRA, and LCRRRA. We note here that active acoustic systems are used for data acquisition purposes only within the CCRA. Many of these surveys also use small trawls, plankton nets, and/or other gear; however, only gear with likely potential for marine mammal interaction is described. Table 1.1 of NWFSC’s application provides summary information related to these surveys. Please see those sections for full details of survey activity planned by NWFSC. Here we provide relevant information related to a subset of survey programs with potential for marine mammal interactions.

1. Bycatch Reduction Research—Bycatch reduction research programs are conducted in the CCRA, from southern Oregon to Canada. This intermittent research is conducted aboard chartered commercial fishing vessels, involving thirty to ninety days at sea (DAS) from April to October, in order to test gear improvements in commercial trawls. Specific trawl gear tested varies based on survey objectives and vessel chartered. Projected annual effort is approximately forty bottom trawls per year (50–1,000 m depth; up to four hour tows), up to sixty midwater trawls per year (50–1,000 m depth; average two hour tow), and up to an additional sixty bottom trawls per year with a double-rigged shrimp trawl (100–300 m depth; thirty to eighty minute tows).

2. Flatfish Broodstock Collection—In order to collect fish for aquaculture development, intermittent surveys are conducted aboard charter fishing vessels or small NOAA vessels. These surveys use commercial bottom trawls and hook and line and are conducted in Puget Sound and along the Washington coast for approximately twenty DAS. The hook and line portion involves approximately eighteen trips per year with up to twelve lines in the water at once, using barbed circle hooks. Total hook-hours are dependent on target species and catch per unit effort (CPUE). Trawls (6–24 per year) are deployed for approximately ten minutes each at depths greater than 10 m.

3. Groundfish Bottom Trawl Survey—This survey is conducted annually from May to October for at least 190 DAS, extending throughout the U.S. west coast, and is designed to monitor groundfish distribution and biomass. Commercial fishing vessels are used to deploy Aberdeen bottom trawls (5 x 15 m mouth opening for approximately 750 tows per year (55–1,200 m depth; fifteen minute tows).

4. Hake Acoustic Survey/Camera Trawl Research—These surveys are conducted annually from March to September (up to 80 DAS) from southern California to southeast Alaska, following hake (Merluccius productus) distribution in order to measure abundance using active acoustic systems and trawl gear. NOAA vessels as well as commercial fishing vessels may be used, deploying Aleutian Wing midwater trawls (100 m headrope) for 225 trawls per year (30–1,500 m depth; variable tow duration) and Poly Nor’Easter bottom trawls (36 m footrope x 27 m headrope) for five to ten trawls per year (variable depth and duration). Results of the survey inform assessments of several rockfish (Sebastes spp.) populations and may be used in assessments of central California salmon productivity. It is either conducted on a NOAA ship or a charter vessel and requires about 45 survey days. The protocols for this survey include underway multi-frequency active acoustic devices, modified-Cobb midwater trawls, various plankton tows, and CTD profiles at fixed stations. The modified-Cobb trawl is deployed for fifteen-minute tows at 2 kn during dark hours at 15–30 m depth.

5. Juvenile Salmon Pacific Northwest Coastal Survey—This survey complements similar surveys conducted by NMFS’ Southwest Fisheries Science Center (SWFSC), is conducted annually in May, June, and September (36 DAS) from Newport, OR, to Cape Flattery, WA, aboard commercial fishing vessels, and is designed to assess ocean conditions and growth, relative abundance, and survival of juvenile salmon (Oncorhynchus spp.). The survey deploys the Nordic 264 surface trawl (30 m wide x 20 m deep) for 180 trawls per year (surface to 30 m depth; thirty minute tow).

6. Marine Fish Broodstock Collection, Sampling, and Tagging—This variable research program occurs annually for approximately ten DAS aboard charter fishing vessels along the Washington coast. In order to collect fish, commercial bottom trawls (ten trawls per year; 50–1,000 m depth, up to four hour tow duration), pelagic longline, and hook and line gear are used. Approximately thirty longline sets per year, using five hundred barbed circle hooks per set, are set at approximately 215–915 m depth (mainline length 1,370–1,830 m; soak time approximately three hours). Hook and line effort involves eight lines with barbed circle hooks deployed for six-hour fishing days for a total of ninety hours or 720 hook-hours per year.
7. Northern Juvenile Rockfish Survey—This survey complements similar surveys conducted by SWFSC, is conducted annually from May to June from Cape Mendocino, CA, to Cape Flattery, WA, for fifteen to thirty DAS, and targets the pelagic phase of juvenile rockfish using a modified Cobb midwater trawl net (26 m headrope; 12 x 12 m opening). It is typically conducted on a charter vessel, with approximately one hundred trawls per year (fifteen-minute tows at night; 15–30 m depth).

8. Video Beam Trawl Collaborative Research—This survey is conducted monthly along the continental shelf from Oregon to Washington aboard partner research vessels or chartered commercial vessels. The survey uses a 2-m beam trawl system with open codend outfitted with a digital video camera to assess the seasonal and interannual distribution of young-of-the-year groundfishes and the potential impacts of hypoxia and requires twenty DAS annually with twenty to forty trawl deployments of ten minutes each.

9. Coastwide Groundfish Hook and Line Survey in Untrawlable Habitat—This survey to monitor groundfish distribution and abundance along the U.S. west coast is conducted annually from May to October aboard charter sportfishing vessels (250 DAS). Hook and line gear is deployed by rod and reel, with approximately 1,000 sites visited annually. At each site, each of three anglers deploys a line with five hooks for a five-minute soak and repeats this five times. Therefore, 75 total hooks are deployed per site for five minutes each, yielding an annual total of 6,250 hook-hours.

10. Near Coastal Ocean Purse Seining—This study of salmon habitat use is conducted monthly from May to September nearshore near the mouth of the Columbia River aboard chartered commercial vessels (12 DAS). Purse seine efforts (228 x 18 m or 305 x 12 m) are deployed for 75 sets per year, with generally less than one hour set duration.

11. Beam Trawl Survey to Evaluate Effects of Hypoxia—Conducted only in Puget Sound, with twenty DAS in summer and fall, this survey is designed to examine effects of hypoxia on demersal fish in Hood Canal. A 2-m beam trawl, primarily with open codend and outfitted with a video camera, is deployed for one tow per each of ten sites per season for a total of twenty tows (each tow at varying depths [30, 60, 90 m]; ten minute duration).

12. Marine Fish Collections Including Flatfish—This survey, conducted only in Puget Sound aboard charter vessels with variable monthly effort (fifteen DAS), utilizes commercial bottom trawls. Annual effort is forty trawls at 50–1,000 m depth and tow duration is up to four hours.

13. Movement Studies of Puget Sound Species—These surveys occur in Puget Sound aboard a variety of small boats, with year-round sampling totaling 25 DAS. Survey effort involves commercial bottom trawls (twelve tows per year at greater than 10 m depth and for ten minutes), hook and line (twenty trips per year with up to twelve barbless hooks in the water at once), and bottom longline (180-m mainline deployed to approximately 60 m depth). The latter involves three sets per year with thirty 16/0 circle hooks per set.

14. Puget Sound Marine Pelagic Food Web—These surveys occur in Puget Sound only about every five years from April to October aboard charter vessels and totaling thirty DAS when it occurs. The survey deploys a Kodiak surface trawl (3.1 x 6.1 m) for five hundred tows of ten minute duration and depths greater than 10 m.

15. Skagit Bay Juvenile Salmon Survey—This survey occurs in Puget Sound aboard chartered vessels annually from April to September for thirty DAS and uses the same Kodiak surface trawl with the same protocols as the Puget Sound marine pelagic food web survey (180 tows per year).

16. Elwha Dam Removal—This Puget Sound study of the effects of dam removal on nearshore fish species includes use of a beach seine (43 x 1.8 m). The survey is conducted monthly using a small vessel, totaling 20 DAS and up to 140 samples per year (less than ten minutes per sample). Separate studies (“Snohomish Juvenile Salmon Studies” [up to 200 sets annually during 50 DAS]; conducted monthly and twice-monthly from February to September) and “Puget Sound Salmon Contaminant Study” [up to 100 sets annually during 30 DAS from May to July]) use similar beach seines in similar ways. Additional surveys in the Columbia River (“Estuary Tidal Habitats” [up to 100 sets annually during 25 DAS, quarterly to monthly] and “LCR Ecosystem Monitoring” [up to 200 sets annually during 16 DAS, monthly from February to December]) also use beach seines similarly.

17. Rockfish Genetics—Hook and line fishing gear is used to capture bottomfish for biological sampling. Conducted in Puget Sound aboard charter boats from April to November (35–41 DAS), this survey uses baited hooks or bottom jigs for approximately 750 hook-hours per year.

18. Marine Fish Research Including Broodstock Collection, Sampling, and Tagging—This research involves pelagic longline and hook and line survey effort conducted in Puget Sound aboard charter vessels for approximately 15 DAS with effort varying monthly. The gear specifications and effort are similar to those described previously (for pelagic longline and hook and line only) for marine fish broodstock collection in the California Current.

19. Eulachon Arrival Timing—This survey uses a modified Cobb midwater trawl net (26 m headrope; 12 x 12 m opening) in the Columbia River estuary and plume to determine the arrival timing and distribution of spawning eulachon. The survey is conducted from January to March (15 DAS) aboard NOAA vessels, with sixty trawls per year (fifteen-minute tow duration at 30–40 m depth).

20. Pair Trawl Juvenile Salmon Survey—This trawl survey is conducted in the Columbia River between approximately RM 40–50 from March to August (80 DAS) aboard small vessels. A surface pair trawl (wings 92 x 92 m; trawl body 9 m wide x 6 m deep x 18 m long) modified with an open codend (2.4 x 3 m opening) is towed near the surface for eight to fifteen hours per trawl, totaling 800–1,200 tow-hours per year. The trawl is outfitted with a flow-through Passive Integrated Transponder (PIT) tag detector to assess passage of tagged juvenile salmon.

21. Benefits of Wetland Restoration to Juvenile Salmon—This study, occurring throughout the LCRRA, uses purse seine (150 x 9 m), beach seines (46 x 1.8 m), and surface trawls (3 x 6 m opening) to study salmon habitat use. The surveys are typically conducted aboard small research vessels and/or skiffs, with purse seine effort occurring for 32 DAS bi-weekly from March to October (ninety sets per year; typically less than one hour set duration) and beach seines and surface trawls (fifteen minute sets) occurring quarterly from March to December. The latter portion is conducted for 16 DAS, at two sites per day with two to three hauls of each type per site.

22. Migratory Behavior of Adult Salmon—This LCRRA survey uses tangle nets to catch and tag fish. Tangle nets (180 x 12 m) are deployed from commercial fishing vessels for 32 DAS from spring to fall, with up to 75 sets per year deployed for 25–45 minutes each.

Description of Active Acoustic Sound Sources—This section contains a brief technical background on sound, the characteristics of certain sound types, and on metrics used in this proposal.
inasmuch as the information is relevant to NWFSC’s specified activity and to a discussion of the potential effects of the specified activity on marine mammals found later in this document. We also describe the active acoustic devices used by NWFSC.

Sound travels in waves, the basic components of which are frequency, wavelength, velocity, and amplitude. Frequency is the number of pressure waves that pass by a reference point per unit of time and is measured in hertz (Hz) or cycles per second. Wavelength is the distance between two peaks or corresponding points of a sound wave (length of one cycle). Higher frequency sounds have shorter wavelengths than lower frequency sounds, and typically attenuate (decrease) more rapidly, except in certain cases in shallower water. Amplitude is the height of the sound pressure wave or the “loudness” of a sound and is typically described using the relative unit of the decibel (dB). A sound pressure level (SPL) in dB is described as the ratio between a measured pressure and a reference pressure (for underwater sound, this is 1 microPascal [μPa]), and is a logarithmic unit that accounts for large variations in amplitude; therefore, a relatively small change in dB corresponds to large changes in sound pressure. The source level (SL) represents the SPL referenced at a distance of 1 m from the source (referenced to 1 μPa), while the received level is the SPL at the listener’s position (referenced to 1 μPa).

Root mean square (rms) is the quadratic mean sound pressure over the duration of an impulse. Rms is calculated by squaring all of the sound amplitudes, averaging the squares, and then taking the square root of the average (Urick, 1983). Rms accounts for both positive and negative values; squaring the pressures makes all values positive so that they may be accounted for in the summation of pressure levels (Hastings and Popper, 2005). This measurement is often used in the context of discussing behavioral effects, in part because behavioral effects, which often result from auditory cues, may be better expressed through averaged units than by peak pressures.

Sound exposure level (SEL; represented as dB re 1 μPa²-s) represents the total energy contained within a pulse, and considers both intensity and duration of exposure. For a single pulse, the numerical value of the SEL measurement is usually 5–15 dB lower than the rms sound pressure in dB re 1 μPa, with the comparative difference between measurements of rms and SEL measurements often tending to decrease with increasing range (Greene, 1997; McCauley et al., 1998). Peak sound pressure is the maximum instantaneous sound pressure measurable in the water at a specified distance from the source, and is represented in the same units as the rms sound pressure. Another common metric is peak-to-peak sound pressure (p-p), which is the algebraic difference between the peak positive and peak negative sound pressures. Peak-to-peak pressure is typically approximately 6 dB higher than peak pressure (Southall et al., 2007).

When underwater objects vibrate or activity occurs, sound-pressure waves are created. These waves alternately compress and decompress the water as the sound wave travels. Underwater sound waves radiate in a manner similar to ripples on the surface of a pond and may be either directed in a beam or beams (as for the sources considered here) or may radiate in all directions (omnidirectional sources). The compressions and decompressions associated with sound waves are detected as changes in pressure by aquatic life and man-made sound receptors such as hydrophones.

Even in the absence of sound from the specified activity, the underwater environment is typically loud due to ambient sound. Ambient sound is defined as environmental background sound levels lacking a single source or point (Richardson et al., 1995), and the sound level of a region is defined by the total acoustical energy being generated by known and unknown sources. These sources may include physical (e.g., wind and waves, earthquakes, ice, atmospheric sound), biological (e.g., sounds produced by marine mammals, fish, and invertebrates), and anthropogenic (e.g., vessels, dredging, construction) sound. A number of sources contribute to ambient sound, including the following (Richardson et al., 1995):

- Wind and waves: The complex interactions between wind and water surface, including processes such as breaking waves and wave-induced bubble oscillations and cavitation, are a main source of naturally occurring ambient sound for frequencies between 200 Hz and 50 kHz (Mitson, 1995). In general, ambient sound levels tend to increase with increasing wind speed and wave height. Surf sound becomes important near shore, with measurements collected at a distance of 8.5 km from shore showing an increase of 10 dB in the 100 to 700 Hz band during heavy surf conditions.
- Prey sound from rain and hail impacting the water surface can become an important component of total sound at frequencies above 500 Hz, and possibly down to 100 Hz during quiet times.
- Biological: Marine mammals can contribute significantly to ambient sound levels, as can some fish and snapping shrimp. The frequency band for biological contributions is from approximately 12 Hz to over 100 kHz.
- Anthropogenic: Sources of ambient sound related to human activity include transportation (surface vessels), dredging and construction, oil and gas drilling and production, seismic surveys, sonar, explosions, and ocean acoustic studies. Vessel noise typically dominates the total ambient sound for frequencies between 20 and 300 Hz. In general, the frequencies of anthropogenic sounds are below 1 kHz and, if higher frequency sound levels are created, they attenuate rapidly. Sound from identifiable anthropogenic sources other than the activity of interest (e.g., a passing vessel) is sometimes termed background sound, as opposed to ambient sound.

The sum of the various natural and anthropogenic sound sources at any given location and time—which comprise “ambient” or “background” sound—depends not only on the source levels (as determined by current weather conditions and levels of biological and human activity) but also on the ability of sound to propagate through the environment. In turn, sound propagation is dependent on the spatially and temporally varying properties of the water column and sea floor and is frequency-dependent. As a result of the dependence on a large number of varying factors, ambient sound levels can be expected to vary widely over both coarse and fine spatial and temporal scales. Sound levels at a given frequency and location can vary by 10–20 dB from day to day (Richardson et al., 1995). The result is that, depending on the source type and its intensity, sound from the specified activity may be a negligible addition to the local environment or could form a distinctive signal that may affect marine mammals. Details of source types are described in the following text.

Sounds are often considered to fall into one of two general types: Pulsed and non-pulsed (defined in the following). The distinction between these two sound types is important because they have differing potential to cause physical effects, particularly with regard to hearing (e.g., Ward, 1997 in Southall et al., 2007). Please see Southall et al. (2007) for an in-depth discussion of these concepts.

Pulsed sound sources (e.g., explosions, gunshots, sonic booms,
impact pile driving) produce signals that are brief (typically considered to be less than one second), broadband, atonal transients (ANSI, 1986, 2005; Harris, 1998; NIOSH, 1998; ISO, 2003) and occur either as isolated events or repeated in some succession. Pulsed sounds are all characterized by a relatively rapid rise from ambient pressure to a maximal pressure value followed by a rapid decay period that may include a period of diminishing, oscillating maximal and minimal pressures, and generally have an increased capacity to induce physical injury as compared with sounds that lack these features.

Non-pulsed sounds can be tonal, narrowband, or broadband, brief or prolonged, and may be either continuous or non-continuous (ANSI, 1995; NIOSH, 1998). Some of these non-pulsed sounds can be transient signals of short duration but without the essential properties of pulses (e.g., rapid rise time). Examples of non-pulsed sounds include those produced by vessels, aircraft, machinery operations such as drilling or dredging, vibratory pile driving, and active sonar systems (such as those used by the U.S. Navy). The duration of such sounds, as received at a distance, can be greatly extended in a highly reverberant environment.

We use generic sound exposure thresholds (see Table 1) to determine when an activity that produces sound might result in impacts to a marine mammal such that a take by harassment might occur. These thresholds should be considered guidelines for estimating when harassment may occur (i.e., when an animal is exposed to levels equal to or exceeding the relevant criterion) in specific contexts; however, useful contextual information that may inform our assessment of effects is typically lacking and we consider these thresholds as step functions. NMFS is currently revising these acoustic guidelines; for more information on that process, please visit www.nmfs.noaa.gov/pr/acoustics/guidelines.htm. NMFS has determined that the 160-dB threshold for impulsive sources is most appropriate for use in considering the potential effects of the NWFSC’s activities.

### Table 1—Current Acoustic Exposure Criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Definition</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level A harassment (underwater)</td>
<td>Injury (PTS—any level above that which is known to cause TTS).</td>
<td>180 dB (cetaceans)/190 dB (pinnipeds) (rms).</td>
</tr>
<tr>
<td>Level B harassment (underwater)</td>
<td>Behavioral disruption</td>
<td>160 dB (impulsive source)/120 dB (continuous source) (rms).</td>
</tr>
</tbody>
</table>

A wide range of active acoustic devices are used in NWFSC fisheries surveys for remotely sensing bathymetric, oceanographic, and biological features of the environment. Most of these sources involve relatively high frequency, directional, and brief repeated signals tuned to provide sufficient focus and resolution on specific objects. NWFSC also uses passive listening sensors (i.e., remotely and passively detecting sound rather than producing it), which do not have the potential to impact marine mammals. NWFSC active acoustic sources include various echosounders (e.g., multibeam systems), scientific sonar systems, positional sonars (e.g., net sounders for determining trawl position), and environmental sensors (e.g., current profilers).

Mid- and high-frequency underwater acoustic sources typically used for scientific purposes operate by creating an oscillatory overpressure through rapid vibration of a surface, using either electromagnetic forces or the piezoelectric effect of some materials. A vibratory source based on the piezoelectric effect is commonly referred to as a transducer. Transducers are usually designed to excite an acoustic wave of a specific frequency, often in a highly directive beam, with the directional capability increasing with operating frequency. The main parameter characterizing directivity is the beam width, defined as the angle subtended by diametrically opposite “half power” (−3 dB) points of the main lobe. For different transducers at a single operating frequency the beam width can vary from 180° (almost omnidirectional) to only a few degrees. Transducers are usually produced with either circular or rectangular active surfaces. For circular transducers, the beam width in the horizontal plane (assuming a downward pointing main beam) is equal in all directions, whereas rectangular transducers produce more complex beam patterns with variable beam width in the horizontal plane. Please see Zykov and Carr (2014) for further discussion of electromechanical sound sources.

The types of active sources employed in fisheries acoustic research and monitoring may be considered in two broad categories here, based largely on their respective operating frequency (e.g., within or outside the known audible range of marine species) and other output characteristics (e.g., signal duration, directivity). As described below, these operating characteristics result in differing potential for acoustic impacts on marine mammals.

Category 1 active fisheries acoustic sources include those with high output frequencies (≤180 kHz) that are outside the known functional hearing capability of any marine mammal. Sounds that are above the functional hearing range of marine animals may be audible if sufficiently loud (e.g., Mehl, 1968). However, the relative output levels of these sources mean that they would potentially be detectable to marine mammals at maximum distances of only a few meters, and are highly unlikely to be of sufficient intensity to result in behavioral harassment. These sources also generally have short duration signals and highly directional beam patterns, meaning that any individual marine mammal would be unlikely to even receive a signal that would almost certainly be inaudible.

We are aware of two recent studies (Deng et al., 2014; Hastie et al., 2014) demonstrating some behavioral reaction by marine mammals to acoustic signals at frequencies above 180 kHz. These studies generally indicate only that sub-harmonics could be detectable by certain species at distances up to several hundred meters. However, this detectability is in reference to ambient noise, not to NMFS’ established 160 dB threshold for assessing the potential for incidental take for these sources. Source levels of the secondary peaks considered in these studies—those within the hearing range of some marine mammals—range from 135–166 dB, meaning that these sub-harmonics would either be below the threshold for behavioral harassment or would attenuate to such a level within a few meters. Beyond these important study details, these high-frequency (i.e., Category 1) sources and any energy they may produce below the primary frequency that could be audible to marine mammals would be dominated by a few primary sources that are
operated near-continuously, and the potential range above threshold would be so small as to essentially discount them. Therefore, Category 1 sources are not expected to have any effect on marine mammals and are not considered further in this document.

Category 2 acoustic sources, which are present on most NWFSC fishery research vessels, include a variety of single, dual, and multi-beam echosounders (many with a variety of modes), sources used to determine the orientation of trawl nets, and several current profilers with lower output frequencies than Category 1 sources. Category 2 active acoustic sources have moderate to high output frequencies (10 to 180 kHz) that are generally within the functional hearing range of marine mammals and therefore have the potential to cause behavioral harassment. However, while likely potentially audible to certain species, these sources have generally short ping durations and are typically focused (highly directional) to serve their intended purpose of mapping specific objects, depths, or environmental features. These characteristics reduce the likelihood of an animal receiving or perceiving the signal. A number of these sources, particularly those with relatively lower output frequencies coupled with higher output levels can be operated in different output modes (e.g., energy can be distributed among multiple output beams) that may lessen the likelihood of perception by and potential impact on marine mammals. We now describe the specific acoustic sources used by NWFSC. The acoustic system used during a particular survey is optimized for surveying under specific environmental conditions (e.g., depth and bottom type). Lower frequencies of sound travel further in the water [i.e., good range] but provide lower resolution [i.e., are less precise]. Pulse width and power may also be adjusted in the field to accommodate a variety of environmental conditions. Signals with a relatively long pulse width travel further and are received more clearly by the transducer [i.e., good signal-to-noise ratio] but have a lower range resolution. Shorter pulses provide higher range resolution and can detect smaller and more closely spaced objects in the water. Similarly, higher power settings may decrease the utility of collected data. Power level is also adjusted according to bottom type, as some bottom types have a stronger return and require less power to produce data of sufficient quality. Power is typically set to the lowest level possible in order to receive a clear return with the best data. Survey vessels may be equipped with multiple acoustic systems; each system has different advantages that may be utilized depending on the specific survey area or purpose. In addition, many systems may be operated at one of two frequencies or at a range of frequencies. Characteristics of these sources are summarized in Table 2.

1) Multi-Frequency Narrow Beam Scientific Echosounders—Echosounders and sonars work by transmitting acoustic pulses into the water that travel through the water column, reflect off the seafloor, and return to the receiver. Water depth is measured by multiplying the time elapsed by the speed of sound in water (assuming accurate sound speed measurement for the entire signal path), while the returning signal itself carries information allowing “visualization” of the seafloor. Multi-frequency split-beam sensors are deployed from NWFSC survey vessels to acoustically map the distributions and estimate the abundances and biomasses of many types of fish; characterize their biotic and abiotic environments; investigate ecological linkages; and gather information about their schooling behavior, migration patterns, and avoidance reactions to the survey vessel. The use of multiple frequencies allows coverage of a broad range of marine acoustic survey activity, ranging from studies of small plankton to large fish schools in a variety of environments from shallow coastal waters to deep ocean basins. Simultaneous use of several discrete echosounder frequencies facilitates accurate estimates of the size of individual fish, and can also be used for species identification based on differences in frequency-dependent acoustic backscattering between species. The NWFSC operates the Simrad EK60 system, which typically transmits and receives at four frequencies ranging from 38–200 kHz.

2) Multibeam Echosounder and Sonar—Multibeam echosounders and sonars operate similarly to the devices described above. However, the use of multiple acoustic “beams” allows coverage of a greater area compared to single beam sonar. The sensor arrays for multibeam echosounders and sonars are usually mounted on the keel of the vessel and have the ability to look horizontally in the water column as well as straight down. Multibeam echosounders and sonars are used for mapping seafloor bathymetry, estimating fish biomass, characterizing fish schools, and studying fish behavior. The NWFSC operates the Simrad MB70 system, which is mounted in the hull of the research vessel and emits frequencies in the 70–120 kHz range.

3) Single-Frequency Omnidirectional Sonar—These sources provide omnidirectional imaging around the source with different vertical beamwidths available, which results in differential transmitting beam patterns. The cylindrical multi-element transducer allows the omnidirectional sonar beam to be electronically tilted down to −90°, allowing automatic tracking of schools of fish within the entire water volume around the vessel. NWFSC operates the Simrad SX90 system.

4) Acoustic Doppler Current Profiler (ADCP)—An ADCP is a type of sonar used for measuring water current velocities simultaneously at a range of depths. Whereas current depth profile measurements in the past required the use of long strings of current meters, the ADCP enables measurements of current velocities across an entire water column. The ADCP measures water currents with sound, using the Doppler effect. A sound wave has a higher frequency when it moves towards the sensor (blue shift) than when it moves away (red shift). The ADCP works by transmitting “pings” of sound at a constant frequency into the water. As the sound waves travel, they ricochet off particles suspended in the moving water, and reflect back to the instrument. Due to the Doppler effect, sound waves bounced back from a particle moving away from the profiler have a slightly lowered frequency when they return. Particles moving toward the instrument send back higher frequency waves. The difference in frequency between the waves the profiler sends out and the waves it receives is called the Doppler shift. The instrument uses this shift to calculate how fast the particle and the water around it are moving. Sound waves that hit particles far from the profiler take longer to come back than waves that strike close by. By measuring the time it takes for the waves to return to the sensor, and the Doppler shift, the profiler can measure current speed at many different depths with each series of pings.

An ADCP anchored to the seafloor can measure current speed not just at the bottom, but at equal intervals to the surface. An ADCP instrument may be anchored to the seafloor or can be mounted to a mooring or to the bottom of a boat. ADCPs that are moored need an anchor to keep them on the bottom, and a data logger. Vessel-mounted instruments need a vessel with power, a shipboard computer to receive data, a GPS navigation system, and a communication system so the ship’s movements can be subtracted from the current velocity.
data. ADCPs operate at frequencies between 75 and 300 kHz.

(5) **Net Monitoring Systems**—During trawling operations, a range of sensors may be used to assist with controlling and monitoring gear. Net sounders give information about the concentration of fish around the opening to the trawl, as well as the clearances around the opening and the bottom of the trawl; catch sensors give information about the rate at which the codend is filling; symmetry sensors give information about the optimal geometry of the trawls; and tension sensors give information about how much tension is in the warps and sweeps. NMFS uses the Simrad ITI Catch Monitoring System, which allows monitoring of the exact position of the gear and of what is happening in and around the trawl, and the Simrad FS70 Third Wire Net Sonde, which allows monitoring of the trawl opening.

### Table 2—Operating Characteristics of NWFSC Active Acoustic Sources

<table>
<thead>
<tr>
<th>Active acoustic system</th>
<th>Operating frequencies (kHz)</th>
<th>Maximum source level</th>
<th>Single ping duration (ms) and repetition rate (Hz)</th>
<th>Orientation/directionality</th>
<th>Nominal beamwidth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simrad EK60 narrow beam echosounder</td>
<td>38, 70, 120, 200</td>
<td>224 dB</td>
<td>1 ms at 1 Hz</td>
<td>Downward looking</td>
<td>11°</td>
</tr>
<tr>
<td>Simrad ME70 multibeam echosounder</td>
<td>70–120</td>
<td>205 dB</td>
<td>2 ms at 1 Hz</td>
<td>Downward looking</td>
<td>0°–90° tilt angle from vertical (average).</td>
</tr>
<tr>
<td>Simrad SX90 omnidirectional multibeam sonar</td>
<td>70–120</td>
<td>206 dB</td>
<td>2 ms at 1 Hz</td>
<td>Downward omnidirectional</td>
<td>40° x 100°</td>
</tr>
<tr>
<td>Teledyne RD Instruments ADCP, Ocean Surveyor</td>
<td>75</td>
<td>224 dB</td>
<td>External trigger</td>
<td>Downward looking (30° tilt)</td>
<td>40° x 100°</td>
</tr>
<tr>
<td>Simrad ITI Trawl Monitoring System</td>
<td>27–33</td>
<td>&lt;200 dB</td>
<td>0.05–0.5 Hz</td>
<td>Downward looking</td>
<td>40° x 100°</td>
</tr>
<tr>
<td>Simrad FS70 trawl sonar</td>
<td>330</td>
<td>216</td>
<td>1 ms at 120 kHz</td>
<td>Third wire trawl sonar for monitoring net opening and fishing conditions</td>
<td>40°</td>
</tr>
</tbody>
</table>

### Proposed Mitigation

In order to issue an incidental take authorization under section 101(a)(5)(A) of the MPPA, NMFS must set forth the permissible methods of taking pursuant to such activity, “and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for subsistence uses.” Note that taxonomic information for certain species mentioned in this section is provided in the following section (“Description of Marine Mammals in the Area of the Specified Activity”).

The NWFSC has invested significant time and effort in identifying technologies, practices, and equipment to minimize the impact of the proposed activities on marine mammal species and stocks and their habitat. These efforts have resulted in the consideration of many potential mitigation measures, including those the NWFSC has determined to be feasible and has implemented in recent years as a standard part of sampling protocols. These measures include the move-on rule mitigation protocol (also referred to in the preamble as the move-on rule), protected species visual watches and use of acoustic pingers on trawl gear, as well as use of a marine mammal excluder device (MMED) in Nordic 264 midwater trawls.

**Development of Mitigation Measures**

In survey year 2008 in the CCE, NMFS’ SWFSC had dramatically more incidental takes of marine mammals in research gear, in terms of both interactions and animals captured, than in any other year. The SWFSC had previously conducted over a thousand midwater trawl survey tows over more than 25 years, with very few incidents of marine mammal interactions (Hewitt, 2009), but the number of incidental takes in 2008 exceeded the aggregate total over all preceding years. Following the first SWFSC survey cruise in April 2008, during which a number of marine mammals were captured in trawl gear, the SWFSC convened a workshop involving SWFSC staff with expertise in survey design and operations and marine mammal bycatch mitigation (Hewitt, 2009). Participants worked to determine appropriate mitigation measures and to consider changes to sampling protocols in an effort to reduce marine mammal interactions.

The SWFSC also allocated resources towards the design, construction, and testing of a MMED that could be incorporated into the Nordic 264 trawl net, use of which had resulted in a large portion of takes. In 2009, the MMED was tested and use of the device added to SWFSC standard survey protocol for the Nordic 264 net (Dotson et al., 2010).

These efforts resulted in the consideration of many potential mitigation measures for all NMFS Science Centers, including those the NWFSC has determined to be feasible and relevant to their operations. These measures include the move-on rule, protected species visual watches and use of acoustic pingers on certain trawl gear, as well as use of the MMED in Nordic 264 trawls.

**General Measures**

**Coordination and communication**—When NWFSC survey effort is conducted aboard NOAA-owned vessels, there are both vessel officers and crew and a scientific party. Vessel officers and crew are not composed of NWFSC staff, but are employees of NOAA’s Office of Marine and Aviation Operations (OMAO), which is responsible for the management and operation of NOAA fleet ships and aircraft and is composed of uniformed officers of the NOAA Commissioned Corps as well as civilians. The ship’s officers and crew provide mission support and assistance to embarked scientists, and the vessel’s Commanding Officer (CO) has ultimate responsibility for vessel and passenger safety and, therefore, decision authority. When NWFSC survey effort is conducted aboard cooperative platforms (i.e., non-NOAA vessels), ultimate responsibility and decision authority again rests with non-NWFSC personnel (i.e., vessel’s master or captain). Decision authority includes the implementation of mitigation measures (e.g., whether to stop deployment of trawl gear upon observation of marine mammals). The scientific party involved in any NWFSC survey effort is composed, in part or whole, of NWFSC staff and is led by a Chief Scientist (CS). Therefore, because the NWFSC—not OMAO or any other entity that may have authority over survey platforms used by NWFSC—is the applicant to whom any incidental take authorization issued under the authority of these proposed regulations would be issued, we require that the NWFSC take all necessary measures to
coordinate and communicate in advance of each specific survey with OMAO, or other relevant parties, to ensure that all mitigation measures and monitoring requirements described herein, as well as the specific manner of implementation and relevant event-contingent decision-making processes, are clearly understood and agreed-upon. This may involve description of all required measures when submitting cruise instructions to OMAO or when completing contracts with external entities. NWFSC will coordinate and conduct briefings at the outset of each survey and as necessary between ship’s crew (CO/master or designee(s), as appropriate) and scientific party in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures. The CS will be responsible for coordination with the Officer on Deck (OOD; or equivalent on non-NOAA platforms) to ensure that requirements, procedures, and decision-making processes are understood and properly implemented.

**Vessel speed**—Vessel speed during active sampling rarely exceeds 5 kn, with typical speeds being 2–4 kn. Transit speeds vary from 6–14 kn but average 10 kn. These low vessel speeds minimize the potential for ship strike (see “Potential Effects of the Specified Activity on Marine Mammals and Their Habitat” for an in-depth discussion of ship strike). At any time during a survey or in transit, if a crew member standing watch or dedicated marine mammal observer sight marine mammals that may intersect with the vessel course that individual will immediately communicate the presence of marine mammals to the bridge for appropriate course alteration or speed reduction, as possible, to avoid incidental collisions.

**Other gears**—The NWFSC deploys a wide variety of gear to sample the marine environment during all of their research cruises. Many of these types of gear (e.g., plankton nets, video camera and ROV deployments) are not considered to pose any risk to marine mammals and are therefore not subject to specific mitigation measures. However, at all times when the NWFSC is conducting survey operations at sea, the OOD and/or CS and crew will monitor for any unusual circumstances that may arise at a sampling site and use best professional judgment to avoid any potential risks to marine mammals during use of all research equipment.

**Handling procedures**—The NWFSC will implement a number of handling protocols to minimize potential harm to marine mammals that are incidentally taken during the course of fisheries research activities. In general, protocols have already been prepared for use on commercial fishing vessels. Because incidental take of marine mammals in fishing gear is similar for commercial fisheries and research surveys, NWFSC proposes to adopt these protocols, which are expected to increase post-release survival. In general, following a “common sense” approach to handling captured or entangled marine mammals will present the best chance of minimizing injury to the animal and of decreasing risks to scientists and vessel crew. Handling or disentangling marine mammals carries inherent safety risks, and using best professional judgment and ensuring human safety is paramount.

Captured live or injured marine mammals are released from research gear and returned to the water as soon as possible with no gear or as little gear remaining on the animal as possible. Animals are released without removing them from the water if possible and data collection is conducted in such a manner as not to delay release of the animal(s) or endanger the crew. NWFSC staff will be instructed on how to identify different species; handle and bring marine mammals aboard a vessel; assess the level of consciousness; remove fishing gear; and return marine mammals to water.

**Trawl Survey Visual Monitoring and Operational Protocols**

Specific mitigation protocols are required for all trawl operations conducted by the NWFSC using Nordic 264 surface trawl gear, midwater trawl gear (modified Cobb, Aleutian Wing, and various commercial nets), and bottom trawl gear (double-rigged shrimp, Poly Nor’easter, modified Aberdeen, beam, and various commercial nets). Separate protocols (described below) are in place for the Nordic surface trawl and pair trawl gear. Marine mammal watches will be conducted for at least ten minutes prior to the beginning of the planned set and throughout the tow and net retrieval, by scanning the surrounding waters with the naked eye and rangefinding binoculars (or monocular). Lookouts immediately alert the OOD and CS as to their best estimate of the species and number of animals observed and any observed animal’s distance, bearing, and direction of travel relative to the ship’s position. The CS must confirm with the OOD that no marine mammals have been sighted within 500 m of the vessel or appear to be approaching the vessel during the pre-set watch period prior to the deployment of any trawl gear. During nighttime operations, visual observation may be conducted using the naked eye and available vessel lighting but effectiveness is limited. The visual observation period typically occurs during transit leading up to arrival at the sampling station, rather than upon arrival on station. However, in some cases it may be necessary to conduct a plankton tow or other small net cast prior to deploying trawl gear. In these cases, the visual watch will continue until trawl gear is ready to be deployed. Aside from pre-trawl monitoring, the OOD/CS and crew standing watch will visually scan for marine mammals during all daytime operations.

It is important to note that the 500 m distance is provided only as a frame of reference for marine mammal observations that would nominally be of greater concern as regards the potential for interaction with research fishing gear. The primary concern is to avoid all marine mammal interactions (regardless of the numbers of takes proposed for authorization here), and the most appropriate course of action to achieve this goal in any given instance is likely to be related more to event-specific elements than to an arbitrary distance from the vessel. Depending on unpredictable contextual elements, animals sighted at distances greater than 500 m could provoke mitigation action or, conversely, animals sighted at closer range could be determined not to be at risk of interacting with research fishing gear. The NWFSC considers 500 m to be the average effective observation distance, but the actual effective range is determined by numerous factors related to the weather, ship observations, and the species observed.

The primary purpose of conducting pre-trawl visual monitoring is to implement the move-on rule. If marine mammals are sighted within 500 m (or as far as may be observed if less than 500 m) of the vessel and are considered at risk of interacting with the vessel or research gear, or appear to be approaching the vessel, then the vessel is considered at risk of interaction, NWFSC may elect to either remain on site to see if the animals move off or may move on to another sampling location. When remaining on site, the set is delayed (typically for at least ten minutes) and, if the animals depart or appear to no longer be at risk of interacting with the vessel or research gear, a further ten minute observation period is conducted. If no further observations are made or the animals still do not appear to be at risk of interaction, then the set may be made. If the vessel is moved to a different section of the sampling area,
move-on rule mitigation protocols would begin anew. If, after moving on, marine mammals remain at risk of interaction, the CS or watch leader may decide to move again or to skip the station. Marine mammals that are sighted further than 500 m from the vessel would be monitored to determine their position and movement in relation to the vessel. If they appear to be closing on the vessel, the move-on rule protocols may be implemented even if they are initially further than 500 m from the vessel.

For surface trawl surveys (i.e., those surveys deploying the Nordic 264 net), which have historically presented the greatest risk of marine mammal interaction, dedicated crew are assigned to marine mammal monitoring duty (i.e., have no other tasks) and are taken to provide some rest periods for observers to avoid fatigue. At least two pairs of binoculars are available for verification of potential sightings. As the vessel approaches the station, the OOD and at least one assigned member of the scientific party monitor for marine mammals. Within several minutes of arriving on station and finishing their sampling duties, two additional members of the scientific party are assigned to monitor for marine mammals and, for the remainder of the tow, there would be a minimum of three members of the scientific party watching for marine mammals. Depending on the situational context (e.g., numbers of marine mammals seen during the station approach or expected at that particular place and season), additional crew may be assigned to stand watch as necessary to provide full monitoring coverage around the vessel. Up to eight observers in total (including ship’s crew standing watch) may be on duty during active trawling. The focus on the full area around the ship continues until trawl retrieval begins, at which point observational focus turns to the stern and the trawl net itself.

For midwater and bottom trawl surveys, the pre-set watch period is conducted by the OOD and bridge crew and typically occurs during transit prior to arrival at the sampling station, but may also include time on station if other types of gear or equipment (e.g., bongo nets) are deployed before the trawl. For these trawls, risk of interaction during the tow is lower and monitoring effort is reduced to the bridge crew until trawl retrieval.

For all surveys, although the minimum pre-set watch period is ten minutes, the actual monitoring period is typically longer. During standard trawl operations, at least some of the trackline to be towed is typically traversed prior to setting gear in order to check for hazards. On surface trawl surveys, CTD casts and plankton/bongo net hauls are made prior to setting the trawl. These activities can take 25–35 minutes after the vessel arrives on station, depending on water depth, and monitoring for marine mammals continues throughout these activities. Midwater trawls and bottom trawls do not typically deploy other gears before deploying trawl gear but reconnaissance of the trackline often takes ten to fifteen minutes after arriving on station. In addition, once the decision is made to deploy the trawl gear, monitoring continues while the net is unspooling, which may take about ten minutes. Before the trawl doors are deployed, the net floats closed on the surface behind the vessel, and appropriate actions can be taken if marine mammals are sighted near the ship. Therefore, the marine mammal monitoring period—which begins before the vessel arrives on station and extends continuously through gear deployment—typically extends for over thirty minutes for all trawl types.

The effectiveness of visual monitoring may be limited depending on weather and lighting conditions. The OOD, CS or watch leader will determine the best strategy to avoid potential takes of marine mammals based on the species encountered and their numbers and behavior, position, and vector relative to the vessel, as well as any other factors. For example, a whale transiting through the sampling area in the distance may only require a short move from the designated station, whereas a pod of dolphins in close proximity to the vessel may require a longer move from the station or possibly cancellation of the planned tow if the group follows the vessel.

In general, trawl operations will be conducted immediately upon arrival on station (and on conclusion of the pre-watch period) in order to minimize the time during which marine mammals (particularly pinnipeds) may become attracted to the vessel. However, in some cases it will be necessary to conduct small net tows (e.g., bongo net) prior to deploying trawl gear.

Once the trawl net is in the water, the OOD, CS, and/or crew standing watch will continue to visually monitor the surrounding waters and maintain a lookout for marine mammal presence as far away as environmental conditions allow. If marine mammals are sighted before the gear is fully retrieved, the most appropriate response to avoid marine mammal interaction will be determined by the professional judgment of the CS, watch leader, OOD and other experienced crew as necessary. This judgment will be based on past experience operating trawl gears around marine mammals (i.e., best professional judgment) and on NWFSC training sessions that will facilitate dissemination of expertise operating in these situations (e.g., factors that contribute to marine mammal gear interactions and those that aid in successfully avoiding such events). Best professional judgment takes into consideration the species, numbers, and behavior of the animals, the status of the trawl net operation (e.g., net opening, depth, and distance from the stern), the time it would take to retrieve the net, and safety considerations for changing speed or course. We recognize that it is not possible to dictate in advance the exact course of action that the OOD or CS should take in any given event involving the presence of marine mammals in proximity to an ongoing trawl tow, given the sheer number of potential variables, combinations of variables that may determine the appropriate course of action, and the need to consider human safety in the operation of fishing gear at sea. Nevertheless, we require a full accounting of factors that shape both successful and unsuccessful decisions, and these details will be fed back into NWFSC training efforts and ultimately help to refine the best professional judgment that determines the course of action taken in any given scenario (see further discussion in “Proposed Monitoring and Reporting”).

If trawling operations have been suspended because of the presence of marine mammals, the vessel will resume trawl operations (when practicable) only when the animals are believed to have departed the area. This decision is at the discretion of the OOD/CS and is dependent on the situation.

Standard survey protocols that are expected to lessen the likelihood of marine mammal interactions include standardized tow durations and distances. Standard tow durations of not more than thirty minutes at the target depth will typically be implemented, excluding deployment and retrieval time (which may require an additional thirty minutes, depending on target depth), to reduce the likelihood of attracting and incidentally taking marine mammals. Short tow durations decrease the opportunity for marine mammals to find the vessel and investigate. Trawl tow distances will be less than 3 nm—typically 1–2 nm, depending on the specific survey and trawl speed—which is expected to reduce the likelihood of attracting and incidentally taking marine mammals. In addition, care will be taken when
emptying the trawl to avoid damage to marine mammals that may be caught in the gear but are not visible upon retrieval. The gear will be emptied as quickly as possible after retrieval in order to determine whether or not marine mammals are present. The vessel’s crew will clean trawl nets prior to deployment to remove prey items that might attract marine mammals. Catch volumes are typically small with every attempt made to collect all organisms caught in the trawl.

**Marine mammal excluder device**

Excluder devices are specialized modifications, typically used in trawl nets, which are designed to reduce bycatch by allowing non-target taxa to escape the net. These devices generally consist of a grid of bars fitted into the net that allow target species to pass through the bars into the codend while larger, unwanted taxa (e.g., turtles, sharks, mammals) strike the bars and are ejected through an opening in the net. Marine turtle bycatch in the commercial shrimp trawl industry led to the development of turtle excluder devices (TED) (e.g., Mitchell et al., 1995) in the 1970s. TEDs are perhaps the most commonly used excluder devices, but devices designed specifically for the exclusion of marine mammals have also been developed for various fisheries around the world where marine mammal interactions are problematic (e.g., Gibson and Isaksson, 1998; Northridge, 2003).

Similar to TEDs, MMEDs generally consist of a large aluminum grate positioned in the intermediate portion of the net forward of the codend and below an escape opening constructed into the upper net panel above the grate. These devices enable target species to pass through a grid or mesh barrier and into the codend while preventing the passage of marine mammals, which are ejected out through an escape opening or swim back out of the mouth of the net. The angled aluminum grate is intended to guide marine mammals through the escape opening. For full details of design and testing of the MMED designed by the SWFSC for the Nordic 264 net, please see Dotson et al. (2010).

MMEDs have not been proven to be fully effective at preventing marine mammal capture in trawl nets (e.g., Chilvers, 2008) and are not expected to prevent marine mammal capture in NWFSF trawl surveys. It is difficult to effectively test such devices, in terms of effectiveness in excluding marine mammals as opposed to effects on target species catchability, because realistic field trials would necessarily involve marine mammal interactions with trawl nets. Use of artificial surrogates in field trials has not been shown to be a realistic substitute (Gibson and Isaksson, 1998). Nevertheless, we believe it reasonable to assume that use of MMEDs may reduce the likelihood of a given marine mammal interaction with trawl gear resulting in mortality. We do not infer causality, but note that annual marine mammal interactions with the Nordic 264 trawl net have been much reduced for the SWFSC (relative to 2008) since use of the MMED began.

Multiple types of midwater trawl nets are used in NWFSF trawl surveys. The Nordic 264 trawl net, used as a surface trawl by NWFSF, is generally much larger than the midwater trawls, is fished at faster speeds, and has a different shape and functionality than these nets. Very few marine mammal interactions with NWFSF pelagic trawl gear have involved nets other than the Nordic 264 (one of 37 total incidents since 1999; Table 4). Therefore, MMED use is not proposed for nets other than the Nordic 264.

The NWFSF has tested the MMED design used by the SWFSC and found that it caused a significant loss of some salmon species that were the target of their research. More recent experiments have used video cameras attached to the net opening and near the excluder device to test different configurations of the excluder device to minimize loss of target species. The experiments have looked at adding weight and stiffeners to the flap covering the escape hatch to keep it closed and flipping the MMED so the escape hatch faces down rather than up. Based on preliminary results, this downward-pointing escape hatch appears to be the best design for minimizing loss of target species.

Additional research will be necessary to calibrate catch levels in tows with the exclude device compared to past tows that did not contain the excluder (i.e., to align the new catchability rates with historical data sets). During these configuration and calibration experiments some nets will be fished without the MMED in order to provide controls for catchability. Once the NWFSF completes these experiments the MMED will be used in all future trawls with the Nordic 264. Please see “Proposed Monitoring and Reporting” for additional discussion.

**Acoustic deterrent devices**—Acoustic deterrent devices (pingers) are underwater sound-emitting devices that have been shown to decrease the probability of interactions with certain species of marine mammals when fishing gear is fitted with the devices. Multiple studies have reported large decreases in harbor porpoise mortality (approximately eighty to ninety percent) in bottom-set gillnets (nets composed of vertical panes of netting, typically set in a straight line and either anchored to the bottom or drifting) during controlled experiments (e.g., Kraus et al., 1997; Trippel et al., 1999; Gearin et al., 2000). Using commercial fisheries data rather than a controlled experiment, Palka et al. (2008) reported that harbor porpoise bycatch rates in the northeast U.S. gillnet fishery when fishing without pingers was about two to three times higher compared to when pingers were used. After conducting a controlled experiment in a California drift gillnet fishery during 1996–97, Barlow and Cameron (2003) reported significantly lower bycatch rates when pingers were used for all cetacean species combined, all pinniped species combined, and specifically for short-beaked common dolphins (85 percent reduction) and California sea lions (69 percent reduction). While not a statistically significant result, catches of Pacific white-sided dolphins (which are historically one of the most frequently captured species in NWFSF surveys; see Table 4) were reduced by seventy percent. Carretta et al. (2008) subsequently examined nine years of observer data from the same drift gillnet fishery and found that pinger use had eliminated beaked whale bycatch.

Carretta and Barlow (2011) assessed the long-term effectiveness of pingers in reducing marine mammal bycatch in the California drift gillnet fishery by evaluating fishery data from 1990–2009 (with pingers in use beginning in 1996), finding that bycatch rates of cetaceans were reduced nearly fifty percent in sets using a sufficient number of pingers. However, in contrast to the findings of Barlow and Cameron (2003), they report no significant difference in pinniped bycatch.

To be effective, a pinger must emit a signal that is sufficiently aversive to deter the species of concern, which requires that the signal is perceived while also deterring investigation. In rare cases, aversion may be learned as a warning when an animal has survived interaction with gear fitted with pingers (Dawson, 1994). The mechanisms by which pingers work in operational settings are not fully understood, but field trials and captive studies have shown that sounds produced by pingers are aversive to harbor porpoises (e.g., Laake et al., 1998; Kastelein et al., 2000; Culik et al., 2001), and it is assumed that when marine mammals are deterred from interacting with gear fitted with pingers that it is because the sounds produced by the devices are aversive.
Two primary concerns expressed with regard to pinger effectiveness in reducing marine mammal bycatch relate to habituation (i.e., marine mammals may become habituated to the sounds made by the pingers, resulting in increasing bycatch rates over time; Dawson, 1994; Cox et al., 2001; Carlström et al., 2009) and the “dinner bell effect” (Dawson, 1994; Richardson et al., 1995), which implies that certain predatory marine mammal species (e.g., sea lions) may come to associate pingers with a food source (e.g., fish caught in nets) with the result that bycatch rates may be higher in nets with pingers than in those without.

Palka et al. (2008) report that habituation has not occurred on a level that affects the bycatch estimate for the northeast U.S. gillnet fishery, while cautioning that the data studied do not provide a direct method to study habituation. Similarly, Carretta and Barlow (2011) report that habituation is not apparent in the California drift gillnet fishery, with the proportion of pinger-equipped sets with bycatch not significantly different for either cetaceans or pinnipeds between the periods 1996–2001 and 2001–09; in fact, bycatch rates for both taxa overall were lower in the latter period. We are not aware of any long-term behavioral studies investigating habituation. Bycatch rates of California sea lions, specifically, did increase during the latter period. However, the authors do not attribute the increase to pinger use (i.e., the “dinner bell effect”); rather, they believe that continuing increases in population abundance for the species (Carretta et al., 2015a) coincident with a decline in fishery effort are responsible for the increased rate of capture. Despite these potential limitations on the effectiveness of pingers, and while effectiveness has not been tested on trawl gear, we believe that the available evidence supports an assumption that use of pingers is likely to reduce the potential for marine mammal interactions with NWFSC trawl gear.

If one assumes that use of a pinger is effective in deterring marine mammals from interacting with fishing gear, one must therefore assume that receipt of the acoustic signal has a disturbance effect on those marine mammals (i.e., Level B harassment). However, Level B harassment that may be incurred as a result of NWFSU use of pingers does not constitute take that must be authorized under the MMPA. The MMPA prohibits the taking of marine mammals by U.S. citizens or within the U.S. EEZ unless such taking is appropriately permitted or authorized. However, the MMPA provides several narrowly defined exemptions from this requirement (e.g., for Alaskan natives; for defense of self or others; for Good Samaritans [16 U.S.C. 1371(b)–(d)]). Section 109(h) of the MMPA (16 U.S.C. 1379(h)) allows for the taking of marine mammals in a humane manner by federal, state, or local government officials or employees in the course of their official duties if the taking is necessary for “the protection or welfare of the mammal,” “the protection of the public health and welfare,” or “the non-lethal removal of nuisance animals.” NWFSU use of pingers as a deterrent device, which may cause Level B harassment of marine mammals, is intended solely for the avoidance of potential marine mammal interactions with NWFSU research gear (i.e., avoidance of Level A harassment, serious injury, or mortality). Therefore, use of such deterrent devices, and the taking that may result, is for the protection and welfare of the mammal and is covered explicitly under MMPA section 109(h)(1)(A). Potential taking of marine mammals resulting from NWFSU use of pingers is not discussed further in this document.

Pingers will be deployed during all surface trawl operations (i.e., using the Nordic 264 net), with two pairs of pingers installed near the net opening. The vessel’s crew will ensure that pingers are operational prior to deployment. Pinger brands typically used by NWFSU include the Aquatec Subsea Limited model AQUAmark and Fumunda Marine models F10 and F70, with the following attributes: (1) Operational depth of 10–200 m; (2) tones range from 200–400 ms in duration, repeated every five to six seconds; (3) variable frequency of 10–160 kHz; and (4) maximum source level of 145 dB rms re 1 μPa. Please see “Marine Mammal Hearing” below for reference to functional and best hearing ranges for marine mammals present in the CCE. Kodiak surface trawl and pair trawl gear—The Kodiak surface trawl, used only in Puget Sound, has only limited potential for marine mammal interaction. This gear type is a small net towed at slow speeds (about 2 kn) as close to shore as the net can be fished, and these characteristics mean that marine mammals would likely be able to avoid the net or swim out of it if necessary. However, rules for cetaceans would be similar as for other net types (i.e., delay and/or move-on if cetaceans observed within approximately 500 m or clearly approaching from greater distance). If killer whales are observed at any distance, the net would not be deployed and the move-on rule invoked.

The pair trawl is used only in the Columbia River, and is fished with an open codend. Although unlikely, there is some potential for pinnipeds to become entangled in the net material. NWFSU’s practice, which would be allowed under section 109(h) of the MMPA, is to deter pinnipeds from encountering the net using pyrotechnic devices and other measures. Therefore, separate mitigation is not warranted, and we do not discuss NWFSU deterrents of pinnipeds associated with pair trawl surveys further in this document. Please see the NWFSU’s draft Programmatic Environmental Assessment for further information about this practice.

Longline and Other Hook and Line Survey Visual Monitoring and Operational Protocols

Visual monitoring requirements for all longline surveys are similar to the general protocols described above for trawl surveys. Please see that section for full details of the visual monitoring protocol and the move-on rule mitigation protocol. In summary, requirements for longline surveys are to: (1) Conduct visual monitoring during the thirty-minute period prior to arrival on station; (2) implement the move-on rule if marine mammals are observed within the area around the vessel and maybe at risk of interacting with the vessel or gear; (3) deploy gear as soon as possible upon arrival on station (depending on presence of marine mammals); and (4) maintain visual monitoring effort throughout deployment and retrieval of the longline gear. As was described for trawl gear, the OOD, CS, or watch leader will use best professional judgment to minimize the risk to marine mammals from potential gear interactions during deployment and retrieval of gear. If marine mammals are detected during setting operations and are considered to be at risk, immediate retrieval or suspension of operations may be warranted. If operations have been suspended because of the presence of marine mammals, the vessel will resume setting (when practicable) only when the animals are believed to have departed the area. If marine mammals are detected during retrieval operations and are considered to be at risk, haul-back may be postponed. These decisions are at the discretion of the OOD/CS and are dependent on the situation. If killer whales are observed at any distance, the set would not occur and the move-on rule would be invoked.}

Other types of hook and line surveys (e.g., rod and reel) generally use the same protocols as longline surveys.
However, for hook and line surveys in Puget Sound the move-on rule is not required for pinnipeds because they are commonly abundant on shore nearby hook and line sampling locations. Use of the move-on rule in these circumstances would represent an impracticable impact on NWFSC survey operations, and we note that no marine mammals have ever been captured in NWFSC hook and line surveys (Table 4). However, the NWFSC would implement the move-on rule for hook and line surveys in Puget Sound for any cetaceans that are within 500 m and may be at risk of interaction with the survey operation. If killer whales are observed at any distance, fishing would not occur.

As for trawl surveys, some standard survey protocols are expected to minimize the potential for marine mammal interactions. Soak times are typically short relative to commercial fishing operations, measured from the time the last hook is in the water to when the first hook is brought out of the water. NWFSC trawl survey protocols specifically prohibit chumming (releasing additional bait to attract target species to the gear) and spent bait and offal is retained on the vessel until all gear has been retrieved. Some hook and line surveys use barbless hooks, which are less likely to injure a hooked animal.

Seine Survey Visual Monitoring and Operational Protocols

Visual monitoring and operational protocols for seine surveys are similar to those described previously for trawl surveys, with a focus on visual observation in the survey area and avoidance of marine mammals that may be at risk of interaction with survey vessels or gear. For purse seine operations, visual monitoring is focused on avoidance of cetaceans and aggregations of pinnipeds. Individual or small numbers of pinnipeds may be attracted to purse seine operations, especially in Puget Sound, and are frequently observed to enter operational purse seines to depredate the catch and exit the net unharmed. Use of the move-on rule in these circumstances would represent an impracticable impact on NWFSC survey operations, and we note that no marine mammals have ever been captured in NWFSC seine surveys (Table 4).

If pinnipeds are in the immediate vicinity of a purse seine survey, the set may be delayed until animals move away or the move-on rule is determined to be appropriate, but the net would not be opened if already deployed and pinnipeds enter it. However, delay would not be invoked if only few pinnipeds are present (e.g., less than five), and they do not appear to obviously be at risk.

If any dolphins or porpoises are observed within approximately 500 m of the purse seine survey location, the set would be delayed. If any dolphins or porpoises are observed in the net, the net would be immediately opened to free the animals. If killer whales or other large whales are observed at any distance the net would not be set, and the move-on rule would be invoked. Beach seines are typically set nearshore by small boat crews, who visually survey the area prior to the set. The set would not be made within 200 m of any hauled pinnipeds. Otherwise, marine mammals are unlikely to be at risk of interaction with NWFSC beach seine operations, as the nets are relatively small and deployed and retrieved slowly. If a marine mammal is observed attempting to interact with the beach seine gear, the gear would immediately be lifted and removed from the water.

Tangle net protocols—Tangle nets are used only in the Columbia River. NWFSC attempts to avoid pinnipeds by rotating sampling locations on a daily basis and by avoiding fishing near haulout areas. However, as was described for NWFSC use of pair trawl gear in the LCRRA, NWFSC also deters pinnipeds from interacting with tangle net gear as necessary using pyrotechnic devices and visual presence, a practice allowed under section 109(h) of the MMPA. Therefore, we do not discuss NWFSC deterrence of pinnipeds associated with tangle net surveys further in this document. Please see the NWFSC’s draft Programmatic Environmental Assessment for further information about this practice. If pinniped presence in the vicinity of tangle net surveys is so abundant as to be uncontrollable through deterrence, sampling would be discontinued for a given day.

We have carefully evaluated the NWFSC’s proposed mitigation measures and considered a range of other measures in the context of ensuring that we prescribed the means of effecting the least practicable adverse impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another: (1) The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals, (2) the practicability of the specific measure to minimize adverse impacts as planned; and (3) the practicability of the measure for applicant implementation.

Any mitigation measure(s) we prescribe should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

(1) Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).

(2) A reduction in the number (total number or number at biologically important time or location) of individual marine mammals exposed to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing takes by behavioral harassment only).

(3) A reduction in the number (total number or number at a biologically important time or location) of times any individual marine mammal would be exposed to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing takes by behavioral harassment only).

(4) A reduction in the intensity of exposure to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing the severity of behavioral harassment only).

(5) Avoidance or minimization of adverse effects to marine mammal habitat, paying particular attention to the prey base, blockage or limitation of passage to or from biologically important areas, permanent destruction of habitat, or temporary disturbance of habitat during a biologically important time.

(6) For monitoring directly related to mitigation, an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on our evaluation of the NWFSC’s proposed measures, as well as other measures we considered, we have preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Description of Marine Mammals in the Area of the Specified Activity

We have reviewed NWFSC’s species descriptions—which summarize available information regarding status and trends, distribution and habitat preferences, behavior and life history, and auditory capabilities of the
potentially affected species—for accuracy and completeness and refer the reader to Sections 3 and 4 of NWFSC’s application, as well as to NMFS’ Stock Assessment Reports (SARs; www.nmfs.noaa.gov/pr/sars/), instead of reprinting the information here. Table 3 lists all species with expected potential for occurrence in the specified geographical region where NWFSC proposes to conduct the specified activity and summarize information related to the population or stock, including potential biological removal (PBR). For taxonomy, we follow Committee on Taxonomy (2015). PBR, defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population, is discussed in greater detail later in this document (see “Negligible Impact Analyses”). Species that could potentially occur in the proposed research areas but are not expected to have the potential for interaction with NWFSC research gear or that are not likely to be harassed by NWFSC’s use of active acoustic devices are described briefly but omitted from further analysis. These include extralimital species, which are species that do not normally occur in a given area but for which there are one or more occurrence records that are considered beyond the normal range of the species. For status of species, we provide information regarding U.S. regulatory status under the MMPA and ESA.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study area. NMFS’ stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. Survey abundance (as compared to stock or species abundance) is the total number of individuals estimated within the survey area, which may or may not align completely with a stock’s geographic range as defined in the SARs. These surveys may also extend beyond U.S. waters.

Thirty-four species (with 43 managed stocks) are considered to have the potential to co-occur with NWFSC activities. Extralimital species or stocks in the California Current include the Bryde’s whale (Balaenoptera edeni brydei) and the North Pacific right whale (Eubalaena japonica). In addition, the sea otter is found in coastal waters, with the southern sea otter (Enhydra lutris nereis) found in California and the northern (or eastern) sea otter (E. l. kenyonii; Washington stock only) found in Washington. However, sea otters are managed by the U.S. Fish and Wildlife Service and are not considered further in this document. All stocks are assessed in NMFS’ U.S. Pacific SARs (Carretta et al., 2015a,b), with the exception of the west coast transient and northern resident stocks of killer whales, the eastern North Pacific stock of the northern fur seal, and the eastern stock of the Steller sea lion, which are considered in the U.S. Alaska SARs (Allen and Angliss, 2015; Muto and Angliss, 2015). Values presented in Table 3 reflect the most recent information available (i.e., final 2014 and draft 2015 reports, as appropriate). Two populations of gray whales are recognized, eastern and western North Pacific (ENP and WNP). WNP whales are known to feed in the Okhotsk Sea and off of Kamchatka before migrating south to poorly known wintering grounds, possibly in the South China Sea. The two populations have historically been considered geographically isolated from each other; however, recent data from satellite-tracked whales indicate that there is some overlap between the stocks. Two WNP whales were tracked from Russian foraging areas along the Pacific rim to Baja California (Mate et al., 2011), and, in one case where the satellite tag remained attached to the whale for a longer period, a WNP whale was tracked from Russia to Mexico and back again (IWC, 2012). Between 22–24 WNP whales are known to have occurred in the eastern Pacific through comparisons of ENP and WNP photo-identification catalogs (IWC, 2012; Weller et al., 2011; Burdin et al., 2011), and WNP animals comprised 8.1 percent of gray whales identified during a recent field season off of Vancouver Island (Weller et al., 2012). In addition, two genetic matches of WNP whales have been recorded off of Santa Barbara, CA (Lang et al., 2011). More recently, Urban et al. (2013) compared catalogs of photo-identified individuals from Mexico with photographs of whales off Russia and reported a total of 21 matches. Therefore, a portion of the WNP population is assumed to migrate, at least in some years, to the eastern Pacific during the winter breeding season.

However, the NWFSC does not believe that any gray whale (WNP or ENP) would be likely to interact with its research gear, as it is extremely unlikely that a gray whale in close proximity to NWFSC research activity would be one of the approximately twenty WNP whales that have been documented in the eastern Pacific. The likelihood that a WNP whale would interact with NWFSC research gear is insignificant and discountable, and WNP gray whales are omitted from further analysis.

### Table 3—Marine Mammals Potentially Present in the Vicinity of NWFSC Research Activities

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Stock</th>
<th>Occurrence</th>
<th>ESA/MMPA status; strategic (Y/N)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Stock abundance (CV, N&lt;sub&gt;min&lt;/sub&gt;, most recent abundance survey)&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PBR</th>
<th>Annual M/SI&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Order Cetartiodactyla—Cetacea—Superfamily Mysticeti (baleen whales)</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Eschrichtiidae</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gray whale</td>
<td><em>Eschrichtius robustus</em></td>
<td>Eastern North Pacific ....</td>
<td>X</td>
<td>X</td>
<td>N 20,990 (0.05; 20,125; 2011)</td>
<td>624</td>
<td>132</td>
</tr>
<tr>
<td><strong>Family Balaenopteridae</strong> (rorquals)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humpback whale</td>
<td><em>Megaptera novaeangliae</em> kuziria.</td>
<td>California/Oregon/Washington (CA/OR/WA).</td>
<td>X</td>
<td>X</td>
<td>E/D; Y 1,918 (0.03; 1.855; 2011)</td>
<td>12 11</td>
<td>≥5.5</td>
</tr>
<tr>
<td>Minke whale</td>
<td><em>Balaenoptera acutorostrata scammioni</em>.</td>
<td>CA/OR/WA ....</td>
<td>X</td>
<td>X</td>
<td>N 478 (1.36; 202; 2008)</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Sei whale</td>
<td>B. borealis borealis</td>
<td>Eastern North Pacific ....</td>
<td>X</td>
<td>E/D; Y 126 (0.53; 83; 2008)</td>
<td>0.17 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fin whale</td>
<td>B. physalus physalus</td>
<td>CA/OR/WA ....</td>
<td>X</td>
<td>E/D; Y 3,051 (0.18; 2.588; 2006)</td>
<td>16 2.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## TABLE 3—MARINE MAMMALS POTENTIALLY PRESENT IN THE VICINITY OF NWFSC RESEARCH ACTIVITIES—Continued

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Stock</th>
<th>Occurrence</th>
<th>ESA/MMPA status; strategic (Y/N)1</th>
<th>Stock abundance (CV, Nmin, most recent abundance survey)2</th>
<th>PBR</th>
<th>Annual M/SI3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue whale</td>
<td>B. musculus musculus</td>
<td>Eastern North Pacific</td>
<td>X</td>
<td>E/D; Y</td>
<td>1,647 (0.07; 1,551; 2011), 123.3</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

### Superfamily Odontoceti (toothed whales, dolphins, and porpoises)

#### Family Physeteridae

| Sperm whale                  | Physeter macrocephalus             | CA/OR/WA               | X          | E/D; Y                            | 2,106 (0.58; 1,332; 2008), 2.7                           | 1.7 |             |

#### Family Kogiidae

| Pygmy sperm whale            | Kogia breviceps                   | CA/OR/WA               | X          | -; N                              | 579 (1.02; 271; 2008), 2.7                               | 0   |             |

#### Family Ziphiidae (beaked whales)

| Baird’s beaked whale         | Ziphius cavirostris               | CA/OR/WA               | X          | -; Y                              | 6,590 (0.55; 4,481; 2008), 45                            | 0   |             |
| Hubbs’ beaked whale          | Berardius bairdi                  | CA/OR/WA               | X          | -; N                              | 847 (0.81; 466; 2008), 4.7                               | 0   |             |
| Blainville’s beaked whale    | Mesoplodon carlhubisi             | CA/OR/WA               | X          | -; Y                              | 694 (0.65; 389; 2008), 3.9                               | 0   |             |
| Perrin’s beaked whale        | M. densirostris                   | CA/OR/WA               | X          | -; Y                              | 708 (1.58; 379; 2008), 4.3                               | 0   |             |
| Lesser (pygmy) beaked whale  | M. peruvianus                     | CA/OR/WA               | X          | -; Y                              | 140 (0.33; 67; 2008), 1.1                                | 0   |             |
| Stejneger’s beaked whale     | M. stejnegeri                     | CA/OR/WA               | X          | -; Y                              | 420 (0.63; 214; 2008), 1.5                               | 0   |             |

#### Family Delphinidae

| Common bottlenose dolphin    | Tursiops truncatus truncatus.     | CA/OR/WA Offshore      | X          | -; N                              | 1,006 (0.48; 684; 2008), 5.5                             | ≥2  |             |
| Striped dolphin              | Stenella coerulea                  | CA/OR/WA               | X          | -; N                              | 323 (0.13; 290; 2005), 2.4                               | 0.2 |             |
| Long-beaked common dolphin   | Delphinus capensis                | California Coastal     | X          | -; N                              | 10,908 (0.34; 8,231; 2008), 82                            | 0   |             |
| Short-beaked common dolphin  | D. delphis delphis                | CA/OR/WA               | X          | -; N                              | 107,016 (0.42; 76,224; 2009), 610                          | 13.8 |             |
| Pacific white-sided dolphin  | Lagenorhynchus obliquidens         | CA/OR/WA               | X          | X; N                              | 141,211 (0.21; 343,990; 2008), 3,440                     | 64  |             |
| Northern right whale dolphin | Lissodelphis borealis             | CA/OR/WA               | X          | -; N                              | 26,930 (0.28; 21,406; 2008), 171                          | 17.8 |             |
| Risso’s dolphin              | Grampus griseus                   | CA/OR/WA               | X          | -; N                              | 8,334 (0.4; 6,019; 2008), 48                               | 4.8  |             |
| Killer whale                 | Orcinus Orca                      | CA/OR/WA               | X          | X; N                              | 6,672 (0.3; 4,913; 2008), 39                             | 1.6  |             |
| Short-finned pilot whale     | Globicephala macrorhynchus        | CA/OR/WA               | X          | -; N                              | 670 (0.64; 465; 2008), 4.6                                | 0   |             |

#### Family Phocoenidae (porpoises)

| Harbor porpoise              | Phocoena phocoena vomerina.       | Morro Bay              | X          | -; N                              | 2,917 (0.41; 2,102; 2012), 51                             | ≥0.6 |             |
| Monterey Bay                 | X                                  |           | X          | -; N                              | 3,715 (0.51; 2,480; 2011), 25                             | 0    |             |
| San Francisco-Russian River. | X                                  |           | X          | -; N                              | 9,886 (0.51; 6,625; 2011), 66                             | 0    |             |
| Northern CA/Southern OR.     | X                                  |           | X          | -; N                              | 35,769 (0.52; 23,749; 2011), 475                           | ≥0.6 |             |
| Northern OR/WA Coast         | X                                  |           | X          | -; N                              | 21,487 (0.44; 15,123; 2011), 151                           | ≥3   |             |
| Washington Inland Waters.    | X                                  |           | X          | -; N                              | 10,682 (0.38; 7,841; 2003), 63                             | ≥2.2 |             |
| Dall’s porpoise              | Phocoenoides dalli dalli           | CA/OR/WA               | X          | X; N                              | 42,000 (0.33; 32,106; 2008), 257                           | ≥0.4 |             |

### Order Carnivora—Superfamily Pinnipedia

#### Family Otariidae (eared seals and sea lions)

| Guadalupe fur seal           | Arctocephalus philippii townsendi. | CA/OR/WA               | X          | T/D; Y                            | 7,408 (n/a; 3,028; 1993), 91                               | 12  | Does not apply |
TABLE 3—MARINE MAMMALS POTENTIALLY PRESENT IN THE VICINITY OF NWFSC RESEARCH ACTIVITIES—Continued

| Common name | Scientific name | Stock | Occurrence | ESA/MMPA status (CV, Nmin, most recent abundance survey) | Stock abundance (CV, Nmin, most recent abundance survey) | PBR | Annual M/SI
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Northern fur seal</td>
<td>Callorhinus ursinus</td>
<td>Pribilof Islands/Eastern Pacific. California</td>
<td>X ....... ....... D; Y</td>
<td>648,534 (0.2; 548,919; 2012)</td>
<td>11,802</td>
<td>439</td>
<td>11,802</td>
</tr>
<tr>
<td>California sea lion</td>
<td>Zalophus californianus</td>
<td>United States</td>
<td>X X X</td>
<td>1,596 (0.15; 1,025; 1999)</td>
<td>Undet.</td>
<td>9.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Steller sea lion</td>
<td>Eumetopias jubatus</td>
<td>Eastern U.S.</td>
<td>X X X</td>
<td>60,131−74,448 (n/a; 36,551; 2013)</td>
<td>1,645</td>
<td>92.3</td>
<td>1,645</td>
</tr>
</tbody>
</table>

Family Phocidae (earless seals)

| Common name | Scientific name | Stock | Occurrence | ESA/MMPA status (CV, Nmin, most recent abundance survey) | Stock abundance (CV, Nmin, most recent abundance survey) | PBR | Annual M/SI
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Harbor seal</td>
<td>Phoca vitulina richardii</td>
<td>California</td>
<td>X ....... ....... D; N</td>
<td>30,968 (n/a; 27,348; 2012)</td>
<td>1,641</td>
<td>43</td>
<td>1,641</td>
</tr>
<tr>
<td>Northern elephant seal</td>
<td>Mirounga angustirostris</td>
<td>California Breeding</td>
<td>X ....... ....... D; Y</td>
<td>1,098 (0.15; 711; 1999)</td>
<td>179,000 (n/a; 81,368; 2010)</td>
<td>4,882</td>
<td>8.8</td>
</tr>
</tbody>
</table>

1 Endangered Species Act (ESA) status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (−) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

2 NMFS marine mammal stock assessment reports at: www.nmfs.noaa.gov/pr/sars/. CV is coefficient of variation; Nmin is the minimum estimate of stock abundance.

3 These values, found in NMFS’ SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial fisheries, subsistence hunting, ship strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value. All M/SI values are as presented in the draft 2015 SARs (Carretta et al., 2015a). Dwarf and pygmy sperm whales are difficult to differentiate at sea but, based on previous sighting surveys and historical stranding data, it is thought that recent ship survey sightings were of pygmy sperm whales.

4 The six species of Mesoplodont beaked whales occurring in the CCE are managed as a single stock due to the rarity of records and the difficulty in distinguishing these animals to species in the field. Based on bycatch and stranding records, it appears that M. carlhubbsi is the most commonly encountered of these species (Carretta et al., 2008; Moore and Barlow, 2013). Additional managed stocks in the Pacific include M. stejnegeri in Alaskan waters and M. densirostris in Hawaiian waters.

5 The abundance estimate for this stock includes only animals from the “inner coast” population occurring in inside waters of southeastern Alaska, British Columbia, and Washington—excluding animals from the “outer coast” subpopulation, including animals from California—and therefore should be considered a minimum count. For comparison, the previous abundance estimate for this stock, including counts of animals from California that are now considered outdated, was 354.

6 These are provisional abundance estimates presented in the draft 2015 SARs.

7 Best abundance is calculated as the product of ptp and a factor based on the birth rate, sex and age structure, and growth rate of the population. A range is presented because the extrapolation factor varies depending on the vital rate parameter resulting in the growth rate (i.e., high fecundity or low juvenile mortality).

8 These stocks are known to spend a portion of their time outside the U.S. EEZ. Therefore, the PBR presented here is for U.S. waters only and is a portion of the total. The total PBR for all CCE beaked whales is 22 (one half allocation for U.S. waters). Annual M/SI presented for these species is for U.S. waters only.

9 These represent annual M/SI in U.S. waters. However, the vast majority of M/SI for this stock—the level of which is unknown—would likely occur in Mexican waters.

Take reduction planning—Take reduction plans are designed to help recover and prevent the depletion of strategic marine mammal stocks that interact with certain U.S. commercial fisheries, as required by Section 118 of the MMPA. The immediate goal of a take reduction plan is to reduce, within six months of its implementation, the M/SI of marine mammals incidental to commercial fishing to less than the PBR level. The long-term goal is to reduce, within five years of its implementation, the M/SI of marine mammals incidental to commercial fishing to insignificant levels, approaching a zero serious injury and mortality rate, taking into account the economics of the fishery, the availability of existing technology, and expanding state or regional fishery management plans. Take reduction teams are convened to develop these plans.

For marine mammals in the California Current Ecosystem, there is currently one take reduction plan in effect (Pacific Offshore Cetacean Take Reduction Plan). The goal of this plan is to reduce M/SI of several marine mammal stocks incidental to the California thresher shark/swordfish drift gillnet fishery (CA DGN). A team was convened in 1996 and a final plan produced in 1997 (62 FR 51805; October 3, 1997). Marine mammal stocks of concern initially included the California, Oregon, and Washington stocks for all CCE beaked whales, short-finned pilot whales, pygmy sperm whales, sperm whales, and humpback whales. The most recent five-year averages of M/SI for these stocks are below PBR, and none of these species was taken in the fishery in 2012–13. More information is available on the Internet at: www.nmfs.noaa.gov/pr/interactions/trt/poctrp.htm. Of the stocks of concern, the NWFSC has requested the authorization of...
incidental M/SI + Level A for the short-finned pilot whale only (see “Estimated Take by Incidental Harassment” later in this document). The most recent reported average annual human-caused mortality for short-finned pilot whales (2004–08) is zero animals. The NWFSC does not use drift gillnets in its fisheries research program; therefore, take reduction measures applicable to the CA DGN fisheries are not relevant to the NWFSC.

**Unusual Mortality Events (UME)—** A UME is defined under the MMPA as “a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response.” From 1991 to the present, there have been sixteen formally recognized UMEs on the U.S. west coast involving species under NMFS’ jurisdiction. The most recent of these, and the only ones involving currently ongoing investigations, involve Guadalupe fur seals and California sea lions. Increased strandings of Guadalupe fur seals (eight times the historical average) have occurred along the entire coast of California. These increased strandings were reported beginning in January 2015 and peaked from April through June 2015. Findings from the majority of stranded animals include malnutrition with secondary bacterial and parasitic infections. Beginning in January 2013, elevated strandings of California sea lion pups were observed in southern California, with live sea lion strandings nearly three times higher than the historical average. Findings to date indicate that a likely contributor to the large number of stranded, malnourished pups was a change in the availability of sea lion prey for nursing mothers, especially sardines. These UMEs are occurring in the same areas and the causes and mechanisms of this remain under investigation (www.nmfs.noaa.gov/pr/health/mmume/guadalupefurseals2015.html; www.nmfs.noaa.gov/pr/health/mmume/californiaseallions2013.htm; accessed December 3, 2015).

Additional UMEs in the past ten years include those involving harbor porpoises in California (2008; cause determined to be ecological factors); Guadalupe fur seals in the Northwest (2007; undetermined); large whales in California (2007; human interaction); cetaceans in California (2007; undetermined); and harbor porpoises in the Pacific Northwest (2006; undetermined). There is also an ongoing UME in the western Gulf of Alaska that involves elevated large whale mortalities and may be affecting eastern North Pacific gray whales, which also occur in the NWFSC’s research areas. For more information on UMEs, please visit the Internet at: www.nmfs.noaa.gov/pr/health/mmume/events.html.

**Potential Effects of the Specified Activity on Marine Mammals and Their Habitat**

This section includes a summary and discussion of the ways that components of the specified activity (e.g., gear deployment, use of active acoustic sources, visual disturbance) may impact marine mammals and their habitat. The “Estimated Take by Incidental Harassment” section later in this document will include a quantitative analysis of the number of individuals that are expected to be taken by this activity. The “Negligible Impact Analysis” section will include an analysis of how this specific activity will impact marine mammals and will consider the content of this section, the “Estimated Take by Incidental Harassment” section, and the “Proposed Mitigation” section, to draw conclusions regarding the likely impacts of this activity on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks. In the following discussion, we consider potential effects to marine mammals from ship strike, physical interaction with the gear types described previously, use of active acoustic sources, and visual disturbance of pinnipeds.

**Ship Strike**

Vessel collisions with marine mammals, or ship strikes, can result in death or serious injury of the animal. Wounds resulting from ship strike may include massive trauma, hemorrhaging, broken bones, or propeller lacerations (Knowlton and Kraus, 2001). An animal at the surface may be struck directly by a vessel, a surfacing animal may hit the bottom of a vessel, or an animal just below the surface may be cut by a vessel’s propeller. More superficial strikes may not kill or result in the death of the animal. These interactions are typically associated with large whales (e.g., fin whales), which are occasionally found draped across the bulbous bow of large commercial ships upon arrival in port. Although smaller cetaceans or pinnipeds are more maneuverable in relation to large vessels than are large whales, they may also be susceptible to strike. The severity of injuries typically depends on the size and speed of the vessel, with the probability of death or serious injury increasing as vessel speed increases (Knowlton and Kraus, 2001; Laist et al., 2001; Vanderlaan and Taggart, 2007; Conn and Silber, 2013). Impact forces increase with speed, as does the probability of a strike at a given distance (Silber et al., 2010; Gende et al., 2011).

Pace and Silber (2005) found that the probability of death or serious injury increased rapidly with increasing vessel speed. Specifically, the predicted probability of serious injury or death increased from 45 to 75 percent as vessel speed increased from 10 to 14 kn, and exceeded ninety percent at 17 kn. Higher speeds during collisions result in greater force of impact, but higher speeds also appear to increase the chance of severe injuries or death through increased likelihood of collision by pulling whales toward the vessel (Clyne, 1999; Knowlton et al., 1995). In a separate study, Vanderlaan and Taggart (2007) analyzed the probability of lethal mortality of large whales at a given speed, showing that the greatest rate of change in the probability of a lethal injury to a large whale as a function of vessel speed occurs between 8.6 and 15 kn. The chances of a lethal injury decline from approximately eighty percent at 15 kn to approximately twenty percent at 8.6 kn. At speeds below 11.8 kn, the chances of lethal injury drop below fifty percent, while the probability asymptotically increases toward one hundred percent above 15 kn.

In an effort to reduce the number and severity of strikes of the endangered North Atlantic right whale (Eubalaena glacialis), NMFS implemented speed restrictions in 2008 (73 FR 60175; October 10, 2008). These restrictions require that vessels greater than or equal to 65 ft (19.8 m) in length travel at less than or equal to 10 kn near key port entrances and in certain areas of right whale aggregation along the U.S. eastern seaboard. Conn and Silber (2013) estimated that these restrictions reduced total ship strike mortality risk levels by eighty to ninety percent.

For vessels used in NWFSC research activities, transit speeds average 10 kn (but vary from 6–14 kn), while vessel speed during active sampling is typically only 2–4 kn. At sampling speeds, both the possibility of striking a marine mammal and the possibility of a strike resulting in serious injury or mortality are discountable. At average transit speed, the probability of serious injury or mortality resulting from a strike is less than fifty percent. However, the likelihood of a strike actually happening is again discountable. Ship speed was analyzed in the studies cited above, generally involve commercial shipping, which is
much more common in both space and time than is research activity. Jensen and Silber (2004) summarized ship strikes of large whales worldwide from 1975–2003 and found that most collisions occurred in the open ocean and involved large vessels (e.g., commercial shipping). Commercial fishing vessels were responsible for three percent of recorded collisions, while only one such incident (0.75 percent) was reported for a research vessel during that time period.

It is possible for ship strikes to occur while traveling at slow speeds. For example, a NOAA-chartered survey vessel traveling at low speed (5.5 km/h) while conducting multi-beam mapping surveys off the central California coast struck and killed a blue whale in 2009. The State of California determined that the whale had suddenly and unexpectedly surfaced beneath the hull, with the result that the propeller severed the whale’s vertebræ, and that this was an unavoidable event. This strike represents the only such incident in approximately 540,000 hours of similar coastal mapping activity (p = 1.9 × 10⁻⁶; 95% CI = 0–5.5 × 10⁻⁶; NMFS, 2013). In addition, a research vessel reported a fatal strike in 2011 of a dolphin in the Atlantic, demonstrating that it is possible for strikes involving smaller cetaceans or pinnipeds to occur. In that case, the incident report indicated that an animal apparently was struck by the vessel’s propeller as it was intentionally swimming near the vessel. While indicative of the type of unusual event that can occur, neither of these instances represents a circumstance that would be considered reasonably foreseeable or that would be considered preventable.

In summary, we anticipate that vessel collisions involving NWFSC research vessels, while not impossible, represent unlikely, unpredictable events for which there are no preventive measures. No ship strikes have been reported from any fisheries research activities conducted or funded by the NWFSC in any of the three research areas. Given the relatively slow speeds of research vessels, the presence of bridge crew watching for obstacles at all times (including marine mammals), the presence of marine mammal observers on some surveys, and the small number of research cruises, we believe that the possibility of ship strike is discountable and, further, that were a strike of a large whale to occur, it would be unlikely to result in serious injury or mortality. No incidental take resulting from ship strikes is anticipated, and this potential effect of research will not be discussed further in the following analysis.

**Research Gear**

The types of research gear used by NWFSC were described previously under “Detailed Description of Activity.” Here, we broadly categorize these gears into those whose use we consider to have an extremely unlikely potential to result in marine mammal interaction and those whose use we believe may result in marine mammal interaction. Gears in the former category are not considered further, while those in the latter category are carried forward for further analysis. Gears with likely potential for marine mammal interaction include trawls, longlines and other hook and line gear, seines (primarily purse seines), and tangle nets.

Trawl nets, longlines, and purse seines deployed by NWFSC are similar to gear used in various commercial fisheries, and the potential for and history of marine mammal interaction with these gears through physical contact (i.e., capture or entanglement) is well-documented. Read et al. (2006) estimated global marine mammal bycatch in U.S. fisheries from 1990–99 and derived an estimate of global marine mammal bycatch via expanding U.S. bycatch estimates using data on fleet composition from the United Nations Food and Agriculture Organization (FAO). Although most U.S. bycatch for both cetaceans (84 percent) and pinnipeds (98 percent) occurred in gillnets (a gear type not generally used by NWFSC), global marine mammal bycatch in trawl nets and longlines is likely substantial given that total global bycatch is thought to number in the hundreds of thousands of individuals (Read et al., 2006). In addition, global bycatch via longline has likely increased, as longlines have become the most common method of capturing swordfish and tuna since the U.N. banned the use of high seas driftnets over 2.5 km long in 1991 (high seas driftnets were previously often 40–60 km long) (Read, 2008; FAO, 2001).

Marine mammals are widely regarded as being quite intelligent and inquisitive, and when their pursuit of prey coincides with human pursuit of the same resources, it should be expected that physical interaction with fishing gear may occur (e.g., Beverton, 1983). Fishermen and marine mammals are both drawn to areas of high prey density, and certain fishing activities may further attract marine mammals by providing food (e.g., bait, captured fish, bycatch discards) or by otherwise making it easier for them to feed on a concentrated food source. Provision of foraging opportunities near the surface may present an advantage by negating the need for energetically expensive deep foraging dives (Hamer and Goldsworthy, 2006). Trawling, for example, can make available previously unexploited food resources by gathering prey that may otherwise be too fast or deep for normal predation, or may concentrate calories in an otherwise patchy landscape (Fertl and Leatherwood, 1997). Pilot whales, which are generally considered to be teuthophagous (i.e., feeding primarily on squid), were commonly observed in association with Atlantic mackerel (Scomber scombrus) trawl fisheries from 1977–88 in the northeast U.S. EEZ (Waring et al., 1990). Not surprisingly, stomach contents of captured whales were observed to have high proportions of mackerel (68 percent of non-trace food items), indicating that the ready availability of a novel, concentrated, high-calorie prey item resulted in changed dietary composition (Read, 1994).

These interactions can result in injury or death for the animal(s) involved and/or damage to fishing gear. Coastal animals, including various pinnipeds, bottlenose dolphins, and harbor porpoises, are perhaps the most vulnerable to these interactions and set or passive fishing gear (e.g., gillnets, traps) the most likely to be interacted with (e.g., Beverton, 1983; Barlow et al., 1994; Read et al., 2006; Byrd et al., 2014; Lewison et al., 2014). Although interactions are less common for use of trawl nets and longlines (gear used by NWFSC), they are often used with sufficient frequency to necessitate the establishment of required mitigation measures for multiple U.S. fisheries using both types of gear (NMFS, 2014). It is likely that no species of marine mammal can be definitively excluded from the potential for interaction with fishing gear (e.g., Northridge, 1984); however, the extent of interactions is likely dependent on the biology, ecology, and behavior of the species involved and the type, location, and nature of the fishery.

**Trawl nets—**As described previously, trawl nets are towed nets (i.e., active fishing) consisting of a cone-shaped net with a codend or bag for collecting the fish and can be designed to fish at the bottom, surface, or any other depth in the water column. Here we refer to bottom trawls and pelagic trawls (midwater or surface, i.e., any net not designed to tend the bottom while fishing). Trawls in general have the potential to capture or entangle marine mammals, which have been known to be caught in bottom trawls, presumably when feeding on fish caught therein.
Capture or entanglement may occur whenever marine mammals are swimming near the gear, intentionally (e.g., foraging) or unintentionally (e.g., migrating), and any animal captured in a net is at significant risk of drowning unless quickly freed. Animals can also be captured or entangled in netting or tow lines (also called lazy lines) other than the main body of the net; animals may become entangled around the head, body, flukes, pectoral fins, or dorsal fin. Interaction that does not result in the immediate death of the animal by drowning can cause injury (i.e., Level A harassment) or serious injury. Constricting lines wrapped around the animal can immobilize the animal or injure by cutting into or through blubber, muscles and bone (i.e., penetrating injuries) or constricting blood flow to or severing appendages. Immobilization of the animal, if it does not result in immediate drowning, can cause internal injuries from prolonged stress and/or severe struggling and/or impede the animal’s ability to feed (resulting in starvation or reduced fitness) (Andersen et al., 2008). Marine mammal interactions with trawl nets, through capture or entanglement, are well-documented. Dolphins are known to attend operating nets in order to either benefit from disturbance of the bottom or to prey on discards or fish within the net. For example, Leatherwood (1975) reported that the most frequently observed feeding pattern for bottlenose dolphins in the Gulf of Mexico involved herds following working shrimp trawlers, apparently feeding on organisms stirred up from the benthos. Bearzi and di Scara (1997) opportunistically investigated working trawlers in the Adriatic Sea from 1990–94 and found that ten percent were accompanied by foraging bottlenose dolphins. However, pelagic trawls have greater potential to capture cetaceans, because the nets may be towed at faster speeds; these trawls are more likely to target species that are important prey for marine mammals (e.g., squid, mackerel), and the likelihood of working in deeper waters means that a more diverse assemblage of species could potentially be present (Hall et al., 2000).

Globally, at least seventeen cetacean species are known to feed in association with trawlers and individuals of at least 25 species are documented to have been killed by trawl nets, including several large whales, porpoises, a variety of delphinids, seals, and sea lions (Perez, 2006; Young and Judicello, 2007; Karpouzli and Leaper, 2004; Hall et al., 2000; Fertl and Leatherwood, 1997; Northridge, 1991; Song et al., 2010). At least eighteen species of seals and sea lions are known to have been killed in trawl nets (Wickens, 1995; Perez, 2006; Zeeberg et al., 2006). Generally, direct interaction between trawl nets and marine mammals (both cetaceans and pinnipeds) has been recorded wherever trawling and animals co-occur. A lack of recorded interactions where animals are known to be present may indicate simply that trawling is absent or an insignificant component of fisheries in that region or that interactions were not observed, recorded, or reported.

In evaluating risk relative to a specific fishery (or comparable research survey), one must consider the size of the net as well as frequency, timing, and location of deployment. These considerations inform determinations of whether interaction with marine mammals is likely. Of the net types described previously under “Trawl Nets,” NWFSC has recorded marine mammal interactions primarily with the Nordic 264 surface trawl net but also has one recorded interaction with the modified Cobb midwater trawl. No marine mammal interactions have been recorded for any bottom trawl survey.

Longlines—Longlines are basically strings of baited hooks that are either anchored to the bottom, for targeting groundfish, or are free-floating, for targeting pelagic species and represent a passive fishing technique. Pelagic longlines, which notionally fish near the surface with the use of floats, may be deployed in such a way as to fish at different depths in the water column. For example, deep-set longlines targeting tuna may have a target depth of 400 m, while a shallow-set longline targeting swordfish is set at 30–90 m depth. We refer here to bottom and pelagic longlines. Any longline generally consists of a mainline from which leader lines (gangions) with baited hooks branch off at a specified interval, and is left to passively fish, or soak, for a set period of time before the vessel returns to retrieve the gear. Longlines are marked by two or more floats that act as visual markers and may also carry radio beacons; aids to detection are of particular importance for pelagic longlines, which may drift a significant distance from the deployment location. Pelagic longlines are generally composed of various diameter monofilament line and are generally much longer, and with more hooks, than are bottom longlines. Bottom longlines may be of monofilament or multifilament natural or synthetic lines.

Marine mammals may be hooked or entangled in longline gear, with interactions potentially resulting in death due to drowning, strangulation, severing of carotid arteries or the esophagus, infection, an inability to evade predators, or starvation due to an inability to catch prey (Hofmeyr et al., 2002), although it is more likely that animals will survive being hooked if they are able to reach the surface to breathe. Injuries, which may include serious injury, include lacerations and puncture wounds. Animals may attempt to depredate either bait or catch, with subsequent hooking, or may become accidentally entangled. As described for trawls, entanglement can lead to constricting lines wrapped around the animals and/or immobilization, and even if entangling materials are removed the wounds caused may continue to weaken the animal or allow further infection (Hofmeyr et al., 2002). Large whales may become entangled in a longline and then break free with a portion of gear trailing, resulting in alteration of swimming energetics due to drag and ultimate loss of fitness and potential mortality (Andersen et al., 2008). Weight of the gear can cause entangling lines to further constrict and further injure the animal. Hooking injuries and ingested gear are most common in small cetaceans and pinnipeds, but have been observed in large cetaceans (e.g., sperm whales). The severity of the injury depends on the species, whether ingested gear includes hooks, whether the gear works its way into the gastrointestinal (GI) tract, whether the gear penetrates the GI lining, and the location of the hooking (e.g., embedded in the animal’s stomach or other internal body parts) (Andersen et al., 2008). Bottom longlines pose less of a threat to marine mammals due to their deployment on the ocean bottom but can still result in entanglement in buoy lines or hooking as the line is either deployed or retrieved. The rate of interaction between longline fisheries and marine mammals depends on the degree of overlap between longline effort and species distribution, hook style and size, type of bait and target catch, and fishing practices (such as setting/hauling during the day or at night).

As was noted for trawl nets, many species of cetaceans and pinnipeds are documented to have been killed by longlines, including several large whales, porpoises, a variety of delphinids, seals, and sea lions (Perez, 2006; Young and Judicello, 2007; Northridge, 1984, 1991; Wickens, 1995). Generally, direct interaction between...
longlines and marine mammals (both cetaceans and pinnipeds) has been recorded wherever longline fishing and animals co-occur. A lack of recorded interactions where animals are known to be present may indicate simply that longlining is absent or an insignificant component of fisheries in that region or that interactions were not observed, recorded, or reported. Hook and line (e.g., rod and reel) gear also carries some lesser potential for marine mammal interaction, as the use of baited hooks in the presence of inquisitive marine mammals necessarily carries some risk. However, the scale of hook and line operations in relation to longline operations and the lack of extended, unattended soak times mean that use of other hook and line gear is much less likely to result in marine mammal interactions. However, due to the limited potential risk we carry this gear forward for further analysis with longline in a general category of hook and line gear.

In evaluating risk relative to a specific fishery (or research survey), one must consider the length of the line and number of hooks deployed as well as frequency, timing, and location of deployment. These considerations inform determinations of whether interaction with marine mammals is likely. NWFSC has not recorded marine mammal interactions with any longline survey. While a lack of historical interactions does not in and of itself indicate that future interactions are unlikely, we believe that the historical record, considered in context with the frequency and timing of these activities, as well as mitigation measures employed indicate that future marine mammal interactions with these gears would be uncommon.

**Tangle nets and other set gear**—As noted previously, tangle nets operate in similar fashion to gillnets. Marine mammal interactions with gillnets are well-documented, with a large proportion of species of all types of marine mammals (e.g., mysticetes, odontocetes, pinnipeds) recorded as gillnet bycatch (Reeves et al., 2013; Lewison et al., 2014; Zollett, 2009). Reeves et al. (2013) note that numbers of marine mammals killed in gillnets tend to be greatest for species that are widely distributed in coastal and shelf waters. Because of the well-documented risk to marine mammals, and to coastally distributed pinnipeds and small cetaceans in particular, we believe there is some risk of interaction inherent to NWFSC use of tangle nets, as described below in “Estimated Take by Incidental Harassment, Serious Injury, or Mortality.” However, this risk is limited by the fact that NWFSC uses tangle nets only in the LCRAA, for up to 75 sets of 25–45 minutes duration each.

The NWFSC also uses fyke traps and modified sablefish pots, both of which are passive fishing gear that have limited species selectivity and may be set for long durations (FAO, 2001). Thus, these gears have the potential to capture non-targeted fauna that use the same habitat as targeted species, even without the use of bait. Mortality in fyke nets can arise from stress and injury associated with anoxia, abrasion, confinement, and starvation (Larocque, 2011). In 2010, NMFS’ Northeast Fisheries Science Center captured a harbor seal in a fyke trap. However, all fyke traps used by the NWFSC are wetland systems designed to target small fish, and are fished in areas where pinnipeds are rare (estuarine, wetland channels typically 1–5 m wide, including brackish and freshwater habitats) and only limited deployments (up to one hundred sets per year). Sablefish pots are likewise used in only very limited fashion, with modified pots deployed in some Puget Sound estuaries to collect herring eggs. The doors are sewed shut such that marine mammals cannot enter the pot itself, and are unlikely to become entangled in the line. Therefore, we do not believe that there is a reasonable potential for marine mammal interaction with fyke traps or pots used by the NWFSC, and these gears are not considered further in this document.

**Set gear**—Purse seine gear is well-known as a potential source of marine mammal mortality due to its use in tuna fisheries of the eastern tropical Pacific Ocean (ETP), where incidental take of dolphins was very high from the late 1950s into the 1970s (Perrin, 1969). Because large yellowfin tuna (Thunnus albacares) and several species of dolphin associate together, dolphins were often captured along with the target species, resulting in the deaths of hundreds of thousands of dolphins. Through a series of combined actions, including passage of the MMPA in 1972, subsequent amendments, regulations, and mitigation measures, dolphin bycatch in the ETP has since decreased 99 percent in the international fishing fleet, and was eliminated by the U.S. fleet (Gerrodette and Forcada, 2005). As in the ETP tuna fisheries, the most significant risk associated with use of purse seines is when marine mammals and target species associate together, which is not the case for any NWFSC use of purse seines. Similar to longline gear, NWFSC purse seines are much smaller than those typically used in commercial fisheries. However, there is some risk associated with use of purse seines (and to a lesser extent, seine nets in general), and we therefore carry seine nets forward for further consideration.

**Other research gear**—The only NWFSC research gears with any record of marine mammal interactions are pelagic trawl nets (i.e., Nordic 264 and modified Cobb). Because of ample evidence from commercial fishing operations, we assume that there is also risk of marine mammal interaction due to NWFSC use of bottom trawl nets, hook and line gear (primarily longlines, but also including other hook and line gear), and seine gear (primarily purse seine gear but also including beach seines). All other gears used in NWFSC fisheries research (e.g., a variety of plankton nets, CTDs, ROVs) do not have the expected potential for marine mammal interactions and are not known to have been involved in any marine mammal interaction anywhere. Specifically, we consider CTDs, water pump/thermosalinograph, ROVs, small surface trawls, plankton nets, and vertically deployed or towed imaging systems to be no-impact gear types. Unlike trawl nets, seine nets, and longline gear, which are used in both scientific research and commercial fishing applications, these other gears are not considered similar or analogous to any commercial fishing gear and are not designed to capture any commercially salable species, or to collect any sort of sample in large quantities. They are not considered to have the potential to take marine mammals primarily because of their design or how they are deployed. For example, CTDs are typically deployed in a vertical cast on a cable and have no loose lines or other entanglement hazards. A Bongo net is typically deployed on a cable, whereas neuston nets (these may be plankton nets or small trawls) are often deployed in the upper one meter of the water column; either net type has very small size (e.g., two bongo nets of 0.5 m² each or a neuston net of approximately 2 m²) and no trailing lines to port entanglement risk. These other gear types are not considered further in this document.

**Acoustic Effects**

We previously provided general background information on sound and the specific sources used by the NWFSC (see “Description of Active Acoustic Sound Sources”). Here, we first provide background information on marine mammal hearing before discussing the potential effects of NWFSC use of active acoustic sources on marine mammals.
Marine mammal hearing—Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Current data indicate that not all marine mammal species have equal hearing capabilities (e.g., Richardson et al., 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall et al. (2007) recommended that marine mammals be divided into functional hearing groups based on directly measured or estimated hearing ranges on the basis of available behavioral response data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. Note that no direct measurements of hearing ability have been successfully completed for low-frequency cetaceans. The functional groups and the associated frequencies are indicated below (note that these frequency ranges correspond to the range for the composite group, with the entire range not necessarily reflecting the capabilities of every species within that group):

- Low-frequency cetaceans (mysticetes): Functional hearing is estimated to occur between approximately 7 Hz and 25 kHz (up to 30 kHz in some species), with best hearing estimated to be from 100 Hz to 8 kHz (Watkins, 1986; Ketten, 1998; Houser et al., 2006; Lucifredi and Stein, 2007; Ketten et al., 2007; Parks et al., 2007a; Ketten and Mountain, 2009; Tubelli et al., 2012);
- Mid-frequency cetaceans (larger toothed whales, beaked whales, and most delphinids): Functional hearing is estimated to occur between approximately 150 Hz and 160 kHz, with best hearing from 10 to less than 100 kHz (Johnson, 1967; White, 1977; Richardson et al., 1995; Szymanski et al., 1999; Kastelein et al., 2003; Finneran et al., 2001; Nachtigall et al., 2005, 2008; Yuen et al., 2005; Popov et al., 2007; Au and Hastings, 2008; Houser et al., 2008; Pacini et al., 2010, 2011; Schlundt et al., 2011);
- High-frequency cetaceans (porpoises, river dolphins, and members of the genera *Kogia* and *Cephalorhynchus*; including two members of the genus *Lagenorhynchus*, including the hourglass dolphin, on the basis of recent echolocation data and genetic data [May-Collado and Agnarsson, 2008; Kynan et al., 2009, 2010; Tougaard et al. 2010]): Functional hearing is estimated to occur between approximately 200 Hz and 180 kHz (Popov and Supin, 1990a,b; Kastelein et al., 2002; Popov et al., 2005); and
- Pinnipeds in water: Phocidae (true seals): Functional hearing is estimated to occur between approximately 75 Hz to 100 kHz, with best hearing between 1–5 kHz (Møhl, 1968; Terhune and Ronald, 1971, 1972; Richardson et al., 1995; Kastak and Schusterman, 1999; Reichmuth, 2008; Kastelein et al., 2009);
- Pinnipeds in water: Otariidae (eared seals): Functional hearing is estimated to occur between 100 Hz and 48 kHz for Otariidae, with best hearing between 2–48 kHz (Schusterman et al., 1972; Moore and Schusterman, 1987; Babushina et al., 1991; Richardson et al., 1995; Kastak and Schusterman, 1998; Kastelein et al., 2005a; Mulsow and Reichmuth, 2007; Mulsow et al., 2011a, b).

The pinned functional hearing group was modified from Southall et al. (2007) on the basis of data indicating that phocid species have consistently demonstrated a broadened frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä et al., 2006; Kastelein et al., 2009; Reichmuth and Holt, 2013).

Thirty-four marine mammal species (28 cetacean and six pinniped [four otarid and two phocid] species) have the potential to co-occur with NWFSC research activities. Please refer to Table 3. Of the 28 cetacean species that may be present, six are classified as low-frequency cetaceans (i.e., all mysticete species), eighteen are classified as mid-frequency cetaceans (i.e., all delphinid and ziphid species and the sperm whale), and four are classified as high-frequency cetaceans (i.e., porpoises and *Kogia* spp.).

**Potential effects of underwater sound**—Please refer to the information given previously ("Description of Active Acoustic Sources") regarding sound, characteristics of sound types, and metrics used in this document. Anthropogenic sounds cover a broad range of frequency bands and sound levels and can have a range of highly variable impacts on marine life, from none or minor to potentially severe responses, depending on received levels, duration of exposure, behavioral context, and various other factors. The potential effects of underwater sound from active acoustic sources can potentially result in one or more of the following: Temporary or permanent hearing impairment, non-auditory physical or physiological effects, behavioral disturbance, stress, and masking (Richardson et al., 1995; Gordon et al., 2004; Nowacek et al., 2007; Southall et al., 2007; Götz et al., 2009). The degree of effect is intrinsically related to the signal characteristics, received level, distance from the source, and duration of the sound exposure. In general, sudden, high level sounds can cause hearing loss, as can longer exposures to lower level sounds. Temporary or permanent loss of hearing will occur almost exclusively for noise within an animal’s hearing range. We first describe specific manifestations of acoustic effects before providing discussion specific to NWFSC’s use of active acoustic sources (e.g., echosounders).

Richardson et al. (1995) described zones of increasing intensity of effect that might be expected to occur, in relation to distance from a source and assuming that the signal is within an animal’s hearing range. First is the area within which the acoustic signal would be audible (potentially perceived) to the animal but not strong enough to elicit any overt behavioral or physiological response. The next zone corresponds with the area where the signal is audible to the animal and of sufficient intensity to elicit behavioral or physiological responsiveness. Third is a zone within which, for signals of high intensity, the received level is sufficient to potentially cause discomfort or tissue damage to auditory or other systems. Overlaid on these zones is a certain extent is the area within which masking (i.e., when a sound interferes with or masks the ability of an animal to detect a signal of interest that is above the absolute hearing threshold) may occur; the masking zone may be highly variable in size.

We describe the more severe effects (i.e., permanent hearing impairment, certain non-auditory physical or physiological effects) only briefly as we do not expect that there is a reasonable likelihood that NWFSC use of active acoustic sources may result in such effects (see below for further discussion). Marine mammals exposed to high-intensity sound, or to lower-intensity sound for prolonged periods, can experience hearing threshold shift (TS), which is the loss of hearing sensitivity at certain frequency ranges (Kastak et al., 1999; Schlundt et al., 2000; Finneran et al., 2002, 2005b). TS can be permanent (PTS), in which case the loss of hearing sensitivity is not fully recoverable, or temporary (TTS), in which case the animal’s hearing threshold would recover over time (Southall et al., 2007). Repeated sound exposure that leads to TTS could cause PTS. In severe cases of PTS, there can be total or partial deafness, while in more cases the impaired ability to hear sounds in specific frequency ranges (Kryter, 1985).
When PTS occurs, there is physical damage to the sound receptors in the ear (i.e., tissue damage), whereas TTS represents primarily tissue fatigue and is reversible (Southall et al., 2007). In addition, other investigators have suggested that TTS is within the normal bounds of physiological variability and tolerance and does not represent physical injury (e.g., Ward, 1997). Therefore, NMFS does not consider TTS to constitute auditory injury.

Relationships between TTS and PTS thresholds have not been studied in marine mammals—PTS data exists only for a single harbor seal (Kastak et al., 2008)—but are assumed to be similar to those in humans and other terrestrial mammals. PTS typically occurs at exposure levels at least seven decibels above (a 40-dB threshold shift approximates PTS onset; e.g., Kryter et al., 1966; Miller, 1974) that inducing mild TTS (a 6-dB threshold shift approximates TTS onset; e.g., Southall et al., 2007). Based on data from terrestrial mammals, a precautionary assumption is that the PTS thresholds for impulse sounds (such as impact pile driving pulses as received close to the source) are at least 6 dB higher than the TTS threshold on a peak-pressure basis, and PTS cumulative sound exposure level thresholds are 15 to 20 dB higher than TTS cumulative sound exposure level thresholds (Southall et al., 2007). Given the higher level of sound or longer exposure duration necessary to cause PTS as compared with TTS, it is considerably less likely that PTS could occur.

Non-auditory physiological effects or injuries that theoretically might occur in marine mammals exposed to high level underwater sound or as a secondary effect of extreme behavioral reactions (e.g., change in dive profile as a result of an avoidance reaction) caused by exposure to sound include neurological effects, bubble formation, resonance effects, and other types of organ or tissue damage (Cox et al., 2006; Southall et al., 2007; Zimmer and Tyack, 2007). NMFS activities do not involve the use of devices such as explosives or mid-frequency active sonar that are associated with these types of effects.

When a live or dead marine mammal swims or floats onto shore and is incapable of returning to sea, the event is termed a “stranding” (16 U.S.C. 1421h(3)). Marine mammals are known to strand for a variety of reasons, such as infectious agents, biotoxins, starvation, fishery interaction, ship strike, unusual oceanographic or weather events, sound exposure, or combinations of these stressors sustained concurrently or in series (e.g., Geraci et al., 1999). However, the cause or causes of most strandings are unknown (e.g., Best, 1982). Combinations of dissimilar stressors may combine to kill an animal or dramatically reduce its fitness, even though one exposure without the other would not be expected to produce the same outcome (e.g., Sih et al., 2004). For further description of stranding events see, e.g., Southall et al., 2006; Jepson et al., 2013; Wright et al., 2013.

1. **Temporary threshold shift**—TTS is the mildest form of hearing impairment that can occur during exposure to sound (Kryter, 1985). While experiencing TTS, the hearing threshold rises, and a sound must be at a higher level in order to be heard. In terrestrial and marine mammals, TTS can last from minutes or hours to days (in cases of strong TTS). In many cases, hearing sensitivity recovers rapidly after exposure to the sound ends. Few data on sound levels and durations necessary to elicit mild TTS have been obtained for marine mammals, and none of the available data is modeled for the purposes of this writing concerning TTS elicited by exposure to multiple pulses of sound.

Marine mammal hearing plays a critical role in communication with conspecifics, and interpretation of environmental cues for purposes such as predator avoidance and prey capture. Depending on the degree (elevation of threshold in dB), duration (i.e., recovery time), and frequency range of TTS, and the context in which it is experienced, TTS can have effects on marine mammals ranging from discountable to serious. For example, a marine mammal may be able to readily compensate for a brief, relatively small amount of TTS in a non-critical frequency range that occurs during a time when ambient noise is lower and there are not as many competing sounds present. Alternatively, a larger amount and longer duration of TTS sustained during time when communication is critical for successful mother/calf interactions could have more serious impacts. Generally, TTS data only exist for four species of cetaceans (bottlenose dolphin, beluga whale [Delphinapterus leucas], harbor porpoise, and Yangtze finless porpoise [Neophocaena asiaeorientalis]) and three species of pinnipeds (northern elephant seal, harbor seal, and California sea lion) exposed to a limited number of sound sources (i.e., mostly tones and octave-band noise) in laboratory settings (e.g., Finneran et al., 2002; Nachtigall et al., 2004; Kastak et al., 2005; Lucke et al., 2009) for mysticetes. For summaries of data on TTS in marine mammals or for further discussion of TTS onset thresholds, please see Southall et al. (2007) and Finneran and Jenkins (2012).

2. **Behavioral effects**—Behavioral disturbance may include a variety of effects, including subtle changes in behavior (e.g., minor or brief avoidance of an area or changes in vocalizations), more conspicuous changes in similar behavioral activities, and more sustained and/or potentially severe reactions, such as displacement from or abandonment of high-quality habitat. Behavioral responses to sound are highly variable and context-specific and any reactions depend on numerous intrinsic and extrinsic factors (e.g., species, state of maturity, experience, current activity, reproductive state, auditory sensitivity, time of day), as well as the interplay between factors (e.g., Richardson et al., 1995; Wartzok et al., 2003; Southall et al., 2007; Weilgart, 2007; Archer et al., 2010). Behavioral reactions can vary not only among individuals but also within an individual, depending on previous experience with a sound source, context, and numerous other factors (Ellison et al., 2012), and can vary depending on characteristics associated with the sound source (e.g., whether it is moving or stationary, number of sources, distance from the source). Please see Appendices B–C of Southall et al. (2007) for a review of studies involving marine mammal behavioral responses to sound.

Habitation can occur when an animal’s response to a stimulus wanes with repeated exposure, usually in the absence of unpleasant associated events (Wartzok et al., 2003). Animals are most likely to habitude to sounds that are predictable and unvarying. It is important to note that habituation is appropriately considered as a “progressive reduction in response to stimuli that are perceived as neither aversive nor beneficial,” rather than as, more generally, moderation in response to human disturbance (Bojder et al., 2009). The opposite process is sensitization, when an unpleasant experience leads to subsequent responses, often in the form of avoidance, at a lower level of exposure. As noted, behavioral state may affect the type of response. For example, animals
that are resting may show greater behavioral change in response to disturbing sound levels than animals that are highly motivated to remain in an area for feeding (Richardson et al., 1995; NRC, 2003; Wartzok et al., 2003). Controlled experiments with captive marine mammals have shown pronounced behavioral reactions, including avoidance of loud sound sources (Ridgway et al., 1997; Finneran et al., 2003). Observed responses of wild marine mammals to loud pulsed sound sources (typically seismic airguns or acoustic harassment devices) have been varied but often consist of avoidance behavior or other behavioral changes suggesting discomfort (Morton and Symonds, 2002; see also Richardson et al., 1995; Nowacek et al., 2007).

Available studies show wide variation in response to underwater sound; therefore, it is difficult to predict specifically how any given sound in a particular instance might affect marine mammals perceiving the signal. If a marine mammal does react briefly to an underwater sound by changing its behavior or moving a small distance, the impacts of the change are unlikely to be significant to the individual, let alone the stock or population. However, if a sound source displaces marine mammals from an important feeding or breeding area for a prolonged period, impacts on individuals and populations could be significant (e.g., Lusseau and Bejder, 2007; Weilgart, 2007; NRC, 2005). However, there are broad categories of potential responses, which we describe in greater detail here, that include alteration of dive behavior, alteration of foraging behavior, effects to breathing, interference with or alteration of vocalization, avoidance, and flight.

Changes in dive behavior can vary widely and may consist of increased or decreased dive times and surface intervals as well as changes in the rates of ascent and descent during a dive (e.g., Frankel and Clark, 2000; Costa et al., 2003; Ng and Leung, 2003; Nowacek et al., 2004; Goldbogen et al., 2013a, b). Variations in dive behavior may reflect interruptions in biologically significant activities (e.g., foraging) or they may be of little biological significance. The impact of an alteration to dive behavior resulting from an acoustic exposure depends on what the animal is doing at the time of the exposure and the type and magnitude of the response.

Disruption of feeding behavior can be difficult to correlate with anthropogenic sound exposure, so it is usually inferred by observed displacement from known foraging areas, the appearance of secondary indicators (e.g., bubble nets or sediment plumes), or changes in dive behavior. As for other types of behavioral response, the frequency, duration, and temporal pattern of signal presentation, as well as differences in species sensitivity, are likely contributing factors to differences in response in any given circumstance (e.g., Croll et al., 2001; Nowacek et al., 2004; Madsen et al., 2006; Yazvenko et al., 2007). A determination of whether foraging disruptions incur fitness consequences would require information on or estimates of the energetic requirements of the affected individuals and the relationship between prey availability, foraging effort and success, and the life history stage of the animal.

Variations in respiration naturally vary with different behaviors and alterations to breathing rate as a function of acoustic exposure can be expected to co-occur with other behavioral reactions, such as a flight response or an alteration in diving. However, respiration rates in and of themselves may be representative of the type and duration of the response. Various studies have shown that respiration rates may either be unaffected or could increase, depending on the species and signal characteristics, again highlighting the importance in understanding species differences in the tolerance of underwater noise when determining the potential for impacts resulting from anthropogenic sound exposure (e.g., Kastelein et al., 2001, 2005b, 2006; Gailey et al., 2007). Marine mammals vocalize for different purposes and across multiple modes, such as whistling, echolocation click production, calling, and singing. Changes in vocalization behavior in response to anthropogenic noise can occur for any of these modes and may result from a need to compete with an increase in background noise or may reflect increased vigilance or a startle response. For example, in the presence of potentially masking signals, humpback whales and killer whales have been observed to increase the length of their songs (Diller et al., 2000; Frisrup et al., 2003; Foote et al., 2004), while right whales have been observed to shift the frequency content of their calls upward while reducing the rate of calling in areas of increased anthropogenic noise (Parks et al., 2007b). In some cases, animals may cease sound production during production of aversive signals (Bowles et al., 1994).

Avoidance is the displacement of an individual from an area or migration path as a result of the presence of a sound or other stressors, and is one of the most obvious manifestations of disturbance in marine mammals (Richardson et al., 1995). For example, gray whales are known to change direction—reflecting from customary migratory paths—in order to avoid noise from seismic surveys (Malme et al., 1984). Avoidance may be short-term, with animals returning to the area once the noise has ceased (e.g., Bowles et al., 1994; Goold, 1996; Stone et al., 2000; Morton and Symonds, 2002; Gailey et al., 2007). Longer-term displacement is possible, however, which may lead to changes in abundance or distribution patterns of the affected species in the affected region if habituation to the presence of the sound does not occur (e.g., Blackwell et al., 2004; Bejder et al., 2006; Teilmann et al., 2006).

A flight response is a dramatic change in normal movement to a directed and rapid movement away from the perceived location of a sound source. The flight response differs from other avoidance responses in the intensity of the response (e.g., directed movement, rate of travel). Relatively little information on flight responses of marine mammals to anthropogenic signals exist, although observations of flight responses to the presence of predators have occurred (Connor and Heithaus, 1996). The result of a flight response could range from brief, temporary exertion and displacement from the area where the signal provokes flight to, in extreme cases, marine mammal strandings (Evens and England, 2001). However, it should be noted that response to a perceived threat does not necessarily invoke flight (Ford and Reeves, 2008), and whether individuals are solitary or in groups may influence the response. Behavioral disturbance can also impact marine mammals in more subtle ways. Increased vigilance may result in costs related to diversion of focus and attention (i.e., when a response consists of increased vigilance, it may come at the cost of decreased attention to other critical behaviors such as foraging or resting). These effects have generally not been demonstrated for marine mammals, but studies involving fish and terrestrial animals have shown that increased vigilance may substantially reduce feeding rates (e.g., Beauchamp and Livoreil, 1997; Fritz et al., 2002; Purser and Radford, 2011). In addition, chronic disturbance can cause population declines through reduction of fitness (e.g., decline in body condition) and subsequent reduction in reproductive success, survival, or both (e.g., Harrington and Veitch, 1992; Daan et al., 1996; Bradshaw et al., 1998). However, Ridgway et al. (2006) reported that increased vigilance in bottlenose
dolphins exposed to sound over a five-day period did not cause any sleep deprivation or stress effects.

Many animals perform vital functions, such as feeding, resting, traveling, and socializing, on a diel cycle (24-hour cycle). Disruption of such functions resulting from reactions to stressors such as sound exposure are more likely to be significant if they last more than one diel cycle or recur on subsequent days (Southall et al., 2007).

Consequently, a behavioral response lasting less than one day and not recurring on subsequent days is not considered particularly severe unless it could directly affect reproduction or survival (Southall et al., 2007). Note that there is a difference between multi-day substantive behavioral reactions and multi-day anthropogenic activities. For example, just because an activity lasts for multiple days does not necessarily mean that individual animals are either exposed to activity-related stressors for multiple days or, further, exposed in a manner resulting in sustained multi-day substantive behavioral responses.

3. Stress responses—An animal’s perception of a threat may be sufficient to trigger stress responses consisting of some combination of behavioral responses, autonomic nervous system responses, neuroendocrine response, or immune responses (e.g., Soyle, 1950; Moberg, 2000). In many cases, an animal’s first and sometimes most economical (in terms of energetic costs) response is behavioral avoidance of the potential stressor. Autonomic nervous system stress responses are typically involve changes in heart rate, blood pressure, and gastrointestinal activity. These responses have a relatively short duration and may or may not have a significant long-term effect on an animal’s fitness.

Neuroendocrine stress responses often involve the hypothalamus-pituitary-adrenal system. Virtually all neuroendocrine functions that are affected by stress—including immune competence, reproduction, metabolism, and behavior—are regulated by pituitary hormones. Stress-induced changes in the secretion of pituitary hormones have been implicated in failed reproduction, altered metabolism, reduced immune competence, and behavioral disturbance (e.g., Moberg, 1987; Blecha, 2000).

Increases in the circulation of glucocorticoids are also equated with stress (Romano et al., 2004).

The primary distinction between stress (which is adaptive and does not normally place an animal at risk) and “distress” is the cost of the response. During a stress response, an animal uses glycogen stores that can be quickly replenished once the stress is alleviated. In such circumstances, the cost of the stress response would not pose serious fitness consequences. However, when an animal does not have sufficient energy reserves to satisfy the energetic costs of a stress response, energy resources must be diverted from other functions. This state of distress will last until the animal replenishes its energetic reserves sufficient to restore normal function.

Relationships between these physiological mechanisms, animal behavior, and the costs of stress responses are well-studied through controlled experiments and for both laboratory and free-ranging animals (e.g., Holberton et al., 1996; Hood et al., 1998; Jessop et al., 2003; Krausman et al., 2004; Lankford et al., 2005). Stress responses due to exposure to anthropogenic sounds or other stressors and their effects on marine mammals have also been reviewed (Fair and Becker, 2000; Romano et al., 2002b) and, more rarely, studied in wild populations (e.g., Romano et al., 2002a).

For example, Rolland et al. (2012) found that noise reduction from reduced shipping traffic in the Bay of Fundy was associated with decreased stress in North Atlantic right whales. These and other studies lead to a reasonable expectation that some marine mammals will experience physiological stress responses upon exposure to acoustic stressors and that it is possible that some of these would be classified as “distress.” In addition, any animal experiencing TTS would likely also experience stress responses (NRC, 2003).

4. Auditory masking—Sound can disrupt behavior through masking, or interfering with, an animal’s ability to detect, recognize, or discriminate between acoustic signals of interest (e.g., those used for intraspecific communication and social interactions, prey detection, predator avoidance, navigation) (Richardson et al., 1995; Erbe et al., 2016). Masking occurs when the receipt of a sound is interfered with by another coincident sound at similar frequencies and at similar or higher intensity, and may occur whether the sound is natural (e.g., snapping shrimp, wind, waves, precipitation) or anthropogenic (e.g., shipping, sonar, seismic exploration) in origin. The ability of a noise source to mask biologically important sounds depends on the characteristics of both the noise source and the signal of interest (e.g., signal-to-noise ratio, temporal variability, duration), in relation to each other and to an animal’s hearing abilities (e.g., sensitivity, frequency range, critical ratios, frequency discrimination, directional discrimination, age or TTS hearing loss), and existing ambient noise and propagation conditions.

Under certain circumstances, marine mammals experiencing significant masking could also be impaired from maximizing their performance fitness in survival and reproduction. Therefore, when the coincident (masking) sound is man-made, it may be considered harassment when disrupting or altering critical behaviors. It is important to distinguish TTS and PTS, which persist after the sound exposure, from masking, which occurs during the sound exposure. Because masking (without resulting in TS) is not associated with abnormal physiological function, it is not considered a physiological effect, but rather a potential behavioral effect.

The frequency range of the potentially masking sound is important in determining any potential behavioral impacts. For example, low-frequency signals may have less effect on high-frequency echolocation sounds produced by odontocetes but are more likely to affect detection of mysticete communication calls and other potentially important natural sounds such as those produced by surf and some prey species. The masking of communication signals by anthropogenic noise may be considered as a reduction in the communication space of animals (e.g., Clark et al., 2009) and may result in energetic or other costs as animals change their vocalization behavior (e.g., Miller et al., 2000; Foote et al., 2004; Parks et al., 2007b; Di Iorio and Clark, 2009; Holt et al., 2009). Masking can be reduced in situations where the signal and noise come from different directions (Richardson et al., 1995), through amplitude modulation of the signal, or through other compensatory behaviors (Houser and Moore, 2014). Masking can be tested directly in captive species (e.g., Erbe, 2008), but in wild populations it must be either modeled or inferred from evidence of masking compensation. There are few studies addressing real-world masking sounds likely to be experienced by marine mammals in the wild (e.g., Branstetter et al., 2013).

Masking affects both senders and receivers of acoustic signals and can potentially have long-term chronic effects on marine mammals at the population level as well as at the individual level. Low-frequency ambient sound levels have increased by as much as 20 dB (nearly three times in terms of SPL) in the world’s ocean from pre-industrial periods, with most
of the increase from distant commercial shipping (Hildebrand, 2009). All anthropogenic sound sources, but especially chronic and lower-frequency signals (e.g., from vessel traffic), contribute to elevated ambient sound levels, thus intensifying masking.

Potential effects of NWFSC activity—
As described previously (see “Description of Active Acoustic Sound Sources”), the NWFSC proposes to use various active acoustic sources, including echosounders (e.g., multibeam systems), scientific sonar systems, positional sonars (e.g., net sounders for determining trawl position), and environmental sensors (e.g., current profilers). These acoustic sources, which are present on most NWFSC fishery research vessels, include a variety of single, dual, and multibeam echosounders (many with a variety of modes), sources used to determine the orientation of trawl nets, and several current profilers.

Many typically investigated acoustic sources (e.g., seismic airguns, low- and mid-frequency active sonar used for military purposes, pile driving, vessel noise)—sources for which certain of the potential acoustic effects described above have been observed or inferred—produce signals that are either much lower frequency and/or higher total energy (considering output sound levels and signal duration) than the high-frequency mapping and fish-finding systems used by the NWFSC. There has been relatively little attention given to the potential impacts of high-frequency sonar systems on marine life, largely because their combination of high output frequency and relatively low output power means that such systems are less likely to impact many marine species. However, some marine mammals do hear and produce sounds within the frequency range used by these sources and ambient noise is much lower at high frequencies, increasing the probability of signal detection relative to other sounds in the environment.

As noted above, relatively high levels of sound are likely required to cause TTS in most pinnipeds and odontocete cetaceans. While dependent on sound exposure frequency, level, and duration, NMFS’ acoustics experts believe that existing studies indicate that for the kinds of relatively brief exposures potentially associated with transient sounds such as those produced by the active acoustic sources used by the NWFSC, SPLs in the range of approximately 180–220 dB rms might be required to onset TTS levels for most species (Southall et al., 2007). However, it should be noted that there may be increased sensitivity to TTS for certain species generally (harbor porpoise; Lucke et al., 2009) or specifically at higher sound exposure frequencies, which correspond to a species’ best hearing range (20 kHz vs. 3 kHz for bottlenose dolphins; Finneran and Schlundt, 2010). However, for these animals, which are better able to hear higher frequencies and may be more sensitive to higher frequencies, exposures on the order of approximately 170 dB rms or higher for brief transient signals are likely required for even temporary (recoverable) changes in hearing sensitivity that would likely not be categorized as physiologically damaging (Lucke et al., 2009). The corresponding estimates for PTS would be at very high received levels that would rarely be experienced in practice.

Based on discussion provided by Southall et al. (2007), Lurton and DeRuiter (2011) modeled the potential impacts of conventional echosounders on marine mammals, estimating PTS onset at typical distances of 10–100 m for the kinds of sources considered here. Kremser et al. (2005) modeled the potential for TTS in blue, sperm, and beaked whales (please see Kremser et al. [2005] for discussion of assumptions regarding PTS onset in these species) from a multibeam echosounder, finding similarly that TTS would likely only occur at very close ranges to the hull of the vessel. The authors estimated ship movement at 12 kn (faster than NWFSC vessels would typically move), which would result in an underestimate of the potential for TTS to occur, but the modeled system (Hydrosweep) operates at lower frequencies and with a wider beam pattern than do typical NWFSC systems, which would result in a likely more significant overestimate of TTS potential. The results of both studies emphasize that these effects would very likely only occur in the cone ensonified below the ship and that animal responses to the vessel (sound or physical presence) at these extremely close ranges would very likely influence their probability of being exposed to these levels. At the same distances, but to the side of the vessel, animals would not be exposed to these levels, greatly decreasing the potential for an animal to be exposed to the most intense signals. For example, Kremser et al. (2005) note that SPLs outside the vertical lobe, or beam, decrease rapidly with distance, such that SPLs within the horizontal lobes are about 20 dB less than the value found in the center of the beam. For certain species (i.e., odontocetes and especially harbor porpoises), these ranges may be somewhat greater based on more recent data (Lucke et al., 2009; Finneran and Schlundt, 2010) but are likely still on the order of hundreds of meters. In addition, potential behavioral responses further reduce the already low likelihood that an animal may approach close enough for any type of hearing loss to occur.

Various other studies have evaluated the environmental risk posed by use of specific scientific sonar systems. Burkhardt et al. (2007) considered both the Hydrosweep system evaluated by Kremser et al. (2005) and the Simrad EK60, which is used by the NWFSC, and concluded that direct injury (i.e., sound energy causes direct tissue damage) and indirect injury (i.e., self-damaging behavior as response to acoustic exposure) would be unlikely given source and operational use (i.e., vessel movement) characteristics, and that any behavioral responses would be unlikely to be significant. Similarly, Boebel et al. (2006) considered the Hydrosweep system in relation to the risk for direct or indirect injury, concluding that (1) risk of PTS (please see Boebel et al. [2006] for assumptions regarding PTS onset) would be less than two percent of the risk of ship strike and (2) risk of behaviorally-induced damage would be essentially nil due to differences in source characteristics between scientific sonars and sources typically associated with stranding events (e.g., mid-frequency active sonar, but see discussion of the 2008 Madagascar stranding event below). It should be noted that the risk of direct injury may be greater when a vessel operates sources while on station (i.e., stationary), as there is a greater chance for an animal to receive the signal when the vessel is not moving.

Boebel et al. (2005) report the results of a workshop in which a structured, qualitative risk analysis of a range of acoustic technology was undertaken, specific to use of such technology in the Antarctic. The authors assessed a single-beam echosounder commonly used for collecting bathymetric data (12 kHz, 232 dB, 1° beam width), an array of single-beam echosounders used for mapping krill (38, 70, 120, and 200 kHz; 230 dB; 7° beam width), and a multibeam echosounder (30 kHz, 236 dB, 150° x 1° swath width). For each source, the authors produced a matrix displaying the severity of potential consequences (on a six-point scale) against the likelihood of occurrence for a given degree of severity. For the former two systems, the authors determined on the basis of the volume of water potentially affected by the system and comparisons between its output and available TTS...
data that the chance of TTS is only in a small volume immediately under the transducers, and that consequences of level four and above were inconceivable, whereas level one consequences (“Individuals show no response, or only a temporary (minutes) behavior change”) would be expected in almost all instances. Some minor displacement of animals in the immediate vicinity of the ship may occur. For the multibeam echosounder, Boebel et al. (2005) note that the high output and broad width of the swath abeam of the vessel makes displacement of animals more likely. However, the fore and aft beamwidth is small and the pulse length very short, so the risk of ensonification above TTS levels is still considered quite small and the likelihood of auditory or other injuries low. In general, the authors reached the same conclusions described for the single-beam systems but note that more severe impacts—including fatalities resulting from herding of sensitive species in narrow sea ways—are at least possible (i.e., may occur in exceptional circumstances). However, the probability of herding remains low not just because of the rarity of the necessary confluence of species, bathymetry, and likely other factors, but because the restricted beam shape makes it unlikely that an animal would be exposed more than briefly during the passage of the vessel (Boebel et al., 2005). More recently, Lurton (2016) conducted a modeling exercise and concluded similarly that likely potential for acoustic injury from these types of systems is negligible, but that behavioral response cannot be ruled out.

We have, however, considered the potential for severe behavioral responses such as stranding and associated indirect injury or mortality from NWFS use of the multibeam echosounder, on the basis of a 2008 mass stranding of approximately one hundred melon-headed whales in a Madagascar lagoon system. An investigation of the event indicated that use of a high-frequency mapping system (12-kHz multibeam echosounder; it is important to note that all NWFS sources operate at higher frequencies [see Table 2]) was the most plausible and likely initial behavioral trigger of the event, while providing the caveat that there is no unequivocal and easily identifiable single cause (Southall et al., 2013). The panel’s conclusion was based on (1) very close temporal and spatial association and directed movement, of the survey with the stranding event; (2) the unusual nature of such an event coupled with previously documented apparent behavioral sensitivity of the species to other sound types (Southall et al., 2006; Brownell et al., 2009); and (3) the fact that all other possible factors considered were determined to be unlikely causes. Specifically, regarding survey patterns prior to the event and in relation to bathymetry, the vessel transited in a north-south direction on the shelf break parallel to the shore, ensonifying large areas of deep-water habitat prior to operating intermittently in a concentrated area offshore from the stranding site; this may have trapped the animals between the sound source and the shore, thus driving them towards the lagoon system.

The investigatory panel systematically excluded or deemed highly unlikely nearly all potential reasons for these animals leaving their typical pelagic habitat for an area extremely atypical for the species (i.e., a shallow lagoon system). Notably, this was the first time that such a system has been associated with a stranding event.

The panel also noted several site- and situation-specific secondary factors that may have contributed to the avoidance responses that led to the eventual entrapment and mortality of the whales. Specifically, shoreward-directed surface currents and elevated chlorophyll levels in the area preceding the event may have played a role (Southall et al., 2013). The report also notes that prior use of a similar system in the general area may have sensitized the animals and also concluded that, for odontocete cetaceans that hear well in higher frequency ranges where ambient noise is typically quite low, high-power active sonar sources operating in this range may be more easily audible and have potential effects over larger areas than low frequency systems that have more typically been considered in terms of anthropogenic noise impacts. It is, however, important to note that the relatively lower output frequency, higher output power, and complex nature of the system implicated in this event, in context of the other factors noted here, likely produced a fairly unusual set of circumstances that indicate that such events would likely remain rare and are not necessarily relevant to use of lower-power, higher-frequency systems more commonly used for scientific applications. The risk of similar events recurring may be very low, given the extensive use of active acoustic systems used for scientific and navigational purposes worldwide on a daily basis and the lack of direct evidence of such responses previously reported.

Characteristics of the sound sources predominantly used by NWFS further reduce the likelihood of effects to marine mammals, as well as the intensity of effect assuming that an animal perceives the signal. Intermittent exposures—as would occur due to the brief, transient signals produced by these sources—require a higher cumulative SEL to induce TTS than would continuous exposures of the same duration (i.e., intermittent exposure results in lower levels of TTS) (Mooney et al., 2009a; Finneran et al., 2010). In addition, intermittent exposures recover faster in comparison with continuous exposures of the same duration (Finneran et al., 2010). Although echosounder pulses are, in general, omitted rapidly, they are not dissimilar to odontocete echolocation click trains. Research indicates that marine mammals generally have extremely fine auditory temporal resolution and can detect each signal separately (e.g., Au et al., 1988; Dolphin et al., 1995; Supin and Popov, 1995; Mooney et al., 2009b), especially for species with echolocation capabilities. Therefore, it is likely that marine mammals would indeed perceive echosounder signals as being intermittent.

We conclude here that, on the basis of available information on hearing and potential auditory effects in marine mammals, high-frequency cetacean species would be the most likely to potentially incur temporary hearing loss from a vessel operating high-frequency sonar sources, and the potential for PTS to occur for any species is so unlikely as to be discountable. Even for high-frequency cetacean species, individuals would have to make a very close approach and also remain very close to vessels operating these sources in order to receive multiple exposures at relatively high levels, as would be necessary to cause TTS. Additionally, given the low frequency responses typically include the temporary avoidance that might be expected (see below), the potential for auditory effects considered physiological damage (injury) is considered extremely low in relation to realistic operations of these devices. Given the fact that fisheries research survey vessels are moving, the likelihood that animals may avoid the vessel to some extent based on either its physical presence or due to aversive sound (vessel or active acoustic sources), and the intermittent nature of many of these sources, the potential for TTS is probably low for high-frequency cetaceans and very low to zero for other species.
Based on the source operating characteristics, most of these sources may be detected by odontocete cetaceans (and particularly high-frequency specialists such as porpoises) but are unlikely to be audible to mysticetes (i.e., low-frequency cetaceans) and some pinnipeds. While low-frequency cetaceans and pinnipeds have been observed to respond behaviorally to low- and mid-frequency sounds (e.g., Watkins et al., 1985) there is little evidence of behavioral responses in these species to high-frequency sound exposure (e.g., Jacobs and Terhune, 2002; Kastelein et al., 2006). If a marine mammal does perceive a signal from a NWFSC active acoustic source, it is likely that the response would be, at most, behavioral in nature. Behavioral reactions of free-ranging marine mammals to scientific sonars are likely to vary by species and circumstance. For example, Watkins et al. (1985) note that sperm whales did not appear to be disturbed by or even aware of signals from scientific sonars and pingers (36–60 kHz) despite being very close to the transducers, but Cerrodet and Pettis (2005) report that when a 38-kHz echosounder and ADCP were on (1) the average size of detected schools of spotted dolphins and pilot whales was decreased; (2) perpendicular sighting distances increased for spotted and spinner dolphins; and (3) sighting rates decreased for beaked whales. As described above, behavioral responses of marine mammals are extremely variable, depending on multiple exposure factors, with the most common type of observed response being behavioral avoidance of areas around aversive sound sources. Certain odontocete cetaceans (particularly harbor porpoises and beaked whales) are known to avoid high-frequency sound sources in both field and laboratory settings (e.g., Kastelein et al., 2000, 2005b, 2008a, b; Culik et al., 2001; Johnston, 2002; Olesiuk et al., 2002; Carretta et al., 2008). There is some additional, low probability for masking to occur for high-frequency specialists, but stimulus detection and directional beam pattern, transient signal, moving vessel) mean that the significance of any potential masking is probably inconsequential.

Potential Effects of Visual Disturbance

During NWFSC surveys conducted in coastal areas, including rivers and estuaries, pinnipeds are expected to be hauled out and at times experience incidental close approaches by researchers in small vessels during the course of fisheries research activities. Such circumstances are expected in Puget Sound and in the Columbia River. NWFSC expects some of these animals will exhibit a behavioral response to the visual stimuli (e.g., including alert behavior, movement, vocalizing, or flushing). NMFS does not consider the lesser reactions (e.g., alert behavior) to constitute harassment. These events are expected to be infrequent and cause only a temporary disturbance on the order of minutes. Monitoring results from other activities involving the disturbance of pinnipeds and relevant studies of pinniped populations that experience more regular vessel disturbance indicate that individually significant or population level impacts are unlikely to occur.

In areas where disturbance of haul-outs due to periodic human activity (e.g., researchers approaching on foot, passage of small vessels, maintenance activity) occurs, monitoring results have generally indicated that pinnipeds typically move or flush from the haul-out in response to human presence or visual disturbance, although some individuals typically remain haul-out (e.g., SCWA, 2012). The nature of response is generally dependent on species. For example, California sea lions and northern elephant seals have been observed as less sensitive to stimulus than harbor seals during monitoring at numerous sites. Monitoring of pinniped disturbance as a result of abalone research in the Channel Islands showed that while harbor seals flushed at a rate of 69 percent, California sea lions flushed at a rate of only 21 percent. The rate for elephant seals declined to 0.1 percent (VanBlaricom, 2010).

Upon the occurrence of low-severity disturbance (i.e., the approach of a vessel or person as opposed to an explosion or sonic boom), pinnipeds typically exhibit a continuum of response beginning with alert movements (e.g., raising the head), which may then escalate to movement away from the stimulus and possible flushing into the water. Flushed pinnipeds typically occupy the haul-out within minutes to hours of the stimulus.

In a popular tourism area of the Pacific Northwest where human disturbances occurred frequently, past studies observed stable populations of seals over a twenty-year period (Calambokidis et al., 1991). Despite high levels of seasonal disturbance by tourists using both motorized and non-motorized vessels, Calambokidis et al. (1991) observed an increase in site use (pup rearing) and classified this area as one of the most important pupping sites for seals in the region. Another study observed an increase in seal vigilance when vessels passed the haul-out site, but then vigilance relaxed within ten minutes of the vessels’ passing (Fox, 2008). If vessels passed frequently within a short time period (e.g., 24 hours), a reduction in the total number of seals present was also observed (Fox, 2008).

Level A harassment, serious injury, or mortality could likely only occur as a result of trampling in a stampede (a potentially dangerous occurrence in which large numbers of animals succumb to mass panic and rush away from a stimulus) or abandonment of pups. However, NWFSC surveys would be unlikely to disturb any sea lion pups, and any disturbance of harbor seal pups would be unlikely to result in abandonment. The eastern stock of Steller sea lions breeds in rookeries located in southeast Alaska, British Columbia, Oregon, and California; there are no known breeding rookeries in Washington or in the Columbia River. California sea lions breed in the Gulf of California, western Baja California, and southern California. Harbor seal pups could be present at times during NWFSC research effort (harbor seal pupping in Washington inland waters occurs from approximately June through September, depending on location), but harbor seal pups are extremely precocious, swimming and diving immediately after birth and throughout the lactation period, unlike most other phocids which normally enter the sea only after weaning (Lawson and Renouf, 1985; Cottrell et al., 2002; Burns et al., 2005). Lawson and Renouf (1987) investigated harbor seal mother-pup bonding in response to natural and anthropogenic disturbance. In summary, they found that the most critical bonding time is within minutes after birth. As such, it is unlikely that infrequent disturbance resulting from NWFSC research would interrupt the brief mother-pup bonding period within which disturbance could result in separation. In addition, NWFSC researchers take precautions to minimize disturbance and prevent any possibility of stampedes, including choosing travel routes as far away from hauled pinnipeds as possible and by moving sample site locations to avoid consistent haulout areas.

Disturbance of pinnipeds caused by NWFSC survey activities would be expected to last for only short periods of time, separated by significant amounts of time in which no disturbance occurred. Because such disturbance is sporadic rather than chronic, and of low intensity, individual marine mammals are unlikely to incur...
any detrimental impacts to vital rates or ability to forage and, thus, loss of fitness. Correspondingly, even local populations, much less the overall stocks of animals, are extremely unlikely to accrue any significantly detrimental impacts.

**Anticipated Effects on Marine Mammal Habitat**

*Effects to prey*—In addition to direct, or operational, interactions between fishing gear and marine mammals, indirect (i.e., biological or ecological) interactions occur as well, in which marine mammals and fisheries both utilize the same resource, potentially resulting in competition that may be mutually disadvantageous (e.g., Northridge, 1984; Beddington et al., 1985; Wickens, 1995). Marine mammal prey varies by species, season, and location and, for some, is not well documented. There is some overlap in prey of marine mammals and the species sampled and removed during NWFSC research surveys, with primary species of concern being hake, salmonids, and small, energy-rich, schooling species such as Pacific sardine, anchovies, and jack mackerel.

However, the total amount of these species taken in research surveys is very small relative to their overall biomass in the area (See Section 4.2.3 of the NWFSC EA for more information on fish catch during research surveys). For example, the average annual catch of Pacific hake in the course of all NWFSC research surveys during 2008–12 was approximately 1.181 metric tons (mt). Research catch is therefore negligible compared to the average commercial harvest for the same period (63,974 mt). For salmonids, in all cases the research take as a percent of either the average spawning population estimate or the average total juveniles produced is less than one tenth of one percent. For most commercial species, the average annual research catch is less than one percent of the overfishing limit (a fisheries management metric used to prevent overfishing). Other species of fish and invertebrates that are used as prey by marine mammals are taken in research surveys as well, but, as indicated by these examples, the proportions of research catch compared to biomass and commercial harvest is very small.

In addition to the small total biomass taken, some of the size classes of fish targeted in research surveys are very small (e.g., juvenile salmonids are typically only centimeters long), and these small size classes are not known to be prey mammals. Research catches are also distributed over a wide area because of the random sampling design covering large sample areas. Fish removals by research are therefore highly localized and unlikely to affect the spatial concentrations and availability of prey for any marine mammal species. This is especially true for pinnipeds, which are opportunistic predators that consume a wide assortment of fish and squid, and judging by their increasing populations throughout their range and expanding range into the Pacific Northwest (Caretta et al., 2015a), food availability does not appear to be a limiting factor (Baraff and Loughlin, 2000; Scordino, 2010). The overall effect of research catches on marine mammals through competition for prey may therefore be considered insignificant for all species.

*Acoustic habitat*—Acoustic habitat is the soundscape—which encompasses all of the sound present in a particular location and time, as a whole—when considered from the perspective of the animals experiencing it. Animals produce sound for, or listen for sounds produced by, conspecifics (communication during feeding, mating, and other social activities), other animals (finding prey or avoiding predators), and the physical environment (finding suitable habitats, navigating). Together, sounds made by animals and the geophysical environment (e.g., produced by earthquakes, lightning, wind, rain, waves) make up the natural contributions to the total acoustics of a place. These acoustic conditions, termed acoustic habitat, are one attribute of an animal's total habitat.

Sounds are also defined by, and acoustic habitat influenced by, the total contribution of anthropogenic sound. This may include incidental emissions from sources such as vessel traffic, or may be intentionally introduced to the marine environment for data acquisition purposes (as in the NWFSC's use of active acoustic sources). Anthropogenic noise varies widely in its frequency content, duration, and loudness and these characteristics greatly influence the potential habitat-mediated effects to marine mammals (please see also the previous discussion on masking under "Acoustic Effects"). This may range from local effects for brief periods of time to chronic effects over large areas and for long durations. Depending on the extent of effects to habitat, animals may alter their communications signals (thereby potentially expending additional energy) or miss acoustic cues (either conspecific or adventitious). For more detail on these concepts see, e.g., Barber et al., 2010; Pijanowski et al., 2011; Francis and Barber, 2013; Lillis et al., 2014.

Problems arising from a failure to detect cues are more likely to occur when noise stimuli are chronic and overlap with biologically relevant cues used for communication, orientation, and predator/prey detection (Francis and Barber, 2013). As described above ("Acoustic Effects"), the signals emitted by NWFSC active acoustic sources are generally high frequency, of short duration, and transient. These factors mean that the signals will attenuate rapidly (not travel over great distances), may not be perceived or affect perception even when animals are in the vicinity, and would not be considered chronic in any given location. NWFSC use of these sources is widely dispersed in both space and time. In conjunction with the prior factors, this means that it is highly unlikely that NWFSC use of these sources would, on their own, have an appreciable effect on acoustic habitat. Sounds emitted by NWFSC vessels would be of lower frequency and continuous, but would also be widely dispersed in both space and time. NWFSC vessel traffic—including both sound from the vessel itself and from the active acoustic sources—is of very low density compared to commercial shipping traffic or commercial fishing vessels and would therefore be expected to represent an insignificant incremental increase in the total amount of anthropogenic sound input to the marine environment.

*Physical habitat*—NWFSC conducts some bottom trawling, which may physically damage seafloor habitat. Physical damage may include furrowing and smoothing of the seafloor as well as the displacement of rocks and boulders, and such damage can increase with multiple contacts in the same area (Morgan and Chuenpagdee, 2003; Stevenson et al., 2004). Damage to seafloor habitat may also harm infauna and epifauna (i.e., animals that live in or on the seafloor or on structures on the seafloor), including corals. In general, physical damage to the seafloor would be expected to recover within eighteen months through the action of water currents and natural sedimentation, with the exception of rocks and boulders which may be permanently displaced (Stevenson et al., 2004). Biological damage would likely recover within the same timeframe, although repeated disturbance of an area can prolong the recovery time (Stevenson et al., 2004), and recovery of corals may take significantly longer. However, NWFSC catch records show that only minimal amounts of coral are captured (annual average of 55 kg of coral in all
survey results from 2008–12. Relatively small areas would be impacted by NWFSC bottom trawling and, because such surveys are conducted in the same areas but not in the exact same locations, they are expected to cause single rather than repeated disturbances in any given area. NWFSC activities would not be expected to have any other impacts on physical habitat.

As described in the preceding, the potential for NWFSC research to affect the availability of prey to marine mammals or to meaningfully impact the quality of physical or acoustic habitat is considered to be insignificant for all species. Effects to habitat will not be discussed further in this document.

**Estimated Take by Incidental Harassment, Serious Injury, or Mortality**

Except with respect to certain activities not pertinent here, the MMPA defines “harassment” as: Any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breeding, nursing, feeding, or sheltering [Level B harassment]. Serious injury means any injury that will likely result in mortality (50 CFR 216.3).

Take of marine mammals incidental to NWFSC research activities could occur as a result of (1) injury or mortality due to gear interaction [Level A harassment, serious injury, or mortality]; (2) behavioral disturbance resulting from the use of active acoustic sources (Level B harassment only); or (3) behavioral disturbance of pinnipeds resulting from incidental approach of researchers (Level B harassment only).

**Estimated Take Due to Gear Interaction Historical Interactions**

In order to estimate the number of potential incidents of take that could occur by M/SI + Level A through gear interaction, we first consider NWFSC’s record of past such incidents, and then consider in addition other species that may have similar vulnerabilities to NWFSC trawl gear as those species for which we have historical interaction records. Historical interactions with NWFSC research gear are described in Table 4. Available records are for the years 1999 through present. All historical interactions have taken place in the CCRA, offshore Washington and Oregon, and have occurred during use of the Nordic 264 surface trawl net, with a few exceptions. There is one historical interaction in the PSRA (also using the Nordic 264 surface trawl) and one CCRA historical interaction using the modified Cobb midwater trawl. NWFSC has no historical interactions for any bottom trawl, hook and line, or seine gear, and has no historical interactions in the LCRRA. Please see Figure 6–1 in the NWFSC request for authorization for specific locations of these incidents.

<table>
<thead>
<tr>
<th>Gear</th>
<th>Survey</th>
<th>Date</th>
<th>Species</th>
<th>Number killed</th>
<th>Number released alive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>5/24/1999</td>
<td>Pacific white-sided dolphin</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>9/23/1999</td>
<td>Steller sea lion</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>10/1/1999</td>
<td>Steller sea lion</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>5/18/2000</td>
<td>Northern fur seal</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>PPFF 2</td>
<td>7/19/2001</td>
<td>California sea lion</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>9/22/2002</td>
<td>Steller sea lion</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>9/24/2002</td>
<td>Steller sea lion</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>6/25/2003</td>
<td>Pacific white-sided dolphin</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>6/30/2003</td>
<td>Harbor seal</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>6/30/2003</td>
<td>Pacific white-sided dolphin</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>6/18/2005</td>
<td>Pacific white-sided dolphin</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>PPFF 2</td>
<td>8/28/2006</td>
<td>Pacific white-sided dolphin</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>9/28/2007</td>
<td>California sea lion</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>5/16/2009</td>
<td>Harbor seal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>5/23/2009</td>
<td>Unidentified small cetacean</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>5/26/2009</td>
<td>California sea lion</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>5/24/2010</td>
<td>Harbor seal</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>6/29/2012</td>
<td>Pacific white-sided dolphin</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Pelagic trawl</td>
<td>JSC</td>
<td>6/21/2014</td>
<td>Pacific white-sided dolphin</td>
<td>6</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Although some historical interactions resulted in the animal(s) being released alive, no serious injury determinations (NMFS, 2012a; 2012b) were made, and it is possible that some of these animals later died. In order to use these historical interaction records in a precautionary manner as the basis for the take estimation process, and because
we have no specific information to indicate whether any given future interaction might result in M/SI versus Level A harassment, we conservatively assume that all interactions equate to mortality. Over the past seventeen years, NWFSC has had only infrequent interactions with marine mammals, with 0.1–0.5 animals captured per year for the pinniped species and 1.4 animals captured per year for the Pacific white-sided dolphin. No Steller sea lion has been captured since 2002, northern fur seals have been involved in only one incident (none since 2000), and only a few California sea lions and harbor seals have been involved in interactions with research fishing gear. However, we assume that any of these species could be captured in any year.

In order to produce the most precautionary take estimates possible, we consider all of the data available to us (i.e., since 1999). In consideration of these interaction records, we assume that one individual of each species of otariid pinniped could be captured per year over the course of the five-year period of validity for these proposed regulations, that two individual harbor seals could be captured per year, and that the worst case event could happen each year for Pacific white-sided dolphins (i.e., six dolphins could be captured in a single trawl in each year). Table 5 shows the projected five-year total captures of these five species for this proposed rule, as described above, for trawl gear only. Although more than one individual of the two sea lion species has been captured in a single tow, interactions with these species have historically occurred only infrequently, and we believe that the above assumption appropriately reflects the likely total number of individuals involved in research gear interactions over a five-year period. We assume that two total harbor seals could be captured per year in recognition of the demonstrated vulnerability to capture in the PSRA (all other species have been captured only in the CCRA). These estimates are based on the assumption that annual effort (e.g., total annual trawl tow time) over the proposed five-year authorization period will not exceed the annual effort during prior years for which we have interaction records.

**TABLE 5—PROJECTED FIVE-YEAR TOTAL TAKE IN TRAWL GEAR FOR HISTORICALLY CAPTURED SPECIES**

<table>
<thead>
<tr>
<th>Gear</th>
<th>Species</th>
<th>CCRA average annual take (total)</th>
<th>PSRA average annual take (total)</th>
<th>Projected 5-year total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trawl</td>
<td>Pacific white-sided dolphin</td>
<td>6 (30)</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>California sea lion</td>
<td>1 (5)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Harbor seal</td>
<td>1 (5)</td>
<td>1 (5)</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Northern fur seal</td>
<td>1 (5)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Steller sea lion</td>
<td>1 (5)</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

1 Because there are no historical take records from the LCRRA, we incorporate all projected LCRRA takes in Table 7 below.

In order to estimate the total potential number of incidents of M/SI + Level A that could occur incidental to the NWFSC’s use of trawl, hook and line, and seine gear over the five-year period of validity for these proposed regulations (i.e., takes additional to those described in Table 4), we first consider whether there are additional species that may have similar vulnerability to capture in trawl gear as the five species described above that have been taken historically and then evaluate the potential vulnerability of these and other species to additional gears.

As background to the process of determining which species not historically taken may have sufficient vulnerability to capture in NWFSC gear to justify inclusion in the take authorization request (or whether species historically taken may have vulnerability to gears in which they have not historically been taken or additional vulnerability not reflected above due to activity in other areas such as the LCRRA), we note that the NWFSC is NMFS’ research arm in the northwest portion of the West Coast Region and may be considered as a leading source of expert knowledge regarding marine mammals (e.g., behavior, abundance, density) in the areas where they operate. The species for which the take request was formulated were selected by the NWFSC, and we have concurred with these decisions.

In order to evaluate the potential vulnerability of additional species to trawl and of all species to hook and line and seine gear, we first consulted NMFS’ List of Fisheries (LOF), which classifies U.S. commercial fisheries into one of three categories according to the level of incidental marine mammal M/SI that is known to occur on an annual basis over the most recent five-year period (generally) for which data has been analyzed: Category I, frequent incidental M/SI; Category II, occasional incidental M/SI; and Category III, remote likelihood of or no known incidental M/SI. We provide summary information, as presented in the 2015 LOF (79 FR 77919; December 29, 2014), in Table 6. In order to simplify information presented, and to encompass information related to other similar species from different locations, we group marine mammals by genus (where there is more than one member of the genus found in U.S. waters). Where there are documented incidents of M/SI incidental to relevant commercial fisheries, we note whether we believe those incidents provide sufficient basis upon which to infer vulnerability to capture in NWFSC research gear. For a listing of all Category I, II, and II fisheries using relevant gears, associated estimates of fishery participants, and specific locations and fisheries associated with the historical fisheries takes indicated in Table 6 below, please see the 2015 LOF. For specific numbers of marine mammal takes associated with these fisheries, please see the relevant SARs. More information is available on the Internet at www.nmfs.noaa.gov/pr/interactions/lof/ and www.nmfs.noaa.gov/pr/sars/.
In relevant commercial fisheries, and for which the NWFC has not requested the authorization of incidental take, are not considered further in this section. The NWFC believes generally that any sex or age class of those species for which take authorization is requested could be captured.

In order to estimate a number of individuals that could potentially be captured in NWFC research gear for those species not historically captured, we first determine which species may have vulnerability to capture in a given gear. Of those species, we then determine whether any may have similar propensity to capture in a given gear as a historically captured species. These species are limited to a few species delphinid species that we believe may have similar risk of capture as that displayed by the Pacific white-sided dolphin. For these species, we assume it is possible that a worst-case scenario of take could occur while at the same time contending that, absent significant range shifts or changes in habitat usage, capture of a species not historically captured would likely be a very rare event. The former assumption also accounts for the likelihood that, for species that often travel in groups, an incident involving capture of that species is likely to involve more than one individual.

For example, we believe that the Risso’s dolphin is potentially vulnerable to capture in trawl gear and may have similar propensity to capture in that gear as does the Pacific white-sided dolphin. Because the greatest number of Pacific white-sided dolphins captured in any one trawl tow was six individuals, we assume that six Risso’s dolphins could also be captured in a single incident. However, in recognition of the fact that any incident involving the capture of Risso’s dolphins would likely be a rare event, we propose a total take authorization over the five-year period of the number that may result from a single, worst-case incident (six dolphins). While we do not necessarily believe that six Risso’s dolphins would be captured in a single incident—and that more capture incidents involving fewer individuals could occur, as opposed to a single, worst-case incident—we believe that this is a reasonable approach to estimating

Table 6—U.S. Commercial Fisheries Interactions for Trawl, Hook and Line, and Seine Gear for Relevant Species

<table>
<thead>
<tr>
<th>Species</th>
<th>Trawl 2</th>
<th>Vulnerability inferred? 3</th>
<th>Hook and line 2</th>
<th>Vulnerability inferred? 3</th>
<th>Seine 2</th>
<th>Vulnerability inferred? 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray whale</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Humpback whale</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Balaenoptera spp.</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Sperm whale</td>
<td>N</td>
<td>n/a</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Kogia spp.</td>
<td>N</td>
<td>n/a</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Cuvier’s beaked whale</td>
<td>N</td>
<td>n/a</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Baird’s beaked whale</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Mesoplodon spp.</td>
<td>N</td>
<td>n/a</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Common bottlenose dolphin</td>
<td>N</td>
<td>n/a</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Stenella spp.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Delphinus spp.</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Lagenorhynchus spp.</td>
<td>n/a</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Northern right whale dolphin</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Risso’s dolphin</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Killer whale</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Globicephala spp.</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Harbor porpoise</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Dall’s porpoise</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Guadalupe fur seal</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Northern fur seal</td>
<td>n/a</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>California sea lion</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Steller sea lion</td>
<td>n/a</td>
<td>n/a</td>
<td>Y</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
<tr>
<td>Phoca spp.</td>
<td>n/a</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Northern elephant seal</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>n/a</td>
<td>N</td>
<td>n/a</td>
</tr>
</tbody>
</table>

1 Please refer to Table 3 for taxonomic reference.
2 Indicates whether any member of the genus has documented incidental M/SI in a U.S. fishery using that gear in the most recent five-year timespan for which data is available.
3 This exercise is considered “not applicable” for trawl gear for those species historically captured by NWFC gear. Historical record, rather than analogy, is considered the best information upon which to base a take estimate.
4 This exercise is considered “not applicable” for trawl gear for those species historically captured by NWFC gear. Historical record, rather than analogy, is considered the best information upon which to base a take estimate.
5 It is likely that Guadalupe fur seals are taken in Mexican fisheries, but there are no records available to us.
6 There are no records of take for California sea lions in commercial hook and line fisheries, but there have been multiple takes of California sea lions in longline surveys conducted by the SWFSC. There are no records of take for northern right whale dolphins in commercial trawl fisheries, but this species has been captured in a trawl survey conducted by the SWFSC. We therefore infer vulnerability for those species to those research gears.
potential incidents of M/SI + Level A while balancing what could happen in a worst-case scenario with the potential likelihood that no incidents of capture would actually occur. The SWFSC historical capture of northern right whale dolphins in 2008 provides an instructive example of a situation where a worst-case scenario (six dolphins captured in a single trawl tow) did occur, but overall capture of this species was very rare (no other capture incidents before or since).

Separately, for those species that we believe may have a vulnerability to capture in given gear but that we do not believe may have a similar propensity to capture in that gear as a historically captured species, we assume that capture would be a rare event such that authorization of a single take over the five-year period is likely sufficient to capture the risk of interaction. For example, from the LOF we infer vulnerability to capture in trawl gear for the Dall’s porpoise but do not believe that this species has a similar propensity for interaction in trawl gear as the Pacific white-sided dolphin.

NWFSC requested authorization of incidental take for bottlenose dolphin, for either the offshore or coastal stock. However, we have had clarifying conversations with NWFSC to more explicitly understand the interaction risk posed by NWFSC survey operations. Coastal stock dolphins are generally found within 1 km of shore, from San Francisco Bay south to Mexican waters. This distribution has very little overlap with NWFSC research survey activity and, when coupled with the limited effort involved in NWFSC survey operations in that range and the mitigation measure proposed to be implemented, we do not believe that incidental take of coastal stock bottlenose dolphins is reasonably likely and do not propose to authorize take from this stock.

_Trawl_—From the 2015 LOF and SWFSC historical gear interactions, we infer vulnerability to trawl gear in the CCRA for the Risso’s dolphin, short- and long-beaked common dolphins, northern right whale dolphin, Dall’s porpoise, harbor porpoise, and bottlenose dolphin. We consider some of these species to have a similar propensity for interaction with trawl gear as that demonstrated by the Pacific white-sided dolphin (Risso’s dolphin, northern right whale dolphin) and the rest to have lower risk of interaction.

Due to their likely presence in the relevant areas and inference based on historical interactions and the LOF, we assume additional vulnerability and therefore potential take for some of these species in trawl gear used in the PSRA and LCRRA. In the PSRA, these include the harbor porpoise and Dall’s porpoise and the California sea lion and Steller sea lion. In the LCRRA these include the harbor porpoise and the harbor seal, California sea lion, and Steller sea lion.

For the striped dolphin, we believe that there is a reasonable likelihood of incidental take in trawl gear although there are no records of incidental M/SI in relevant commercial fisheries. The proposed take authorization for this species was determined to be appropriate based on analogy to other similar species that have been taken either in NWFSC operations or in analogous commercial fishery operations. We believe that the striped dolphin has a similar propensity for interaction with trawl gear as that demonstrated by the Pacific white-sided dolphin.

It is also possible that a captured animal may not be able to be identified to species with certainty. Certain pinnipeds and small cetaceans are difficult to differentiate at sea, especially in low-light situations or when a quick release is necessary. For example, a captured delphinid that is struggling in the net may escape or be freed before positive identification is made. This is only likely to occur in the CCRA due to the greater diversity of pinniped and small cetacean species likely to be encountered in that area. Therefore, the NWFSC has requested the authorization of incidental M/SI + Level A for one unidentified pinniped and one unidentified small cetacean over the course of the five-year period of proposed authorization.

_Hook and line_—The process is the same as is described above for trawl gear. From the 2015 LOF and SWFSC historical gear interactions, we infer vulnerability to hook and line gear in the CCRA for the Risso’s dolphin, bottlenose dolphin, striped dolphin, pygmy and dwarf sperm whale (i.e., *Kogia* spp.), short- and long-beaked common dolphins, short-finned pilot whale, and California and Steller sea lions.

Due to their likely presence in the relevant areas and inference based on historical interactions and the LOF, we assume additional vulnerability and therefore potential take for some of these species in hook and line gear used in the PSRA (hook and line gear is not used in the LCRRA). These include the California sea lion and harbor seal.

_Seine_—The process is the same as is described above for trawl gear. From the 2015 LOF, we infer vulnerability to seine and tangle net gear in the CCRA and/or LCRRA for the short-beaked common dolphin, harbor seal, and California sea lion. Long-beaked common dolphin is not included because they are much rarer in Oregon and Washington where seine surveys are conducted. Seine gear is used infrequently in the PSRA (e.g., twelve purse seine sets per year) and the move-on rule applied if any small cetacean is seen within 500 m of the planned set. We do not believe that any take in seine gear is likely in the PSRA.

We also believe there is a reasonable potential of seine gear interaction for a number of species in the CCRA and/or LCRRA for which there are no LOF records of interaction in commercial fisheries. These proposed authorizations reflect the NWFSC’s expert judgment regarding the distribution of these species in relation to NWFSC use of seine gear offshore Oregon and Washington. For example, several of these species have the potential to interact with NWFSC purse seine surveys in the Columbia River plume, where there are no corresponding commercial seine fisheries. Therefore, we would not expect the LOF to adequately reflect the risk of marine mammal interaction posed by NWFSC survey activities. Species for which we propose to authorize take in seine gear in the CCRA and/or LCRRA with no LOF interaction records include the Dall’s porpoise, Pacific white-sided dolphin, Risso’s dolphin, northern right whale dolphin, Steller sea lion, and harbor porpoise. For the harbor porpoise, we expect that there is greater vulnerability to take in these gears (i.e., we expect it could be taken in both the CCRA and LCRRA) and have increased the proposed take authorization relative to the other species accordingly. NWFSC considers the delphinid species to be at risk because of their occurrence in coastal waters offshore Oregon and Washington, and because they often occur in mixed schools and could be caught together in purse seines.
For large whales, beaked whales, and killer whales, observed M/IS is extremely rare for trawl and seine gear and, for most of these species, only slightly more common in longline gear. Although large whale species could become captured or entangled in NWFS gear, the probability of interaction is extremely low considering the low level of effort relative to that of commercial fisheries. For example, there were estimated to be three total incidents of sperm whale M/IS in the Hawaii deep-set longline fishery from 2007–11. This fishery has 129 participants, and the fishery as a whole exerts substantially greater effort in a given year than does the NWFS. In a very rough estimate, we can say that these three estimated incidents between 2007–11 represent an insignificant participant interaction rate of 0.005 per year, despite the greater effort. Similarly, there were zero documented interactions from 2007–11 in the Atlantic Ocean, Caribbean, Gulf of Mexico large pelagics longline fishery, despite a reported fishing effort of 8,044 sets and 5,955,800 hooks in 2011 alone (Garrison and Stokes, 2012). With an average soak time of ten to fourteen hours, this represents an approximate minimum of almost sixty million hook hours. For reference, an approximate maximum estimate of NWFS effort in the CCRA is 52,000 hook-hours per year. Other large whales, beaked whales and killer whales have similarly low rates of interaction with commercial fisheries, despite the significantly greater effort. In addition, large whales, beaked whales, and killer whales generally have, with few exceptions, very low densities in the CCE relative to other species (see Table 10). We believe it extremely unlikely that any large whale, beaked whale, or killer whale would be captured or entangled in NWFS gear. There is a number of additional species with various LOF interaction records where we do not infer vulnerability to NWFS use of that gear. Pilot whales have demonstrated vulnerability to midwater trawl gear in Atlantic fisheries and to purse seine gear, but we do not infer vulnerability to capture during NWFS use of these gears because of the species is not abundant in the CCRA (Table 10). bottlenose dolphins have been captured in purse seines, but they are also very rare in the areas where NWFS conducts seine surveys. Similarly, we do not infer vulnerability to hook and line gear for Dall’s porpoise or fur seals or to trawl gear for elephant seals given the amount of research effort conducted (for hook and line) or the rare nature of fisheries interactions for elephant seals.

**Estimated Take Due to Acoustic Harassment**

As described previously (“Potential Effects of the Specified Activity on Marine Mammals”), we believe the NWFS use of active acoustic sources has, at most, the potential to cause Level B harassment of marine mammals. In order to attempt to quantify the potential for Level B harassment to occur, NMFS (including the NWFS and acoustics experts from other parts of NMFS) developed an analytical framework considering characteristics of the active acoustic systems described previously under “Description of Active Acoustic Sound Sources,” their expected patterns of use, and characteristics of the marine mammal species that may interact with them. We believe that this quantitative assessment benefits from its simplicity and consistency with current NMFS acoustic guidance regarding Level B harassment but caution that, based on a number of deliberately precautionary assumptions, the resulting take estimates may be seen as an overestimate of the potential for behavioral harassment to occur as a result of the operation of these systems. Additional details on the approach used and the assumptions made that result in these estimates are described below.

The operating frequencies of active acoustic systems used by NWFS sources only go down to 27–33 kHz for the trawl monitoring system, which is not one of the predominant sources, and to 38 kHz for the EK60 echosounder (see Table 2 and Table 8). These frequencies are above the hearing range of baleen whales (i.e., mysticetes); therefore, baleen whales would not be expected to perceive signals from NWFS active acoustic sources, and we would not expect any exposures to these signals to

### TABLE 7—TOTAL ESTIMATED M/SI + LEVEL A DUE TO GEAR INTERACTION, 2016–21

<table>
<thead>
<tr>
<th>Species</th>
<th>Estimated 5-year total, trawl</th>
<th>Estimated 5-year total, hook and line</th>
<th>Estimated 5-year total, seine</th>
<th>Total, all gears</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kogia spp. 2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bottlenose dolphin 3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Striped dolphin</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Short-beaked common dolphin</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Long-beaked common dolphin</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pacific white-sided dolphin</td>
<td>30</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Northern right whale dolphin</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Risso’s dolphin</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Short-finned pilot whale</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Harbor porpoise 4</td>
<td>3 (CCRA/PSRA/LCRRA)</td>
<td>1 (CCRA/PSRA)</td>
<td>1 (CCRA/LSRRA)</td>
<td>5</td>
</tr>
<tr>
<td>Northern fur seal 5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>California sea lion</td>
<td>7 (5 CCRA/PSRA/LCRRA)</td>
<td>1 (LCRRA)</td>
<td>1 (LCRRA)</td>
<td>10</td>
</tr>
<tr>
<td>Steller sea lion</td>
<td>7 (5 CCRA/PSRA/LCRRA)</td>
<td>1 (PSRA)</td>
<td>1 (LCRRA)</td>
<td>9</td>
</tr>
<tr>
<td>Harbor seal 4</td>
<td>11 (6 CCRA/5 PSRA/LCRRA)</td>
<td>1 (PSRA)</td>
<td>1 (LCRRA)</td>
<td>13</td>
</tr>
<tr>
<td>Unidentified short-beaked cetacean</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

1 Please see Table 6 and preceding text for derivation of take estimates. Takes proposed for authorization are not specific to any area, but our estimates are informed by area-specific vulnerability. All takes are expected to occur in the CCRA, except where the gear-specific breakdown of expected takes per area is provided. Note that hook and line surveys are not proposed for LCRRA and only limited seine surveys are proposed for PSRA.

2 We expect that only one *Kogia* spp. may be taken over the five-year timespan and that it could be either a pygmy or dwarf sperm whale.

3 Incidental take is expected only from the offshore stock.

4 Incidental take for these species may be of animals from any stock in California, Oregon, or Washington, but expected vulnerability may be assigned to CCE or Washington inland waters stocks according to the expected take proportions shown.

5 Incidental take may be of animals from either the eastern Pacific or California stock.
result in behavioral harassment. Baleen whales are not considered further in this section.

The assessment paradigm for active acoustic sources used in NWFSC fisheries research is relatively straightforward and has a number of key simplifying assumptions. NMFS’ current acoustic guidance requires in most cases that we assume Level B harassment occurs when a marine mammal receives an acoustic signal at or above a simple step-function threshold. For use of these active acoustic systems, the appropriate threshold is 160 dB re 1 μPa (rms). Estimating the number of exposures at the specified received level requires several determinations, each of which is described sequentially below:

1. A detailed characterization of the acoustic characteristics of the effective sound source or sources in operation;
2. The operational areas exposed to levels at or above those associated with Level B harassment when these sources are in operation;
3. A method for quantifying the resulting sound fields around these sources; and
4. An estimate of the average density for marine mammal species in each area of operation.

Quantifying the spatial and temporal dimension of the sound exposure footprint (or “swath width”) of the active acoustic devices in operation on moving vessels and their relationship to the average density of marine mammals enables a quantitative estimate of the number of individuals for which sound levels exceed the relevant threshold for each area. The number of potential incidents of Level B harassment is ultimately estimated as the product of the volume of water ensonified at 160 dB rms or higher and the volumetric density of animals determined from simple assumptions about their vertical stratification in the water column. Specifically, reasonable assumptions based on what is known about diving behavior across different marine mammal species were made to segregate those that predominately remain in the upper 200 m of the water column versus those that regularly dive deeper during foraging and transit. Methods for estimating each of these calculations are described in greater detail in the following sections, along with the simplifying assumptions made, and followed by the take estimates. Note that NWFSC only uses active acoustic systems for data acquisition purposes in the CCRA.

**Sound source characteristics**—An initial characterization of the general source parameters for the primary active acoustic sources operated by the NWFSC was conducted, enabling a full assessment of all sound sources used by the NWFSC and delineation of Category 1 and Category 2 sources, the latter of which were carried forward for analysis here (see Table 2). This auditing of the active acoustic sources also enabled a determination of the predominant sources that, when operated, would have sound footprints exceeding those from any other simultaneously used sources. These sources were effectively those used directly in acoustic propagation modeling to estimate the zones within which the 160 dB rms received level would occur.

Many of these sources can be operated in different modes and with different output parameters. In modeling their potential impact areas, those features among those given previously in Table 2 (e.g., lowest operating frequency) that would lead to the most precautionary estimate of maximum received level ranges (i.e., largest ensonified area) were used. The effective beam patterns took into account the normal modes in which these sources are typically operated. While these signals are brief and intermittent, a conservative assumption was taken in ignoring the temporal pattern of transmitted pulses in calculating Level B harassment events. Operating characteristics of each of the predominant sound sources were used in the calculation of effective line-kilometers and area of exposure for each source in each survey.

### Table 8—Effective Exposure Areas for Predominant Acoustic Sources Across Two Depth Strata

<table>
<thead>
<tr>
<th>Active acoustic system</th>
<th>Effective exposure area: Sea surface to 200 m depth (km²)</th>
<th>Effective exposure area: Sea surface to depth at which 160-dB threshold is reached (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simrad EK60 narrow beam echosounder</td>
<td>0.0142</td>
<td>0.1411</td>
</tr>
<tr>
<td>Simrad ME70 multibeam echosounder</td>
<td>0.0201</td>
<td>0.0201</td>
</tr>
<tr>
<td>Simrad FS70 trawl sonar</td>
<td>0.008</td>
<td>0.008</td>
</tr>
<tr>
<td>Simrad SX90 narrow beam sonar</td>
<td>0.0054</td>
<td>0.1634</td>
</tr>
<tr>
<td>Teledyne RD Instruments ADCP, Ocean Surveyor</td>
<td>0.0086</td>
<td>0.0167</td>
</tr>
<tr>
<td>Simrad ITI trawl monitoring system</td>
<td>0.0032</td>
<td>0.0032</td>
</tr>
</tbody>
</table>

1 Exposure area varies greatly depending on the tilt angle setting of the SX90. To approximate the varied usage this system might receive, the exposure area for each depth strata was averaged by assuming equal usage at tilt angles of 5, 20, 45, and 80 degrees.

Among Category 2 sources (Table 2), six predominant sources (Table 8) were identified as having the largest potential impact zones during operations, based on their relatively lower output frequency, higher output power, and their operational pattern of use. Estimated effective cross-sectional areas of exposure were estimated for each of the predominant sources using a commercial software package (MATLAB) and key input parameters including source-specific operational characteristics (i.e., frequency, beamwidth, source level, tilt angle, and horizontal and vertical resolution; see Table 2) and environmental characteristics (i.e., temperature, salinity, pH, and latitude). Where relevant, calculations were performed for different notional operational scenarios and the largest cross-sectional area used in estimating take (e.g., see Figure 6.2 of NWFSC’s application, which displays a simple visualization of a two-dimensional slice of modeled sound propagation to illustrate the predicted area ensonified to the 160-dB threshold by the nominal EK60 beam pattern assuming side lobes of ensonification).

In determining the effective line-kilometers for each of these predominant sources, the operational patterns of use relative to one another were further applied to determine which source was the predominant one operating at any point in time for each survey. When multiple sound sources are used simultaneously, the one with the largest potential impact zone in each relevant depth strata is considered for...
use in estimating exposures. For example, when species (e.g., sperm whales) regularly dive deeper than 200 m, the largest potential impact zone was calculated for both depth strata and in some cases resulted in a different source being predominant in one depth stratum or the other. This enabled a more comprehensive way of accounting for maximum exposures for animals diving in a complex sound field resulting from simultaneous sources with different spatial profiles. This overall process effectively resulted in three sound sources (Table 8; SX90, EK60, and ME70) comprising the total effective line-kilometers, their relative proportions depending on the nature of each survey.

Calculating effective line-kilometers—As described below, based on the operating parameters for each source type, an estimated volume of water ensonified at or above the 160 dB rms threshold was determined. In all cases where multiple sources are operated simultaneously, the one with the largest estimated acoustic footprint was considered to be the effective source. This was calculated for each depth stratum (0–200 m and greater than 200 m), which in some cases resulted in different sources being predominant in each depth stratum for all line-kilometers when multiple sources were in operation; this was accounted for in estimating overall exposures for species that utilize both depth strata (deep divers). The total number of line-kilometers that would be surveyed was determined, as was the relative percentage of surveyed linear kilometers associated with each source type. The total line-kilometers for each vessel, the effective percentages associated with each of the resulting three predominant source types (SX90, EK60, and ME70), and the effective total line-kilometers of operation for each source type are given below.

Calculating volume of water ensonified—The cross-sectional area of water ensonified at or above the 160 dB rms threshold was calculated using a simple model of sound propagation loss, which accounts for the loss of sound energy over increasing range. We used a spherical spreading model (where propagation loss = 20 * log [range]; such that there would be a 6-dB reduction in sound level for each doubling of distance from the source), a reasonable approximation over the relatively short ranges involved, and accounted for the frequency-dependent absorption coefficient (e.g. at 8 °C and 34 ppt) and beam pattern of these sound sources, which is generally highly directional. The lowest frequency was used for systems that are operated over a range of frequencies. The vertical extent of this area is calculated for two depth strata (0–200 m and surface to range at which the on-axis received level reaches 160 dB rms). These results, shown in Table 8, were applied differentially based on the vertical stratification of marine mammals (see Table 10).

Following the determination of effective sound exposure area for transmissions considered in two dimensions, the next step was to determine the effective volume of water ensonified at or above 160 dB rms for the entirety of each survey. For each of the three predominant sound sources, the volume of water ensonified is estimated as the athwartship cross-sectional area (in square kilometers) of sound at or above 160 dB rms (as illustrated in Figure 6.2 of NWFSC’s application) multiplied by the total distance traveled by the ship. Where different sources operating simultaneously would be predominant in each different depth strata (e.g., ME70 and EK60 operating simultaneously may be predominant in the shallow stratum and deep stratum, respectively), the resulting cross-sectional area calculated took this into account. Specifically, for shallow-diving species this cross-sectional area was determined for whichever was predominant in the shallow stratum, whereas for deeper-diving species this area was calculated from the combined effects of the predominant source in the shallow stratum and the somewhat different source predominating in the deep stratum. This creates an effective total volume characterizing the area ensonified when each predominant source is operated and accounts for the fact that deeper-diving species may encounter a complex sound field in different portions of the water column.

Marine mammal densities—One of the primary limitations to traditional estimates of behavioral harassment from acoustic exposure is the assumption that animals are uniformly distributed in time and space across very large geographical areas, such as those being considered here. There is ample evidence that this is in fact not the case, and marine species are highly heterogeneous in terms of their spatial distribution, largely as a result of species-typical utilization of heterogeneous ecosystem features. Some more sophisticated modeling efforts have attempted to include species-typical behavioral patterns and diving parameters in movement models that more adequately assess the spatial and temporal aspects of distribution and thus exposure to sound (e.g., Navy, 2013). While simulated movement models were not used to mimic individual diving or aggregation parameters in the determination of animal density in this estimation, the vertical stratification of marine mammals based on known or reasonably assumed diving behavior was integrated into the density estimates used.

First, typical two-dimensional marine mammal density estimates (animals/km²) were obtained from various sources for each ecosystem area. These were estimated from marine mammal Stock Assessment Reports (Allen and Angliss, 2015; Carretta et al., 2015a) and other sources (Barlow and Forney, 2007; ManTech-SRS Technologies, 2007).

There are a number of caveats associated with these estimates:

(1) They are often calculated using visual sighting data collected during one season rather than throughout the year. The time of year when data were collected and from which densities were estimated may not always overlap with the timing of NWFSC fisheries surveys (detailed previously in “Detailed Description of Activities”).

(2) The densities used for purposes of estimating acoustic exposures do not take into account the patchy distributions of marine mammals in an ecosystem, at least on the moderate to fine scales over which they are known to occur. Instead, animals are considered evenly distributed throughout the assessed area, and seasonal movement patterns are not taken into account.

In addition, and to account for at least some coarse differences in marine mammal diving behavior and the effect this has on their likely exposure to these kinds of often highly directional sound sources, a volumetric density of marine mammals of each species was determined. This value is estimated as the abundance averaged over the two-dimensional geographic area of the surveys and the vertical range of typical habitat for the population. Habitat ranges were categorized in two generalized depth strata (0–200 m and greater than 200 m) based on gross differences between known generally surface-associated and typically deep-diving marine mammals (e.g., Reynolds and Rommel, 1999; Perrin et al., 2009). Animals in the shallow-diving stratum were assumed, on the basis of empirical measurements of diving with monitoring tags and reasonable assumptions of behavior based on other indicators, to spend a large majority of their lives (i.e., greater than 75 percent) at depths shallower than 200 m. Their volumetric density and thus exposure to...
sound is therefore limited by this depth boundary. In contrast, species in the deeper-diving stratum were assumed to regularly dive deeper than 200 m and spend significant time at these greater depths. Their volumetric density and thus potential exposure to sound at or above the 160 dB rms threshold is extended from the surface to the depth at which this received level condition occurs (i.e., corresponding to the 0 to greater than 200 m depth stratum).

The volumetric densities are estimates of the three-dimensional distribution of animals in their typical depth strata. For shallow-diving species the volumetric density is the area density divided by 0.2 km (i.e., 200 m). For deeper diving species, the volumetric density is the area density divided by a nominal value of 0.5 km (i.e., 500 m). The two-dimensional and resulting threedimensional (volumetric) densities for each species in each ecosystem area are shown below.

Using area of ensonification and volumetric density to estimate exposures—Estimates of potential incidents of Level B harassment (i.e., potential exposure to levels of sound at or exceeding the 160 dB rms threshold) are then calculated by using (1) the combined results from output characteristics of each source and identification of the predominant sources in terms of acoustic output; (2) their relative annual usage patterns for each operational area; (3) a source-specific determination made of the area of water associated with received sounds at either the extent of a depth boundary or the 160 dB rms received sound level; and (4) determination of a biologically-relevant volumetric density of marine mammal species in each area. Estimates of Level B harassment by acoustic sources are the product of the volume of water ensonified at 160 dB rms or higher for the predominant sound source for each portion of the total line-kilometers for which it is used and the volumetric density of animals for each species. These annual estimates are given below.

We first provide information related to relative annual usage patterns of predominant active acoustic sources. For example, use of the ME70 and EK60 account for predominant sources during all surveys on the R/V Bell M. Shimada, with the EK60 used during one hundred percent of distance traveled (Table 9). When the ME70 is on, it is the dominant source in the 0–200 m depth stratum (0.0201 km² cross-sectional ensonified area versus 0.0142 km² cross-sectional ensonified area for the EK60; Table 8); therefore, the ME70 is the dominant active acoustic source for twenty percent of the line-kilometers and the EK60 is the dominant active acoustic source for the other eighty percent. However, in the deeper depth stratum, the EK60 is always the dominant source when compared with the ME70 (0.1411 km² cross-sectional ensonified area versus 0.0201 km² cross-sectional ensonified area for the ME70; Table 8); therefore, the EK60 is the dominant active acoustic source in the deeper depth stratum at all times for the Shimada. However, of the total line-kilometers of NWFSC survey activity aboard the Shimada, only forty percent are in waters greater than 200 m.

### Table 9—Annual Linear Survey Kilometers for Each Vessel and Its Predominant Sources Within Two Depth Strata

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Line-km/vessel</th>
<th>Source</th>
<th>% time source dominant (0–200 m)</th>
<th>Line-km/dominant source (0–200 m)</th>
<th>% time source dominant (&gt;200 m)</th>
<th>Line-km/dominant source (&gt;200 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lasker</td>
<td>4,500</td>
<td>SX90</td>
<td>100</td>
<td>4,500</td>
<td>50</td>
<td>2,250</td>
</tr>
<tr>
<td>Shimada</td>
<td>18,494</td>
<td>ME70</td>
<td>20</td>
<td>3,699</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EK60</td>
<td>80</td>
<td>14,795</td>
<td>40</td>
<td>7,398</td>
</tr>
</tbody>
</table>

Next, we provide volumetric densities for marine mammals in the CCRA and total estimated takes by Level B harassment, by dominant source and total, for each species in the CCRA (Table 10). We also provide a sample calculation.

We first determine the source-specific ensonified volume of water (i.e., the ensonified volume where we consider a specific source to be predominant and therefore have the potential to harass marine mammals) and then determine source- and species-specific exposure estimates for the shallow and deep (if applicable; Table 10) depth strata. First, we know the estimated source-specific cross-sectional ensonified area within the shallow and deep strata (Table 8) and the number of annual line-kilometers when a given source would be predominant in each stratum and use these values to derive an estimated source-specific ensonified volume. In order to estimate the additional volume of ensonified water in the deep stratum, we first subtract the cross-sectional ensonified area of the shallow stratum (which is already accounted for) from that of the deep stratum. Source- and stratum-specific exposure estimates are the product of the estimated ensonified volumes and the species-specific volumetric densities (Table 10).

### Table 10—Densities and Estimated Source-, Stratum-, and Species-Specific Annual Estimates of Level B Harassment

<table>
<thead>
<tr>
<th>Species</th>
<th>Shallow</th>
<th>Deep</th>
<th>Area density (animals/km²)¹</th>
<th>Volumetric density (animals/km³)²</th>
<th>Estimated Level B harassment, 0–200 m</th>
<th>Estimated Level B harassment, &gt;200 m</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sperm whale</td>
<td>X</td>
<td>0.002</td>
<td>0.003</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

To illustrate the process, we focus on the EK60 and the sperm whale.

1. EK60 ensonified volume; 0–200 m: 0.0142 km² * 14,795 km² = 210.1 km³
2. EK60 ensonified volume; >200 m: 0.1411 km² – 0.0142 km² = 938.8 km³
3. Estimated exposures to sound ≥160 dB rms; sperm whale; EK60: 0.003 sperm whales/km³ * 210.1 km³ = 0.7 [rounded to 1] + (0.003 sperm whales/km³ * 938.8 km³) = 4 estimated sperm whale exposures to SPLs ≥160 dB rms resulting from use of the EK60.
**Table 10—Densities and Estimated Source-, Stratum-, and Species-Specific Annual Estimates of Level B Harassment—Continued**

<table>
<thead>
<tr>
<th>Species</th>
<th>Shallow</th>
<th>Deep</th>
<th>Area density (animals/km²)</th>
<th>Volumetric density (animals/km³)</th>
<th>Estimated Level B harassment, 0–200 m</th>
<th>Estimated Level B harassment, &gt;200 m</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kogia spp.</td>
<td></td>
<td>X</td>
<td>0.001</td>
<td>0.002</td>
<td>0 0 1 2 0 3</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Cuvier’s beaked whale</td>
<td></td>
<td>X</td>
<td>0.004</td>
<td>0.008</td>
<td>2 1 2 0 7 2</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Baird’s beaked whale</td>
<td></td>
<td>X</td>
<td>0.001</td>
<td>0.002</td>
<td>0 0 1 1 2 0</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Mesoplodont beaked whales</td>
<td></td>
<td>X</td>
<td>0.001</td>
<td>0.002</td>
<td>0 0 1 2 0 3</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Bottle-nose dolphin</td>
<td></td>
<td>X</td>
<td>0.002</td>
<td>0.009</td>
<td>2 1 3 0 6 3</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Striped dolphin</td>
<td></td>
<td>X</td>
<td>0.017</td>
<td>0.083</td>
<td>18 6 25 0 0 49</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Long-beaked common dolphin</td>
<td></td>
<td>X</td>
<td>0.019</td>
<td>0.126</td>
<td>20 7 128 0 0 55</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Short-beaked common dolphin</td>
<td></td>
<td>X</td>
<td>0.309</td>
<td>1.547</td>
<td>325 115 455 0 0 895</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Pacific white-sided dolphin</td>
<td></td>
<td>X</td>
<td>0.021</td>
<td>0.105</td>
<td>22 8 31 0 0 61</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Northern right whale dolphin</td>
<td></td>
<td>X</td>
<td>0.010</td>
<td>0.049</td>
<td>10 4 14 0 0 28</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Risso’s dolphin</td>
<td></td>
<td>X</td>
<td>0.010</td>
<td>0.052</td>
<td>11 4 15 0 0 30</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Killer whale</td>
<td></td>
<td>X</td>
<td>0.001</td>
<td>0.004</td>
<td>1 0 1 0 2 0</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Short-lined pilot whale</td>
<td></td>
<td>X</td>
<td>0.0003</td>
<td>0.001</td>
<td>0 0 1 0 1 0</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Harbor porpoise</td>
<td></td>
<td>X</td>
<td>0.038</td>
<td>0.189</td>
<td>40 14 56 0 0 110</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Dall’s porpoise</td>
<td></td>
<td>X</td>
<td>0.076</td>
<td>0.578</td>
<td>79 28 111 0 0 218</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Guadalupe fur seal</td>
<td></td>
<td>X</td>
<td>0.007</td>
<td>0.037</td>
<td>8 3 11 0 0 22</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Northern fur seal</td>
<td></td>
<td>X</td>
<td>0.649</td>
<td>3.245</td>
<td>682 241 955 0 0 1,878</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>California sea lion</td>
<td></td>
<td>X</td>
<td>0.297</td>
<td>1.484</td>
<td>312 110 437 0 0 859</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Steller sea lion</td>
<td></td>
<td>X</td>
<td>0.060</td>
<td>0.301</td>
<td>63 22 89 0 0 174</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Harbor seal</td>
<td></td>
<td>X</td>
<td>0.056</td>
<td>0.279</td>
<td>59 21 82 0 0 162</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
<tr>
<td>Northern elephant seal</td>
<td></td>
<td>X</td>
<td>0.179</td>
<td>0.358</td>
<td>75 27 105 336 79 622</td>
<td>EK60 ME70 SX90</td>
<td></td>
</tr>
</tbody>
</table>

1. All density estimates from Barlow and Forney (2007) unless otherwise indicated.
2. Volumetric density estimates derived by dividing area density estimates by 0.2 km (for shallow species) or 0.5 km (for deep species), corresponding with defined depth strata.
3. Density estimates derived by NWFSC from SAR abundance estimates and notional study area of 1,000,000 km².
4. ManTech-SRS Technologies (2007) estimated a harbor porpoise density for coastal and inland waters of Washington, which is used as the best available proxy here. There are no known density estimates for harbor porpoises in NWFSC survey areas in the CCRA.

**Estimated Take Due to Physical Disturbance**

It is likely that some pinnipeds will move or flush from known haul-outs into the water in response to the presence or sound of NWFSC vessels or researchers, as a result of unintentional approach during survey activity.

Behavioral responses may be considered according to the scale shown in Table 11 and based on the method developed by Mortensen (1996). We consider responses corresponding to Levels 2–3 to constitute Level B harassment.

**Table 11—Seal Response to Disturbance**

<table>
<thead>
<tr>
<th>Level</th>
<th>Type of response</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alert</td>
<td>Seal head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in a U-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length.</td>
</tr>
<tr>
<td>2</td>
<td>Movement</td>
<td>Movements away from the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats over the beach.</td>
</tr>
<tr>
<td>3</td>
<td>Flight</td>
<td>All retreats (flushes) to the water.</td>
</tr>
</tbody>
</table>

The NWFSC has estimated potential incidents of Level B harassment due to physical disturbance (Table 12) by considering the number of seals believed to potentially be present at affected haul-outs and the number of visits expected to be made by NWFSC researchers. The number of haul-outs disturbed and number of animals assumed to be on those haul-outs was determined by NWFSC on the basis of anecdotal evidence from researchers. Although not all individuals on “disturbed” haul-outs would necessarily actually be disturbed, and some haul-outs may experience some disturbance at distances greater than expected, we believe that this approach is a reasonable effort towards accounting for this potential source of disturbance.
Summary of Estimated Incidental Take

Here we provide a summary of the total proposed incidental take authorization on an annual basis, as well other information relevant to the negligible impact analysis. Table 13 shows information relevant to our negligible impact analysis concerning the total annual take that could occur for each stock from NMFS’ scientific research activities when considering incidental take previously authorized for SWFSC (80 FR 58982; September 30, 2015) and take proposed for authorization for NWFSC. As footnoted in Table 13, the indicated level of take could occur to any species or stock for those species with multiple stocks (e.g., Northern fur seal) or considered as a group (e.g., Mesoplodont beaked whales). However, the harbor porpoise and harbor seal each have multiple stocks spanning the three NWFSC research areas, and we provide further detail regarding our consideration of potential take specific to stocks that may occur in the PSRA and LCRRA. Many stocks do not occur in those research areas and, therefore, would not be vulnerable to interaction with research gear deployed in those areas.

For harbor porpoise, we propose to authorize a total of five takes by M/SI + Level A for all stocks combined over the five-year period of validity for these proposed regulations. For the purposes of the negligible impact analysis, we assume that all of these takes could potentially be in the form of M/SI; PBR is not intended for assessment of the significance of harassment. These takes could occur to any stock; however, our proposed take authorization is informed by reasonable expectation regarding species vulnerability to gear used in the three research areas. Of the five total takes, we expect that two might occur in the CCRA, one in the PSRA, and two in the LCRRA. Therefore, corresponding with the relationship between stock ranges and the location of NWFSC research activities, the likely maximum takes that could accrue to any harbor porpoise stock from California to southern Oregon would be two, while the northern Oregon/Washington coast stock could potentially accrue four takes because it is vulnerable to the take expected in either the CCRA or LCRRA. In Table 13 below, the proposed total take authorization column reflects the total of four takes that could occur in either the CCRA or LCRRA (and the one take expected in the PSRA, which would occur to the California harbor seal). However, the estimated maximum annual take column reflects the annualized stock-specific risk, i.e., any stock in the CA-southern OR group is expected to be vulnerable to a maximum of two takes over the five-year period (0.4/year) while the northern OR/WA coast stock could be vulnerable to as many as four takes over the five years (0.8/year). This stock-specific accounting does not change our expectation that a total of five takes would occur for all stocks combined but informs our stock-specific negligible impact analysis.

Similarly, the harbor seal has separate designated stocks that may occur in all three research areas. We propose to authorize a total of thirteen takes by M/SI + Level A for all harbor seal stocks combined, and expect that five of these may occur in the CCRA, six in the PSRA, and two in the LCRRA. Therefore, while we would expect that a maximum of five takes could accrue to the California stock, as many as seven takes could occur for the Oregon/Washington coastal stock (which is the only stock that may occur in the LCRRA). Although NMFS has split the former Washington inland waters stock of harbor seals into three separate stocks, we do not have sufficient information to assess stock-specific risk in the PSRA. Separately, we have estimated that 162 incidents of acoustic harassment may occur for harbor seals due to NWFSC use of active acoustic systems (in the CCRA only) and that, due to the physical presence of researchers, individual harbor seals on haul-outs (as many as 3,000) may be disturbed up to 25 times per year in the LCRRA. Therefore, as shown in Table 13, the California stock of harbor seals is vulnerable to only the estimated 162 acoustic harassment takes, but the OR/WA coast stock would be vulnerable to both the acoustic harassment takes as well as the physical disturbance takes. However, note that the percent of estimated population is calculated considering the number of individuals anticipated to be disturbed rather than the number of incidents of disturbance.

We previously authorized take of marine mammals incidental to fisheries research operations conducted by the SWFSC (see 80 FR 58982 and 80 FR 66512). This take would occur to some of the same stocks for which we propose to authorize take incidental to NWFSC fisheries research operations. Therefore, in order to evaluate the likely impact of the take by M/SI proposed for authorization in this rule, we consider not only other ongoing sources of human-caused mortality but the potential mortality authorized for SWFSC. As used in this document, other ongoing sources of human-caused (anthropogenic) mortality refers to estimates of realized or actual annual mortality reported in the SARs and does not include authorized or unknown mortality. Below, we consider the total taking by M/SI proposed for authorization for NWFSC and previously authorized for SWFSC together to produce a maximum annual M/SI take level (including take of unidentified marine mammals that could accrue to any relevant stock) and compare that value to the stock’s PBR value, considering ongoing sources of anthropogenic mortality (as described in footnote 4 of Table 13 and in the following discussion). PBR and annual M/SI values considered in Table 13 reflect the most recent information available (i.e., final 2014 and draft 2015 SARs, as appropriate).
### TABLE 13—SUMMARY INFORMATION RELATED TO NWFSC PROPOSED ANNUAL TAKE AUTHORIZATION, 2016–21

<table>
<thead>
<tr>
<th>Species</th>
<th>Proposed total annual Level B harassment authorization</th>
<th>Percent of estimated population abundance</th>
<th>Proposed total M/SI authorization, 2016–21</th>
<th>SWFSC total M/SI authorization, 2015–20</th>
<th>Estimated maximum annual M/SI</th>
<th>PBR minus annual M/SI (%)</th>
<th>Stock trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sperm whale</td>
<td>6</td>
<td>0.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>?</td>
</tr>
<tr>
<td>Kogia spp.</td>
<td>3</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>0.4</td>
<td>2.7 (14.8)</td>
<td>?</td>
</tr>
<tr>
<td>Cuvier’s beaked whale</td>
<td>14</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>↓</td>
</tr>
<tr>
<td>Baird’s beaked whale</td>
<td>3</td>
<td>0.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>↓</td>
</tr>
<tr>
<td>Mesoplodont beaked whales</td>
<td>3</td>
<td>0.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>↓</td>
</tr>
<tr>
<td>Bottlenose dolphin (offshore stock)</td>
<td>6</td>
<td>0.6</td>
<td>2</td>
<td>9</td>
<td>2.6</td>
<td>3.5 (74.3)</td>
<td>?</td>
</tr>
<tr>
<td>Striped dolphin</td>
<td>49</td>
<td>0.4</td>
<td>7</td>
<td>12</td>
<td>4.2</td>
<td>82 (5.1)</td>
<td>?</td>
</tr>
<tr>
<td>Long-beaked common dolphin</td>
<td>55</td>
<td>0.1</td>
<td>2</td>
<td>12</td>
<td>3.2</td>
<td>596.2 (0.5)</td>
<td>↑</td>
</tr>
<tr>
<td>Short-beaked common dolphin</td>
<td>895</td>
<td>0.2</td>
<td>3</td>
<td>12</td>
<td>3.4</td>
<td>3,376 (0.1)</td>
<td>?</td>
</tr>
<tr>
<td>Pacific white-sided dolphin</td>
<td>61</td>
<td>0.2</td>
<td>31</td>
<td>35</td>
<td>13.6</td>
<td>159.2 (8.5)</td>
<td>?</td>
</tr>
<tr>
<td>Northern right whale dolphin</td>
<td>28</td>
<td>0.3</td>
<td>7</td>
<td>10</td>
<td>3.8</td>
<td>44.4 (8.6)</td>
<td>?</td>
</tr>
<tr>
<td>Risso’s dolphin</td>
<td>30</td>
<td>0.5</td>
<td>8</td>
<td>12</td>
<td>4.4</td>
<td>37.4 (11.8)</td>
<td>?</td>
</tr>
<tr>
<td>Killer whale</td>
<td>2</td>
<td>0.8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>?</td>
</tr>
<tr>
<td>Short-finned pilot whale</td>
<td>1</td>
<td>0.1</td>
<td>1</td>
<td>1</td>
<td>0.4</td>
<td>4.6 (8.7)</td>
<td>?</td>
</tr>
<tr>
<td>Harbor porpoise (CA-southern OR stocks)</td>
<td>110</td>
<td>3.8</td>
<td>4</td>
<td>5</td>
<td>1.8</td>
<td>20.4 (8.8)</td>
<td>?</td>
</tr>
<tr>
<td>Harbor porpoise (Northern OR/WA coast)</td>
<td>0</td>
<td>n/a</td>
<td>1</td>
<td>0</td>
<td>0.2</td>
<td>60.8 (0.3)</td>
<td>?</td>
</tr>
<tr>
<td>Dall’s porpoise</td>
<td>218</td>
<td>0.5</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>256.6 (0.8)</td>
<td>?</td>
</tr>
<tr>
<td>Guadalupe fur seal</td>
<td>22</td>
<td>0.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>↑</td>
</tr>
<tr>
<td>Northern fur seal</td>
<td>1,878</td>
<td>0.3</td>
<td>5</td>
<td>5</td>
<td>2.4</td>
<td>449.4 (0.5)</td>
<td>↑</td>
</tr>
<tr>
<td>California sea lion</td>
<td>3,659</td>
<td>0.4</td>
<td>10</td>
<td>25</td>
<td>7.6</td>
<td>8,815 (0.1)</td>
<td>↑</td>
</tr>
<tr>
<td>Steller sea lion</td>
<td>174</td>
<td>0.3</td>
<td>9</td>
<td>10</td>
<td>4.4</td>
<td>1,552.7 (0.3)</td>
<td>↑</td>
</tr>
<tr>
<td>Harbor seal (CA)</td>
<td>75,164</td>
<td>0.6</td>
<td>5</td>
<td>9</td>
<td>3.2</td>
<td>1,596 (0.2)</td>
<td>→</td>
</tr>
<tr>
<td>Harbor seal (OR/WA coast)</td>
<td>75,164</td>
<td>0.6</td>
<td>5</td>
<td>9</td>
<td>3.2</td>
<td>1,596 (0.2)</td>
<td>→</td>
</tr>
<tr>
<td>Harbor seal (WA inland waters)</td>
<td>11,520</td>
<td>10.5</td>
<td>6</td>
<td>0</td>
<td>1.2</td>
<td>Unknown</td>
<td>→</td>
</tr>
<tr>
<td>Northern elephant seal</td>
<td>622</td>
<td>0.3</td>
<td>5</td>
<td>5</td>
<td>2.2</td>
<td>4,873.2 (0.1)</td>
<td>↑</td>
</tr>
<tr>
<td>Unidentified small cetacean</td>
<td>n/a</td>
<td>n/a</td>
<td>1</td>
<td>1</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Unidentified pinniped</td>
<td>n/a</td>
<td>n/a</td>
<td>1</td>
<td>1</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Please see Tables 7, 10, and 12 and preceding text for details.

1 Species with multiple stocks or for species groups (Kogia spp. and Mesoplodont beaked whales), indicated level of take could occur to individuals from any stock or species except as indicated in table.

2 Level B harassment totals include estimated take due to acoustic harassment and, for harbor seals and California sea lions, estimated take due to physical disturbance. Takes by physical disturbance for pinniped species represent repeated takes of smaller numbers of individuals (e.g., we expect as many as 1,440 harbor seals in the PSRA to be harassed on as many as eight occasions). The "percent of estimated population" column represents this smaller number of individuals taken rather than the total number of take incidents.

3 As explained earlier in this document, gear interaction could result in mortality, serious injury, or Level A harassment. Because we do not have sufficient information to enable us to parse out these outcomes, we present such take as a pool. For purposes of this negligible impact analysis we assume the worst case scenario (that all such takes result in mortality).

4 This column represents the total number of incidents of M/SI that could potentially accrue to the specified species or stock as a result of NMFS' fisheries research activities and is the number carried forward for evaluation in the negligible impact analysis (later in this document). To reach this total, we add one to the total for each pinniped or cetacean that may be captured in trawl gear in the CCRA. This represents the potential that the take of an unidentified pinniped or small cetacean could accrue to any given stock captured in that gear in that area. The proposed take authorization is formulated as a five-year total; the annual average is used only for purposes of negligible impact analysis. We recognize that portions of an animal may not be taken in a given year.

5 This value represents the calculated PBR less the average annual estimate of ongoing anthropogenic mortalities (i.e., total annual human-caused M/SI, which is presented in the SARs) (see Table 3). For the Pacific-white sided dolphin, harbor seal, and California sea lion, we subtract 2007–11 from the total human-caused M/SI prior to calculating this value, as we explicitly account for predicted future mortalities incidental to NMFS fisheries research. Calculations for the estimated maximum annual M/SI + Level A column. In parentheses, we provide the estimated maximum annual M/SI as a percentage of this value.

6 See relevant SARs for more information regarding stock status and trends. Interannual increases may not be interpreted as evidence of a trend. Based on the most recent abundance estimates, harbor seal stocks may have reached carrying capacity and appear stable. A time series of stock-specific abundance estimates for harbor porpoise shows either increasing or stable estimates, but it is not statistically valid to infer a trend.

7 These species have multiple stocks that may be affected. Values for "percent of estimated population" and "PBR—annual M/SI" (where relevant) calculated for the stock with the lowest population abundance and/or PBR (as appropriate). This approach assumes that all indicated takes would accrue to the stock in question, which is a very conservative assumption. Stocks in question are the offshore killer whale, Morro Bay harbor porpoise, and California northern fur seal.

8 A range is provided for Steller sea lion abundance. We have used the higher bound of the given range for calculation of this value.

9 Calculated on the basis of relative abundance; i.e., of 1,878 total estimated incidents of Level B harassment, we would expect on the basis of relative abundance in the study area that 98 percent would accrue to the Pribilof Islands/Eastern Pacific stock and two percent would accrue to the California stock.

↑ Estimated maximum annual M/SI + Level A column.
Analyses and Preliminary Determinations

Negligible Impact Analysis

Introduction—NMFS has defined “negligible impact” in 50 CFR 216.103 as “... an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.” A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (i.e., population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be “taken” by mortality, serious injury, and Level A or Level B harassment, we consider other factors, such as the likely nature of any behavioral responses (e.g., intensity, duration), the context of any such responses (e.g., critical reproductive time or location, migration), as well as effects on habitat. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status (i.e., the environmental baseline).

In 1988, Congress amended the MMPA, with provisions for the incidental take of marine mammals in commercial fishing operations. Congress directed NMFS to develop and recommend a new long-term regime to govern such incidental taking (see MMC, 1994). The need to set allowable take levels incidental to commercial fishing operations led NMFS to suggest a new conceptual means for assuring that incidental take does not cause any marine mammal species or stock to be reduced or to be maintained below the lower limit of its Optimum Sustainable Population (OSP) level. That concept, potential biological removal (PBR), was incorporated in the 1994 amendments to the MMPA, wherein Congress enacted MMPA sections 117 and 118, establishing a new regime governing the incidental taking of marine mammals in commercial fishing operations and stock assessments.

PBR, which is defined by the MMPA (16 U.S.C. 1362(20)) as “the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population,” is one tool that can be used to help evaluate the effects of M/SI on a marine mammal stock. PBR is defined by the MMPA (16 U.S.C. 1362(6)) as “the number of animals which will result in the maximum productivity of the population or the species, keeping in mind the carrying capacity of the habitat and the health of the ecosystem of which they form a constituent element.” A primary goal of the MMPA is to ensure that each stock of marine mammal either does not have a level of human-caused M/SI that is likely to cause the stock to be reduced below its OSP level or, if the stock is depleted (i.e., below its OSP level), does not have a level of human-caused mortality and serious injury that is likely to delay restoration of the stock to OSP level by more than ten percent in comparison with recovery time in the absence of human-caused M/SI.

PBR, a parametric concept that relates survivorship to population size, was developed in consideration of the principle given by Holt and Talbot (1978): “Management decisions should include a safety factor to allow for the facts that knowledge is limited and institutions are imperfect” (Taylor, 1993). PBR values are calculated by NMFS as the level of annual removal from a stock that will allow that stock to equilibrate within OSP at least 95 percent of the time, and is the product of factors relating to the minimum population estimate of the stock (Nmin), the productivity rate of the stock at a small population size; and a recovery factor. Determination of appropriate values for these three elements incorporates significant precaution, such that application of the parameter to the management of marine mammal stocks may be reasonably certain to achieve the goals of the MMPA. For example, calculation of Nmin incorporates the precision and variability associated with abundance information and is intended to provide reasonable assurance that the stock size is equal to or greater than the estimate (Barlow et al., 1995). In general, the three factors are developed on a stock-specific basis in consideration of one another in order to produce conservative PBR values that appropriately account for both imprecision that may be estimated as well as potential bias stemming from lack of knowledge (Wade, 1998).

PBR was not designed as an absolute threshold limiting human activities, but as a means to evaluate the relative impacts of those activities on marine mammal stocks. Specifically, assessing M/SI relative to a stock’s PBR may signal to NMFS the need to establish take reduction teams in commercial fisheries and may assist NMFS and existing take reduction teams in the identification of measures to reduce and/or minimize the taking of marine mammals by commercial fisheries to a level below a stock’s PBR. That is, where the total annual human-caused M/SI exceeds PBR, NMFS is not required to halt fishing activities contributing to total M/SI but rather may prioritize working with a take reduction team to further mitigate the effects of fishery activities via additional bycatch reduction measures. In addition, PBR alone is not used to authorize or deny authorization of commercial fisheries that may incidentally take marine mammals.

Since the introduction of PBR, NMFS has used the concept almost entirely within the context of implementing sections 117 and 118 and other commercial fisheries management-related provisions of the MMPA, including those within section 101(a)(5)(E) related to the taking of ESA-listed marine mammals incidental to commercial fisheries (46 FR 28800; May 27, 1991). The MMPA requires that PBR be estimated in stock assessment reports and that it be used in applications related to the management of take incidental to commercial fisheries (i.e., the take reduction planning process described in section 118 of the MMPA and the determination of whether a stock is “strategic” [16 U.S.C. 1362(19)]), but nothing in the MMPA requires the application of PBR outside the management of commercial fisheries interactions with marine mammals. Although NMFS has not historically applied PBR outside the context of sections 117, 118, and 101(a)(5)(E), NMFS recognizes that as a quantitative tool, PBR may be useful in certain instances for evaluating the impacts of other human-caused activities on marine mammal stocks. Our use of PBR here (for NWFSC fisheries research activities) does not make up the entirety of our impact assessment, but rather is being utilized as a known, quantitative metric for evaluating whether the proposed activities are likely to have a population-level effect on the affected
marine mammal stocks. Here, we calculate a metric that incorporates information regarding ongoing anthropogenic mortality into the PBR value; i.e., PBR minus the reported annual anthropogenic mortality estimate (also referred to as “residual PBR”; Wood et al., 2012). We first consider maximum potential incidental M/SI for NMFS research relative to this metric for each affected stock (see Table 13), in consideration of NMFS’ defined significance threshold for M/SI (ten percent of PBR [69 FR 43338; July 20, 2004]). By considering the maximum potential incidental M/SI in relation to PBR and other ongoing sources of anthropogenic mortality, we ensure that the potential incremental addition of M/SI through NMFS’ fisheries research activities does not pose a risk to the stock that bears further consideration here. We also consider the interaction of those removals with incidental taking of that stock by harassment pursuant to the specified activity (i.e., NWFS fisheries research activities).

Therefore, for those stocks with total incidental M/SI less than the significance threshold (i.e., ten percent of residual PBR), we consider the effects of the specified activity to represent an insignificant incremental increase in ongoing anthropogenic M/SI and need not consider other factors in making a negligible impact determination except in combination with additional incidental take by harassment. For those stocks with incidental M/SI exceeding the significance threshold, we will consider all factors that may either increase or reduce the level of concern related to the significance of a given level of taking—such as implementation of mitigation measures or additional population stressors—in addition to considering the interaction of those removals with incidental taking of that stock by harassment.

Analysis—Please see Table 13 for information related to this analysis. The large majority of stocks that may potentially be taken by M/SI + Level A (18 of 21) fall below the significance threshold, while an additional four stocks do not have current PBR values and therefore are evaluated using other factors. We first consider stocks expected to be affected only by behavioral harassment and those stocks that fall below the significance threshold. Next, we consider those stocks above the significance threshold (i.e., Kogia spp., the offshore stock of bottlenose dolphin, and Risso’s dolphin) and those without PBR values (harbor seals along the Oregon and Washington coasts and in Washington inland waters).

As described in greater depth previously (see “Acoustic Effects”), we do not believe that NWFS use of active acoustic sources has the likely potential to cause any effect exceeding Level B harassment of marine mammals. In addition, for the majority of species, the proposed annual take by Level B harassment is very low in relation to the population abundance estimate (less than one percent). We have produced what we believe to be precautionary estimates of potential incidents of Level B harassment. The procedure for producing these estimates, described in detail in “Estimated Take Due to Acoustic Harassment,” represents NMFS’ best effort towards balancing the need to quantify the potential for occurrence of Level B harassment due to production of underwater sound with a general lack of information related to the specific way that these acoustic signals, which are generally highly directional and transient, interact with the physical environment and to a meaningful understanding of marine mammal perception of these signals and occurrence in the areas where NWFS operates. The sources considered here have moderate to high output frequencies (10 to 180 kHz), generally short ping durations, and are typically focused (highly directional) to serve their intended purpose of mapping specific objects, depths, or environmental features. In addition, some of these sources can be operated in different output modes (e.g., energy can be distributed among multiple output beams) that may lessen the likelihood of behavioral and potential impacts on marine mammals in comparison with the quantitative estimates that guide our proposed take authorization.

In addition, otariid pinnipeds are less likely than other taxa to perceive acoustic signals generated by NWFS or, given perception, to react to these signals than the quantitative estimates indicate. This group of pinnipeds has reduced functional hearing at the higher frequencies produced by active acoustic sources (e.g., primary operating frequencies of 40–180 kHz) and, based purely on their auditory capabilities, the potential impacts are likely much less than we have calculated as these relevant factors are not taken into account.

As described previously, there is some minimal potential for temporary effects to hearing for certain marine mammals, but most effects would likely be limited to temporary behavioral disturbance. Effects on individuals that are taken by Level B harassment will likely be limited to reactions such as increased swimming speeds, increased surfacing time, or decreased foraging (if such activity were occurring), reactions that are considered to be of low severity (e.g., Southall et al., 2007). Individuals may move away from the source if disturbed, but because the source is itself moving and because of the directional nature of the sources considered here, there is unlikely to be even temporary displacement from areas of significance and any disturbance would be of short duration. Although there is no information on which to base any distinction between incidents of harassment and individuals harassed, the same factors, in conjunction with the fact that NWFS survey effort is widely dispersed in space and time, indicate that repeated exposures of the same individuals would be very unlikely. For these reasons, we do not consider the proposed level of take by acoustic disturbance to represent a significant additional population stressor when considered in context with the proposed level of take by M/SI + Level A for any species.

Similarly, disturbance of pinnipeds on haul-outs by researchers approaching on foot or in small vessels (as is expected for harbor seals in the lower Columbia River and Puget Sound and for California sea lions in Puget Sound) are expected to be infrequent and cause only a temporary disturbance on the order of minutes. As noted previously, monitoring results from other activities involving the disturbance of pinnipeds and relevant studies of pinniped populations that have more regular vessel disturbance indicate that individually significant or population level impacts are unlikely to occur. When considering the individual animals likely affected by this disturbance, only a small fraction (less than fifteen percent) of the estimated population abundance of the affected stocks would be expected to experience the disturbance.

For Kogia spp. and Risso’s dolphin, maximum total potential M/SI due to NMFS’ fisheries research activity (SWFS and NWFS combined) approaches fifteen and twelve percent of residual PBR, respectively. There are no other known sources of anthropogenic M/SI for Kogia spp. The only known source of other anthropogenic mortality for Risso’s dolphin is in commercial fisheries, but such take is considered to be insignificant and approaching zero mortality and serious injury. For example, PBR for Risso’s dolphin is currently set at 39 and the annual average of known ongoing anthropogenic M/SI is 1.6, yielding a residual PBR value of 37.4.
maximum combined annual average M/ SI incidental to NMFS fisheries research activity is 4.4, or 11.8 percent of residual PBR.

M/SI incidental to NMFS’ fisheries research activities could be as much as 74 percent of residual PBR for the offshore stock of bottlenose dolphin, assuming a worst-case scenario in which take of an unidentified cetacean is applied to this stock. Fisheries bycatch of this stock occurs on an annual basis, though this ongoing level of M/SI is accounted for. The majority of takes in commercial fisheries from 2007–11 were due to interactions with the California drift gillnet fishery, and it is possible that these interactions have declined since the use of acoustic pingers was required. Any level of removals up to PBR could occur while still allowing the stock to reach or maintain its optimum sustainable population, as indicated in the definition of the PBR metric.

Nevertheless, given the small PBR value, fluctuation in the amount of incidental take could result in unsustainable levels of removal from the stock. If bycatch in commercial fisheries increases, or other sources of mortality are recorded for this stock, we will use the adaptive management provisions of the proposed regulations to prescribe increased mitigation sufficient to reduce the likelihood of incidental take in NMFS fisheries research activities. No population trends are known for these three stocks.

PBR is unknown for harbor seals on the Oregon and Washington coasts and in Washington inland waters (comprised of the Hood Canal, southern Puget Sound, and Washington northern inland waters stocks). The Hood Canal, southern Puget Sound, and Washington northern inland waters stocks were formerly a single inland waters stock. Both the Oregon/Washington coast and Washington inland waters stocks of harbor seal were considered to be stable following the most recent abundance estimates (in 1999, stock abundances were estimated at 24,732 and 13,692, respectively). However, a Washington Department of Fish and Wildlife expert (S. Jeffries) stated an unofficial abundance of 32,000 harbor seals in Washington (Mapes, 2013). Therefore, it is reasonable to assume that at worst, the stocks have not declined since the last abundance estimates. Ongoing anthropogenic mortality is estimated at 10.6 harbor seals per year for the coastal stock and 13.4 for inland waters seals; therefore, we reasonably assume that the maximum potential annual M/SI incidental to NMFS’ fisheries research activities (1.8 and 1.2, respectively) is a small fraction of any sustainable take level that might be calculated for either stock. For the reasons stated above, we do not consider the proposed level of take by acoustic and physical disturbance for harbor seals to represent a significant additional population stressor when considered in context with the proposed level of take by M/SI.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the planned mitigation measures, we preliminarily find that the total marine mammal take from NWSC’s fisheries research activities will have a negligible impact on the affected marine mammal species or stocks. In summary, this finding of negligible impact is founded on the following factors: (1) The possibility of injury, serious injury, or mortality from the use of active acoustic devices may reasonably be considered discountable; (2) the anticipated incidents of Level B harassment from the use of active acoustic devices and physical disturbance of pinnipeds consist of, at worst, temporary and relatively minor modifications in behavior; (3) the predicted number of incidents of potential mortality are at insignificant levels (i.e., below ten percent of residual PBR) for a majority of affected stocks; (4) consideration of additional factors for Kogia spp. and Risso’s dolphin do not reveal cause for concern; (5) total maximum potential M/SI incidental to NMFS fisheries research activity for bottlenose dolphin, considered in conjunction with other sources of ongoing mortality, is currently sustainable because it is below the residual PBR level; (6) available information regarding two harbor seal stocks indicates that total maximum potential M/SI is sustainable; and (7) the presumed efficacy of the planned mitigation measures in reducing the effects of the specified activity to the level of least practicable adverse impact. In addition, no M/SI is proposed for authorization for any species or stock that is listed under the ESA or considered depleted under the MMPA. In combination, we believe that these factors demonstrate that the specified activity will have only short-term effects on individuals (resulting from Level B harassment) and that the total level of taking will not impact rates of recruitment or survival sufficiently to result in population-level impacts.

Small Numbers Analysis

Please see Table 13 for information relating to this small numbers analysis. The total amount of taking proposed for authorization is less than one percent for a large majority of stocks. The total amount of taking for remaining stocks ranges from four to thirteen percent.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed mitigation measures, we preliminarily find that small numbers of marine mammals will be taken relative to the populations of the affected species or stocks.

Proposed Monitoring and Reporting

In order to issue an incidental take authorization for an activity, section 101(a)(5)(A) of the MMPA states that NMFS must set forth “requirements pertaining to the monitoring and reporting of such taking.” The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for incidental take authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area.

Any monitoring requirement we prescribe should improve our understanding of one or more of the following:

- Occurrence of marine mammal species in action area (e.g., presence, abundance, distribution, density);
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) Action or environment (e.g., source characterization, propagation, ambient noise); (2) affected species (e.g., life history, dive patterns); (3) co-occurrence of marine mammal species with the action; (4) biological or behavioral context of exposure (e.g., age, calving, or feeding areas);
- Individual responses to acute stressors, or impacts of chronic exposures (behavioral or physiological);
- How anticipated responses to stressors impact either: (1) Long-term fitness and survival of an individual; or (2) population, species, or stock.
- Effects on marine mammal habitat and resultant impacts to marine mammals.
- Mitigation and monitoring effectiveness.

NWSC plans to make more systematic its training, operations, data collection, animal handling and
sampling protocols, etc. in order to improve its ability to understand how mitigation measures influence interaction rates and ensure its research operations are conducted in an informed manner and consistent with lessons learned from those with experience operating these gears in close proximity to marine mammals. It is in this spirit that we propose the monitoring requirements described below.

**Visual Monitoring**

Marine mammal watches are a standard part of conducting fisheries research activities, and are implemented as described previously in “Proposed Mitigation.” Dedicated marine mammal visual monitoring occurs as described (1) for some period prior to deployment of most research gear; (2) throughout deployment and active fishing of all research gears; (3) for some period prior to retrieval of longline gear; and (4) throughout retrieval of all research gear. This visual monitoring is performed by trained NWFSC personnel with no other responsibilities during the monitoring period. Observers record the species and estimated number of animals present and their behaviors, which may be valuable information towards an understanding of whether certain species may be attracted to vessels or certain survey gears. Separately, marine mammal watches are conducted by watch-standers (those navigating the vessel and other crew; these will typically not be NWFSC personnel) at all times when the vessel is being operated. The primary focus for this type of watch is to avoid striking marine mammals and to generally avoid navigational hazards. These watch-standers typically have other duties associated with navigation and other vessel operations and are not required to record or report to the scientific party data on marine mammal sightings, except when gear is being deployed or retrieved.

In the PSRA and LCRRA only, the NWFSC will monitor any potential disturbance of hauled-out pinnipeds, paying particular attention to the distance at which different species of pinniped are disturbed. Disturbance will be recorded according to the three-point scale, representing increasing seal response to disturbance, shown in Table 11.

**Training**

NWFSC anticipates that additional information on practices to avoid marine mammal interactions can be gleaned from training sessions and more systematic data collection standards. The NWFSC will conduct annual trainings for all chief scientists and other personnel who may be responsible for conducting dedicated marine mammal visual observations to explain mitigation measures and monitoring and reporting requirements, mitigation and monitoring protocols, marine mammal identification, recording of count and disturbance observations (relevant to AMLR surveys), completion of datasheets, and use of equipment. Some of these topics may be familiar to NWFSC staff, who may be professional biologists; the NWFSC shall determine the agenda for these trainings and ensure that all relevant staff have necessary familiarity with these topics. The first training such will include three primary elements:

First, the course will provide an overview of the purpose and need for the authorization, including mandatory mitigation measures by gear and the purpose for each, and species that NWFSC is authorized to incidentally take.

Second, the training will provide detailed descriptions of reporting, data collection, and sampling protocols. This portion of the training will include instruction on how to complete new data collection forms such as the marine mammal watch log, the incidental take form (e.g., specific gear configuration and details relevant to an interaction with protected species), and forms used for species identification and biological sampling. The biological data collection and sampling training module will include the same sampling and necropsy training that is used for the West Coast Regional Observer training.

NWFSC will also dedicate a portion of training to discussion of best professional judgment (which is recognized as an integral component of mitigation implementation; see “Proposed Mitigation”), including use in any incidents of marine mammal interaction and instructive examples where use of best professional judgment was determined to be successful or unsuccessful. We recognize that many factors come into play regarding decision-making at sea and that it is not practicable to simplify what are inherently variable and complex situational decisions into rules that may be defined on paper. However, it is our intent that use of best professional judgment be an iterative process from year to year, in which any at-sea decision-maker (i.e., responsible for decisions regarding the avoidance of marine mammal interactions with certain survey gears) and training (i.e., recognition of best professional judgment) learns from the prior experience of all relevant NWFSC personnel (rather than from solely their own experience). The outcome should be increased transparency in decision-making processes where best professional judgment is appropriate and, to the extent possible, some degree of standardization across common situations, with an ultimate goal of reducing marine mammal interactions. It is the responsibility of the NWFSC to facilitate such exchange.

**Handling Procedures and Data Collection**

Improved standardization of handling procedures were discussed previously in “Proposed Mitigation.” In addition to the benefits implementing these protocols are believed to have on the animals through increased post-release survival, NWFSC believes adopting these protocols for data collection will also increase the information on which “serious injury” determinations (NMFS, 2012a, b) are based and improve scientific knowledge about marine mammals that interact with fisheries research gears and the factors that contribute to these interactions. NWFSC personnel will be provided standard guidance and training regarding handling of marine mammals, including how to identify different species, bring an individual aboard a vessel, assess the level of consciousness, remove fishing gear, return an individual to water and log activities pertaining to the interaction.

NWFSC will record interaction information on either existing data forms created by other NMFS programs or will develop their own standardized forms. To aid in serious injury determinations and comply with the current NMFS Serious Injury Guidelines (NMFS, 2012a, b), researchers will also answer a series of supplemental questions on the details of marine mammal interactions.

Finally, for any marine mammals that are killed during fisheries research activities, scientists will collect data and samples pursuant to Appendix D of the NWFSC DEAA, “Protected Species Handling Procedures for NWFSC Fisheries Research Vessels.”

**Reporting**

As is normally the case, NWFSC will coordinate with the relevant stranding coordinators for any unusual marine mammal behavior and any stranding, beached live/dead, or floating marine mammals that are encountered during field research activities. The NWFSC will follow a phased approach with regard to the cessation of its activities and/or reporting of such events, as
described in the proposed regulatory texts following this preamble. In addition, Chief Scientists (or cruise leader, CS) will provide reports to NWFSC leadership and to the Office of Protected Resources (OPR). As a result, when marine mammals interact with survey gear, whether killed or released alive, a report provided by the CS will fully describe any observations of the animals, the context (vessel and conditions), decisions made and rationale for decisions made in vessel and gear handling. The circumstances of these events are critical in enabling NWFSC and OPR to better evaluate the conditions under which takes are most likely occur. We believe in the long term this will allow the avoidance of these types of events in the future.

The NWFSC will submit annual summary reports to OPR including: (1) Annual line-kilometers surveyed during which the EK60, ME70, SX90 (or equivalent sources) were predominant (see “Estimated Take by Acoustic Harassment” for further discussion), specific to each region; (2) summary information regarding use of all hook and line, seine, and trawl gear, including number of sets, hook hours, tows, etc., specific to each research area and gear; (3) accounts of all incidents of marine mammal interactions, including circumstances of the event and descriptions of any mitigation procedures implemented or not implemented and why; (4) summary information related to any disturbance of pinnipeds, including event-specific total counts of animals present, counts of reactions according to the three-point scale shown in Table 11, and distance of closest approach; and (5) a written evaluation of the effectiveness of NWFSC mitigation strategies in reducing the number of marine mammal interactions with survey gear, including best professional judgment and suggestions for changes to the mitigation strategies, if any. The period of reporting will be annually, beginning one year post-issuance of any LOA, and the report must be submitted not less than ninety days following the end of a given year. Submission of this information is in service of an adaptive management framework allowing NMFS to make appropriate modifications to mitigation and/or monitoring strategies, as necessary, during the proposed five-year period of validity for these regulations.

NMFS has established a formal incidental take reporting system, the Protected Species Incidental Take (PSIT) database, requiring that all incidental takes of protected species be reported within 48 hours of the occurrence. The PSIT generates automated messages to NMFS leadership and other relevant staff, alerting them to the event and to the fact that updated information describing the circumstances of the event has been inputted to the database. The PSIT and CS reports represent not only valuable real-time reporting and information dissemination tools, but also serve as an archive of information that may be mined in the future to study why takes occur by species, gear, region, etc.

NWFSC will also collect and report all necessary data, to the extent practicable given the primary of human safety and the well-being of captive or entangled marine mammals, to facilitate serious injury (SI) determinations for marine mammals that are released alive. NWFSC will require that the CS complete data forms and address supplemental questions, both of which have been developed to aid in SI determinations. NWFSC understands the critical need to provide as much relevant information as possible about marine mammal interactions to inform decisions regarding SI determinations. In addition, the NWFSC will perform all necessary reporting to ensure that any incidental M/SI is incorporated as appropriate into relevant SARS.

Adaptive Management

The regulations governing the take of marine mammals incidental to NWFSC fisheries research survey operations would contain an adaptive management component. The inclusion of an adaptive management component will be both valuable and necessary within the context of five-year regulations for activities that have been associated with marine mammal mortality.

The reporting requirements associated with this proposed rule are designed to provide OPR with monitoring data from the previous year to allow consideration of whether any changes are appropriate. OPR and the NWFSC will meet annually to discuss the monitoring reports and current science and whether mitigation or monitoring modifications are appropriate. The use of adaptive management allows OPR to consider new information from different sources to determine (with input from the NWFSC regarding practicability) on an annual or biennial basis if mitigation or monitoring measures should be modified (including additions or deletions). Mitigation measures could be modified if new data suggests that such modifications would have a reasonable likelihood of reducing adverse effects to marine mammals and if the measures are practicable.

The following are some of the possible sources of applicable data to be considered through the adaptive management process: (1) Results from monitoring reports, as required by MMPA authorizations; (2) results from general marine mammal and sound research; and (3) any information which reveals that marine mammals may have been taken in a manner, extent, or number not authorized by these regulations or subsequent LOAs.

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by these actions. Therefore, we have determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act (ESA)

There are multiple marine mammal species listed under the ESA with confirmed or possible occurrence in the proposed specified geographical region (see Table 3). The proposed authorization of incidental take pursuant to the NWFSC’s specified activity would not affect any designated critical habitat. OPR has initiated consultation with NMFS’ West Coast Regional Office under section 7 of the ESA on the promulgation of five-year regulations and the subsequent issuance of LOAs to NWFSC under section 101(a)(5)(A) of the MMPA. This consultation will be concluded prior to issuing any final rule.

National Environmental Policy Act (NEPA)

The NWFSC has prepared a Draft Environmental Assessment (EA; Draft Programmatic Environmental Assessment for Fisheries Research Conducted and Funded by the Northwest Fisheries Science Center) in accordance with NEPA and the regulations published by the Council on Environmental Quality. It is posted on the Internet at: www.nmfs.noaa.gov/pr/permits/incidental/research.htm. We have independently evaluated the Draft EA and are proposing to adopt it. We may prepare a separate NEPA analysis and incorporate relevant portions of NWFSC’s EA by reference. Information in NWFSC’s application, EA and this notice collectively provide the environmental information related to proposed issuance of these regulations for public review and comment. We will review all comments submitted in response to this notice as we complete the NEPA process, including a decision.
of whether to sign a Finding of No Significant Impact, prior to a final decision on the incidental take authorization request.

Request for Information

NMFS requests interested persons to submit comments, information, and suggestions concerning the NWFSF request and the proposed regulations (see ADDRESSES). All comments will be reviewed and evaluated as we prepare final rules and make final determinations on whether to issue the requested authorizations. This notice and referenced documents provide all environmental information relating to our proposed action for public review.

Classification

Pursuant to the procedures established to implement Executive Order 12866, the Office of Management and Budget has determined that this proposed rule is not significant.

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. NMFS is the sole entity that would be subject to the requirements in these proposed regulations, and NMFS is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Because of this certification, a regulatory flexibility analysis is not required and none has been prepared.

This proposed rule does not contain a collection-of-information requirement subject to the provisions of the Paperwork Reduction Act (PRA) because the applicant is a federal agency. Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number. These requirements have been approved by OMB under control number 0648–0151 and include applications for regulations, subsequent LOAs, and reports.

List of Subjects in 50 CFR Part 219

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: June 6, 2016.
Samuel D. Rauch III,
Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For reasons set forth in the preamble, 50 CFR part 219 is proposed to be amended as follows:

PART 219—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

§ 219.41 Specified activity and specified geographical region.

(a) Regulations in this part apply only to the National Marine Fisheries Service's (NMFS) Northwest Fisheries Science Center (NWFSC) and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to research survey program operations.

(b) The taking of marine mammals by NWFSF may be authorized in a Letter of Authorization (LOA) only if it occurs within the California Current Ecosystem, including Puget Sound and the Columbia River.

§ 219.42 Effective dates.

Regulations in this subpart are effective from [EFFECTIVE DATE OF FINAL RULE] through [DATE 5 YEARS AFTER EFFECTIVE DATE OF FINAL RULE].

§ 219.43 Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 and 219.47 of this chapter, the Holder of the LOA (hereinafter “NWFSF”) may incidentally, but not intentionally, take marine mammals within the area described in § 219.41(b) of this chapter by Level B harassment associated with use of active acoustic systems and physical or visual disturbance of hauled-out pinnipeds and by Level A harassment, serious injury, or mortality associated with use of hook and line gear, trawl gear, and seine gear, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 219.44 Prohibitions.

Notwithstanding takings contemplated in § 219.41 and authorized by a LOA issued under §§ 216.106 and 219.47 of this chapter, no person in connection with the activities described in § 219.41 of this chapter may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under §§ 216.106 and 219.47 of this chapter;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 219.45 Mitigation requirements.

When conducting the activities identified in § 219.41(a) of this chapter, the mitigation measures contained in any LOA issued under §§ 216.106 and 219.47 of this chapter must be implemented. These mitigation measures shall include but are not limited to:

(a) General conditions: (1) NWFSF shall take all necessary measures to coordinate and communicate in advance of each specific survey with the National Oceanic and Atmospheric Administration's (NOAA) Office of Marine and Aviation Operations (OMAO) or other relevant parties on non-NOAA platforms to ensure that all mitigation measures and monitoring requirements described herein, as well as the specific manner of implementation and relevant event-contingent decision-making processes, are clearly understood and agreed upon.
(2) NWFSC shall coordinate and conduct briefings at the outset of each survey and as necessary between ship’s crew (Commanding Officer/master or designee(s), as appropriate) and scientific party in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

(3) NWFSC shall coordinate as necessary on a daily basis during survey cruises with OMAO personnel or other relevant personnel on non-NOAA platforms to ensure that requirements, procedures, and decision-making processes are understood and properly implemented.

(4) When deploying any type of sampling gear at sea, NWFSC shall at all times monitor for any unusual circumstances that may arise at a sampling site and use best professional judgment to avoid any potential risks to marine mammals during use of all research equipment.

(5) NWFSC shall implement handling and/or disentanglement protocols as specified in the guidance that shall be provided to NWFSC survey personnel.

(b) For all research surveys using trawl, hook and line, or seine gear in Puget Sound, the move-on rule mitigation protocol described in paragraph (c)(3) shall be implemented upon observation of killer whales at any distance.

(c) Trawl survey protocols: (1) NWFSC shall conduct trawl operations as soon as is practicable upon arrival at the sampling station.

(2) NWFSC shall initiate marine mammal watches (visual observation) a minimum of ten minutes prior to beginning of net deployment, but shall also conduct monitoring during pre-set activities including trackline reconnaissance, CTD casts, and plankton or bongo net hauls. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and available vessel lighting. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and available vessel lighting.

(3) NWFSC shall implement the move-on rule mitigation protocol, as described in this paragraph. If one or more marine mammals are observed within 500 m of the planned location in the ten minutes before setting the trawl gear, and are considered at risk of interacting with the vessel or research gear, or appear to be approaching the vessel and are considered at risk of interaction, NWFSC shall either remain onsite or move on to another sampling location. If remaining onsite, the set shall be delayed. If the animals depart or appear to no longer be at risk of interacting with the vessel or gear, a further ten minute observation period shall be conducted. If no further observations are made or the animals still do not appear to be at risk of interaction, then the set may be made. If the vessel is moved to a different section of the sampling area, the move-on rule mitigation protocol would begin anew. If, after moving on, marine mammals remain at risk of interaction, the NWFSC shall move again or skip the station. Marine mammals that are sighted further than 500 m from the vessel shall be monitored to determine their position and movement in relation to the vessel to determine whether the move-on rule mitigation protocol should be implemented. NWFSC may use best professional judgment in making these decisions.

(4) NWFSC shall maintain visual monitoring effort during the entire period of time that trawl gear is in the water (i.e., throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NWFSC shall take the most appropriate action to avoid marine mammal interaction. NWFSC may use best professional judgment in making this decision.

(5) If trawling operations have been suspended because of the presence of marine mammals, NWFSC may resume trawl operations when practicable only when the animals are believed to have departed the area. NWFSC may use best professional judgment in making this determination.

(6) When conducting surface trawls using the Nordic 264 net, dedicated crew with no other tasks shall conduct required marine mammal monitoring. Marine mammal monitoring shall be staffed in a stepwise process, with a minimum of two observers beginning pre-set monitoring and increasing to a minimum of four observers prior to and during gear deployment. During the tow, a minimum of three observers shall conduct required monitoring.

(7) NWFSC shall implement standard survey protocols to minimize potential for marine mammal interactions, including maximum tow durations at target depth and maximum tow distance, and shall carefully empty the trawl as quickly as possible upon retrieval. Trawl nets must be cleaned prior to deployment.

(8) NWFSC must install and use a marine mammal excluder device at all times when the Nordic 264 trawl net is used.

(9) NWFSC must install and use deterrent devices whenever the Nordic 264 trawl net is used, with two pairs of the devices installed near the net opening. NWFSC must ensure that the devices are operating properly before deploying the net.

(10) For use of the Kodiak surface trawl in Puget Sound, trawl survey protocols described in this section apply only to cetaceans.

(11) Trawl survey protocols described in this section do not apply to use of pair trawl gear in the Columbia River.

(d) Hook and line (including longline) survey protocols: (1) For use of the Kodiak surface trawl in Puget Sound, trawl survey protocols described in this section apply only to cetaceans.

(2) NWFSC shall initiate marine mammal watches (visual observation) a minimum of thirty minutes prior to both deployment and retrieval of longline gear. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and rangefinding binoculars (or monocular). During nighttime operations, visual monitoring shall be conducted by using the naked eye and available vessel lighting.

(3) NWFSC shall implement the move-on rule mitigation protocol, as described in this paragraph. If one or more marine mammals are observed within 500 m of the planned location in the ten minutes before gear deployment, and are considered at risk of interacting with the vessel or research gear, or appear to be approaching the vessel and are considered at risk of interaction, NWFSC shall either remain onsite or move on to another sampling location. If remaining onsite, the set shall be delayed. If the animals depart or appear to no longer be at risk of interacting with the vessel or gear, a further thirty minute observation period shall be conducted. If no further observations are made or the animals still do not appear to be at risk of interaction, then the set may be made. If the vessel is moved to a different section of the sampling area, the move-on rule mitigation protocol would begin anew. If, after moving on, marine mammals remain at risk of interaction, the NWFSC shall move again or skip the station. Marine mammals that are sighted further than 500 m from the vessel shall be monitored to determine their position and movement in relation to the vessel to determine whether the move-on rule mitigation protocol should be implemented. NWFSC may use best professional judgment in making these decisions.

(4) NWFSC shall maintain visual monitoring effort during the entire period of time that trawl gear is in the water (i.e., throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NWFSC shall take the most appropriate action to avoid marine mammal interaction. NWFSC may use best professional judgment in making this decision.

(5) If trawling operations have been suspended because of the presence of marine mammals, NWFSC may resume trawl operations when practicable only when the animals are believed to have departed the area. NWFSC may use best professional judgment in making this decision.

(6) When conducting surface trawls using the Nordic 264 net, dedicated crew with no other tasks shall conduct required marine mammal monitoring. Marine mammal monitoring shall be staffed in a stepwise process, with a minimum of two observers beginning pre-set monitoring and increasing to a minimum of four observers prior to and during gear deployment. During the tow, a minimum of three observers shall conduct required monitoring.

(7) NWFSC shall implement standard survey protocols to minimize potential for marine mammal interactions, including maximum tow durations at target depth and maximum tow distance, and shall carefully empty the trawl as quickly as possible upon retrieval. Trawl nets must be cleaned prior to deployment.

(8) NWFSC must install and use a marine mammal excluder device at all times when the Nordic 264 trawl net is used.

(9) NWFSC must install and use deterrent devices whenever the Nordic 264 trawl net is used, with two pairs of the devices installed near the net opening. NWFSC must ensure that the devices are operating properly before deploying the net.

(10) For use of the Kodiak surface trawl in Puget Sound, trawl survey protocols described in this section apply only to cetaceans.

(11) Trawl survey protocols described in this section do not apply to use of pair trawl gear in the Columbia River.

(d) Hook and line (including longline) survey protocols: (1) For use of the Kodiak surface trawl in Puget Sound, trawl survey protocols described in this section apply only to cetaceans.
NWFSC shall take the most appropriate action to avoid marine mammal interaction. NWFSC may use best professional judgment in making this decision.

(5) If deployment or retrieval operations have been suspended because of the presence of marine mammals, NWFSC may resume such operations when practicable only when the animals are believed to have departed the area. NWFSC may use best professional judgment in making this decision.

(6) NWFSC shall implement standard survey protocols, including maximum soak durations and a prohibition on chumming.

(7) For hook and line surveys in Puget Sound, but not including longline surveys, hook and line survey protocols described in this section apply only to cetaceans.

(e) Seine survey protocols: (1) NWFSC shall conduct seine operations as soon as is practicable upon arrival at the sampling station.

(2) NWFSC shall conduct marine mammal watches (visual observation) prior to beginning of net deployment. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and rangefinding binoculars (or monocular).

(3) NWFSC shall implement the move-on rule mitigation protocol, as described in this paragraph for use of purse seine gear. If one or more small cetaceans (i.e., dolphin or porpoise) or five or more pinnipeds are observed within 500 m of the planned location before setting the seine gear, and are considered at risk of interacting with the vessel and research gear, or appear to be approaching the vessel and are considered at risk of interaction, NWFSC shall either remain onsite or move on to another sampling location. If remaining onsite, the set shall be delayed. If the animals depart or appear to no longer be at risk of interacting with the vessel or gear, a further ten minute observation period shall be conducted. If no further observations are made or the animals still do not appear to be at risk of interaction, then the set may be made. If the vessel is moved to a different area, the move-on rule mitigation protocol would begin anew. If, after moving on, marine mammals remain at risk of interaction, the NWFSC shall move again or skip the station. Marine mammals that are sighted further than 500 m from the vessel shall be monitored to determine their position and movement in relation to the vessel to determine whether the move-on rule mitigation protocol should be implemented. NWFSC may use best professional judgment in making these decisions.

(4) NWFSC shall maintain visual monitoring effort during the entire period of time that seine gear is in the water (i.e., throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NWFSC shall take the most appropriate action to avoid marine mammal interaction. NWFSC may use best professional judgment in making this decision.

(5) If seine operations have been suspended because of the presence of marine mammals, NWFSC may resume seine operations when practicable only when the animals are believed to have departed the area. NWFSC may use best professional judgment in making this determination.

(6) If any cetaceans are observed in a purse seine net, NWFSC shall immediately open the net and free the animals.

(7) NWFSC shall not make beach seine sets within 200 m of any hauled-out pinniped, and shall immediately remove the gear from the water upon observation of any marine mammal attempting to interact with the gear.

§ 219.46 Requirements for monitoring and reporting.

(a) NWFSC shall designate a compliance coordinator who shall be responsible for ensuring compliance with all requirements of any LOA issued pursuant to §§216.106 and 219.47 of this chapter and for preparing for any subsequent request(s) for incidental take authorization.

(b) Visual monitoring program: (1) Marine mammal visual monitoring shall occur prior to deployment of trawl, seine, and hook and line gear, respectively; throughout deployment of gear and active fishing of research gears (not including longline soak time); prior to retrieval of longline gear; and throughout retrieval of all research gear.

(2) Marine mammal watches shall be conducted by watch-standers (those navigating the vessel and/or other crew) at all times when the vessel is being operated.

(c) Training: (1) NWFSC must conduct annual training for all chief scientists and other personnel who may be responsible for conducting dedicated marine mammal visual observations to explain mitigation measures and monitoring and reporting requirements, mitigation and monitoring protocols, marine mammal identification, completion of datasheets, and use of equipment. NWFSC may determine the agenda for these trainings.

(2) NWFSC shall also dedicate a portion of training to discussion of best professional judgment, including use in any incidents of marine mammal interaction and instructive examples where use of best professional judgment was determined to be successful or unsuccessful.

(3) NWFSC shall coordinate with NMFS’ Southwest Fisheries Science Center (SWFSC) regarding surveys conducted in the California Current Ecosystem, such that training and guidance related to handling procedures and data collection is consistent.

(d) Handling procedures and data collection: (1) NWFSC must develop and implement standardized marine mammal handling, disentanglement, and data collection procedures. These standard procedures will be subject to approval by NMFS’ Office of Protected Resources (OPR).

(2) When practicable, for any marine mammal interaction involving the release of a live animal, NWFSC shall collect necessary data to facilitate a serious injury determination.

(3) NWFSC shall provide its relevant personnel with standard guidance and training regarding handling of marine mammals, including how to identify different species, bring an individual aboard a vessel, assess the level of consciousness, remove fishing gear, return an individual to water, and log activities pertaining to the interaction.

(4) NWFSC shall record such data on standardized forms, which will be subject to approval by OPR. NWFSC shall also answer a standard series of supplemental questions regarding the details of any marine mammal interaction.

(e) Reporting: (1) NWFSC shall report all incidents of marine mammal interaction to NMFS’ Protected Species Incidental Take database within 48 hours of occurrence and shall provide supplemental information to OPR upon request. Information related to marine mammal interaction (animal captured or entangled in research gear) must include details of survey effort, full descriptions of any observations of the animals, the context (vessel and conditions), decisions made, and rationale for decisions made in vessel and gear handling.

(2) Annual reporting: (i) NWFSC shall submit an annual summary report to OPR not later than ninety days following the end of a given year. NWFSC shall provide a final report within thirty days following resolution of comments on the draft report.

(ii) These reports shall contain, at minimum, the following:
(A) Annual line-kilometers surveyed during which the EK60, ME70, SX90 (or equivalent sources) were predominant and associated pro-rated estimates of actual take;

(B) Summary information regarding use of all hook and line, seine, and trawl gear, including number of sets, hook hours, tows, etc., specific to each gear;

(C) Accounts of all incidents of marine mammal interactions, including circumstances of the event and descriptions of any mitigation procedures implemented or not implemented and why;

(D) A written evaluation of the effectiveness of NWFSC mitigation strategies in reducing the number of marine mammal interactions with survey gear, including best professional judgment and suggestions for changes to the mitigation strategies, if any;

(E) Final outcome of serious injury determinations for all incidents of marine mammal interactions where the animal(s) were released alive; and

(F) A summary of all relevant training provided by NWFSC and any coordination with SWFSC or NMFS’ West Coast Regional Office.

(i) Reporting of injured or dead marine mammals:
(1) In the unanticipated event that the activity defined in §219.41(a) clearly causes the take of a marine mammal in a prohibited manner, NWFSC personnel engaged in the research activity shall immediately cease such activity until such time as an appropriate decision regarding activity continuation can be made by the NWFSC Director (or designee). The incident must be reported immediately to OPR and the West Coast Regional Stranding Coordinator, NMFS. OPR will review the circumstances of the prohibited take and work with NWFSC to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The immediate decision made by NWFSC regarding continuation of the specified activity is subject to OPR concurrence. The report must include the following information:

(i) Time, date, and location (latitude/longitude) of the incident;

(ii) Description of the incident;

(iii) Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, visibility);

(iv) Description of all marine mammal observations in the 24 hours preceding the incident;

(v) Species identification or description of the animal(s) involved;

(vi) Status of all sound source use in the 24 hours preceding the incident;

(vii) Water depth;

(viii) Fate of the animal(s); and

(ix) Photographs or video footage of the animal(s).

(2) In the event that NWFSC discovers an injured or dead marine mammal and determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate state of decomposition), NWFSC shall immediately report the incident to OPR and the West Coast Regional Stranding Coordinator, NMFS. The report must include the information identified in paragraph (f)(1) of this section. Activities may continue while OPR reviews the circumstances of the incident. OPR will work with NWFSC to determine whether additional mitigation measures or modifications to the activities are appropriate.

(3) In the event that NWFSC discovers an injured or dead marine mammal and determines that the injury or death is not associated with or related to the activities defined in §219.41(a) (e.g., previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), NWFSC shall report the incident to OPR and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. NWFSC shall provide photographs or video footage or other documentation of the stranded animal sighting to OPR.


(a) To incidentally take marine mammals pursuant to these regulations, NWFSC must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, NWFSC may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, NWFSC must apply for and obtain a modification of the LOA as described in §219.48 of this chapter.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (i.e., mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the Federal Register within thirty days of a determination.

§219.48 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§216.106 and 219.47 of this chapter for the activity identified in §219.41(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) OPR determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting measures (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), OPR may publish a notice of proposed LOA in the Federal Register, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§216.106 and 219.47 of this chapter for the activity identified in §219.41(a) may be modified by OPR under the following circumstances:

(1) Adaptive Management—OPR may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with NWFSC regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from NWFSC’s monitoring from the previous year(s);

(B) Results from other marine mammal and/or sound research or studies.
(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, OPR will publish a notice of proposed LOA in the Federal Register and solicit public comment.

(2) Emergencies—If OPR determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§216.106 and 219.47 of this chapter, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the Federal Register within thirty days of the action.

§219.49 [Reserved]
§219.50 [Reserved]
Reader Aids

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Monday, June 13, 2016

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CFR Checklist. Effective January 1, 2009, the CFR Checklist no longer appears in the Federal Register. This information can be found online at http://bookstore.gpo.gov/.

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