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Federal Register

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The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 72

[NRC-2015-0067]

RIN 3150-AJ58

#### List of Approved Spent Fuel Storage Casks: Holtec International HI-STORM UMAX Canister Storage System, Certificate of Compliance No. 1040, Amendment No. 1

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Direct final rule.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is amending its spent fuel storage regulations by revising the Holtec International, Inc. (Holtec), HI-STORM (Holtec International Storage Module) Underground Maximum Capacity (UMAX) Canister Storage System listing within the "List of approved spent fuel storage casks" to add Amendment No. 1 to Certificate of Compliance (CoC) No. 1040. Amendment No. 1 provides a seismically enhanced version of the HI-STORM UMAX Canister Storage System, identified as the "Most Severe Earthquake (MSE)" version, that could be used in areas with higher seismic demands than those analyzed previously. Amendment No. 1 also includes minor physical design changes to help ensure structural integrity of the amended system. These are the addition of a hold-down system to the closure lid; replacing the fill material in the interstitial spaces between the cavity enclosure containers (CECs) surrounding the casks with 3000 psi concrete; strengthening the multi-purpose canister (MPC) guides; and engineering the guides' nominal gap with the MPC to be tighter than the original HI-STORM UMAX Canister Storage System design.

**DATES:** The direct final rule is effective September 8, 2015, unless significant adverse comments are received by July 23, 2015. If the direct final rule is withdrawn as a result of such comments, timely notice of the withdrawal will be published in the **Federal Register**. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date. Comments received on this direct final rule will also be considered to be comments on a companion proposed rule published in the Proposed Rules section of this issue of the **Federal Register**.

**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-2015-0067. Address questions about NRC dockets to Carol Gallagher, telephone: (301) 415-3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Email comments to:* [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive an automatic email reply confirming receipt, then contact us at (301) 415-1677.

- *Fax comments to:* Secretary, U.S. Nuclear Regulatory Commission at (301) 415-1101.

- *Mail comments to:* Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.

- *Hand deliver comments to:* 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: (301) 415-1677.

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:** Solomon Sahle, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone:

(301) 415-3781; email: [Solomon.Sahle@nrc.gov](mailto:Solomon.Sahle@nrc.gov).

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#### I. Obtaining Information and Submitting Comments

##### A. Obtaining Information

Please refer to Docket ID NRC-2015-0067 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:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0067.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the "Availability of Documents" section.

- *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-2015-0067 in the subject line of 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 will post all comment submissions at <http://www.regulations.gov> as well as enter 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 into ADAMS.

## II. Procedural Background

This rule is limited to the changes contained in Amendment No. 1 to CoC No. 1040 and does not include other aspects of the HI-STORM UMAX Canister Storage System. The NRC is using the “direct final rule” procedure to issue this amendment because it represents a limited and routine change to an existing CoC that is expected to be noncontroversial. The amendment to the rule will become effective on September 8, 2015. However, if the NRC receives significant adverse comments on this direct final rule by July 23, 2015, the NRC will publish a document that withdraws this action, and will subsequently address the comments received in a final rule as a response to the companion proposed rule published in the Proposed Rule section of this issue of the **Federal Register**. Absent significant modifications to the proposed revisions requiring republication, the NRC will not initiate a second comment period on this action.

A significant adverse comment is a comment where the commenter explains why the rule would be inappropriate, including challenges to the rule’s underlying premise or approach, or would be ineffective or unacceptable without a change. A comment is adverse and significant if:

(1) The comment opposes the rule and provides a reason sufficient to require a substantive response in a notice-and-comment process. For example, a substantive response is required when:

(a) The comment causes the NRC staff to reevaluate (or reconsider) its position or conduct additional analysis;

(b) The comment raises an issue serious enough to warrant a substantive

response to clarify or complete the record; or

(c) The comment raises a relevant issue that was not previously addressed or considered by the NRC staff.

(2) The comment proposes a change or an addition to the rule, and it is apparent that the rule would be ineffective or unacceptable without incorporation of the change or addition.

(3) The comment causes the NRC staff to make a change (other than editorial) to the rule, CoC, or Technical Specifications (TSs).

For detailed instructions on submitting comments, please see the **ADDRESSES** section of this document.

## III. Background

Section 218(a) of the Nuclear Waste Policy Act (NWPA) of 1982, as amended, requires that “the Secretary [of the U.S. Department of Energy] shall establish a demonstration program, in cooperation with the private sector, for the dry storage of spent nuclear fuel at civilian nuclear power reactor sites, with the objective of establishing one or more technologies that the [U.S. Nuclear Regulatory] Commission may, by rule, approve for use at the sites of civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission.” Section 133 of the NWPA states, in part, that “[t]he Commission shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 219(a) [sic: 218(a)] for use at the site of any civilian nuclear power reactor.”

To implement this mandate, the Commission approved dry storage of spent nuclear fuel in NRC-approved casks under a general license by publishing a final rule which added a new subpart K in part 72 of Title 10 of the *Code of Federal Regulations* (10 CFR) entitled “General License for Storage of Spent Fuel at Power Reactor Sites” (55 FR 29181; July 18, 1990). This rule also established a new subpart L within 10 CFR part 72 entitled, “Approval of Spent Fuel Storage Casks,” which contains procedures and criteria for obtaining NRC approval of spent fuel storage cask designs. The NRC subsequently issued a final rule on March 6, 2015 (80 FR 12073), as corrected on March 25, 2015 (80 FR 15679), that approved the HI-STORM UMAX Canister Storage System design and added it to the list of NRC-approved cask designs in 10 CFR 72.214 as CoC No. 1040.

## IV. Discussion of Changes

By letter dated July 11, 2014, and as supplemented on October 31, 2014, Holtec submitted an application to the NRC to amend the HI-STORM UMAX Canister Storage System, CoC No. 1040, under subpart K of 10 CFR part 72. Amendment No. 1 to CoC No. 1040 provides a seismically enhanced version of the HI-STORM UMAX Canister Storage System, identified as the “Most Severe Earthquake (MSE)” version, that could be used in areas with higher seismic demands than those analyzed previously. Amendment No. 1 also includes minor physical design changes to help ensure structural integrity of the amended system. These are the addition of a hold-down system to the closure lid; replacing the fill material in the interstitial spaces between the CECs surrounding the casks with 3000 psi concrete; strengthening the MPC guides; and engineering the guides’ nominal gap with the MPC to be tighter than the original HI-STORM UMAX Canister Storage System design.

As documented in the NRC staff’s Safety Evaluation Report (SER) (ML15070A149), the NRC staff performed a detailed safety evaluation of the proposed CoC amendment request. This amendment does not reflect a significant change in design or fabrication of the HI-STORM UMAX Canister Storage System cask design previously approved by the NRC (see 80 FR 12073, as corrected 80 FR 15679). Considering the specific design requirements for accident conditions, the NRC staff determined that the design of the cask would continue to prevent loss of confinement, shielding, and criticality control.

This direct final rule revises the Holtec HI-STORM UMAX Canister Storage System listing in 10 CFR 72.214 by adding Amendment No. 1 to CoC No. 1040. The amendment consists of the changes previously described, as set forth in the revised CoC and TSs. The revised TSs are identified in the SER.

The amended Holtec HI-STORM UMAX Canister Storage System, when used under the conditions specified in the CoC, the TSs, and the NRC’s regulations, will meet the requirements of 10 CFR part 72; therefore, adequate protection of public health and safety will continue to be ensured. When this direct final rule becomes effective, persons who hold a general license under 10 CFR 72.210 may load spent nuclear fuel into Holtec HI-STORM UMAX Canister Storage Systems that meet the criteria of Amendment No. 1 to CoC No. 1040 under 10 CFR 72.212.

## V. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104–113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this direct final rule, the NRC will amend the Holtec HI–STORM UMAX Canister Storage System design listed in 10 CFR 72.214, “List of approved spent fuel storage casks.” This action does not constitute the establishment of a standard that contains generally applicable requirements.

## VI. Agreement State Compatibility

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs” approved by the Commission on June 30, 1997, and published in the **Federal Register** on September 3, 1997 (62 FR 46517), this direct final rule is classified as Compatibility Category “NRC.” Compatibility is not required for Category “NRC” regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act of 1954, as amended, or the provisions of 10 CFR. Although an Agreement State may not adopt program elements reserved to the NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State’s administrative procedure laws, but does not confer regulatory authority on the State.

## VII. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111–274) requires Federal agencies to write documents in a clear, concise, well-organized manner. The NRC has written this document to be consistent with the Plain Writing Act as well as the Presidential Memorandum, “Plain Language in Government Writing,” published June 10, 1998 (63 FR 31883).

## VIII. Environmental Assessment and Finding of No Significant Environmental Impact

### A. The Action

The action is to amend 10 CFR 72.214 to amend the Holtec HI–STORM UMAX Canister Storage System listing within the “List of approved spent fuel storage casks” to include Amendment No. 1 to CoC No. 1040. Under the National Environmental Policy Act of 1969, as amended, and the NRC’s regulations in subpart A of 10 CFR part 51,

“Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” the NRC has determined that this rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required. The NRC has made a finding of no significant impact on the basis of this environmental assessment.

### B. The Need for the Action

This direct final rule amends the CoC for the Holtec HI–STORM UMAX Canister Storage System design within the list of approved spent fuel storage casks that power reactor licensees can use to store spent fuel at reactor sites under a general license. Specifically, Amendment No. 1 to CoC No. 1040 provides a seismically enhanced version of the HI–STORM UMAX Canister Storage System, identified as the “Most Severe Earthquake (MSE)” version that could be used in areas with higher seismic demands than those analyzed previously. Amendment No. 1 also includes minor physical design changes to help ensure the structural integrity of the amended system. These are the addition of a hold-down system to the closure lid; replacing the fill material in the interstitial spaces between the CECs surrounding the casks with 3000 psi concrete; strengthening MPC guides; and engineering the guides’ nominal gap with the MPC to be tighter than the original HI–STORM UMAX Canister Storage System.

### C. Environmental Impacts of the Action

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR part 72 to provide for the storage of spent fuel under a general license in cask designs approved by the NRC. The potential environmental impact of using NRC-approved storage casks was initially analyzed in the environmental assessment for the 1990 final rule. The environmental assessment for this amendment tiers off of the environmental assessment for the July 18, 1990, final rule. Tiering on past environmental assessments is a standard process under the National Environmental Policy Act.

Holtec HI–STORM UMAX Canister Storage Systems are designed to mitigate the effects of design basis accidents that could occur during storage. Design basis accidents account for human-induced events and the most severe natural phenomena reported for the site and surrounding area. Postulated accidents analyzed for an Independent Spent Fuel Storage Installation, the type of facility at which a holder of a power reactor

operating license would store spent fuel in casks in accordance with 10 CFR part 72, include tornado winds and tornado-generated missiles, a design basis earthquake, a design basis flood, an accidental cask drop, lightning effects, fire, explosions, and other incidents.

Considering the specific design requirements for accident conditions, the design of the storage system would prevent loss of containment, shielding, and criticality control. If there is no loss of containment, shielding, or criticality control, the environmental impacts would be insignificant. There are no significant changes to cask design requirements in the proposed CoC amendment. In addition, because there are no significant design or process changes, any resulting occupational exposure or offsite dose rates from the implementation of Amendment No.1 would remain well within the 10 CFR part 20 limits. Therefore, the proposed CoC amendment will not result in any radiological or non-radiological environmental impacts that significantly differ from the environmental impacts evaluated in the environmental assessment supporting the July 18, 1990, final rule. There will be no significant change in the types or significant revisions in the amounts of any effluent released, no significant increase in the individual or cumulative radiation exposure, and no significant increase in the potential for or consequences from radiological accidents. The NRC staff documented its safety findings in the SER for this amendment.

### D. Alternative to the Action

The alternative to this action is to deny approval of Amendment No. 1 and terminate the direct final rule. Consequently, any 10 CFR part 72 general licensee that seeks to load spent nuclear fuel into Holtec HI–STORM UMAX Canister Storage Systems in accordance with the changes described in proposed Amendment No. 1 would have to request an exemption from the requirements of 10 CFR 72.212 and 72.214. Under this alternative, interested licensees would have to prepare, and the NRC would have to review, a separate exemption request, thereby increasing the administrative burden upon the NRC and the costs to each licensee. Therefore, the environmental impacts of the alternative to the action would be the same or more than the impacts of the action.

### E. Alternative Use of Resources

Approval of Amendment No.1 to CoC No. 1040 would result in no irreversible commitments of resources.

**F. Agencies and Persons Contacted**

No agencies or persons outside the NRC were contacted in connection with the preparation of this environmental assessment.

**G. Finding of No Significant Impact**

The environmental impacts of the action have been reviewed under the requirements in 10 CFR part 51. Based on the foregoing environmental assessment, the NRC concludes that this direct final rule entitled, "List of Approved Spent Fuel Storage Casks: Holtec International HI-STORM UMAX Canister Storage System, Certificate of Compliance No. 1040, Amendment No. 1," will not have a significant effect on the human environment. Therefore, the NRC has determined that an environmental impact statement is not necessary for this direct final rule.

**IX. Paperwork Reduction Act Statement**

This direct final rule does not contain any information collection requirements and, therefore, is not subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Public Protection Notification.

The NRC may not conduct or sponsor, and a person is not required to respond to a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

**X. Regulatory Flexibility Certification**

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this rule will not, if issued, have a significant economic impact on a substantial number of small entities. This direct final rule affects only nuclear power plant licensees and Holtec. These entities do not fall within the scope of the definition of small entities set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

**XI. Regulatory Analysis**

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR part 72 to provide for the storage of spent nuclear fuel under a general license in cask designs approved by the NRC. Any nuclear power reactor

licensee can use NRC-approved cask designs to store spent nuclear fuel if it notifies the NRC in advance, the spent fuel is stored under the conditions specified in the cask's CoC, and the conditions of the general license are met. A list of NRC-approved cask designs is contained in 10 CFR 72.214.

On March 6, 2015 (80 FR 12073), as corrected on March 25, 2015 (80 FR 15679), the NRC issued an amendment to 10 CFR part 72 that approved the Holtec HI-STORM UMAX Canister Storage System design by adding it to the list of NRC-approved cask designs in 10 CFR 72.214. On July 11, 2014, and as supplemented on October 31, 2014, Holtec submitted an application to amend the HI-STORM UMAX Canister Storage System as described in Section IV, "Discussion of Changes," of this document.

The alternative to this action is to withhold approval of Amendment No.1 and to require any 10 CFR part 72 general licensees seeking to load spent nuclear fuel into the Holtec HI-STORM UMAX Canister Storage System under the changes described in Amendment No. 1 to request an exemption from the requirements of 10 CFR 72.212 and 72.214. Under this alternative, each interested 10 CFR part 72 licensee would have to prepare, and the NRC would have to review, a separate exemption request, thereby increasing the administrative burden upon the NRC and the costs to each licensee.

Approval of this direct final rule is consistent with previous NRC actions. Further, as documented in the SER and the environmental assessment, the direct final rule will have no adverse effect on public health and safety or the environment. This direct final rule has no significant identifiable impact or benefit on other Government agencies. Based on this regulatory analysis, the NRC concludes that the requirements of the direct final rule are commensurate with the NRC's responsibilities for public health and safety and the common defense and security. No other available alternative is believed to be as satisfactory, and therefore, this action is recommended.

**XII. Backfitting and Issue Finality**

The NRC has determined that the backfit rule (10 CFR 72.62) does not

apply to this direct final rule. Therefore, a backfit analysis is not required. This direct final rule amends CoC No. 1040 for the Holtec HI-STORM UMAX Canister Storage System, as currently listed in 10 CFR 72.214, "List of approved spent fuel storage casks." Amendment No. 1 provides a seismically enhanced version of the HI-STORM UMAX Canister Storage System, identified as the "Most Severe Earthquake (MSE)" version that could be used in areas with higher seismic demands than those analyzed previously. It also includes minor physical design changes to help ensure structural integrity of the amended system.

Amendment No. 1 of CoC No. 1040 for the Holtec HI-STORM UMAX Canister Storage System was initiated by Holtec and was not submitted in response to new NRC requirements, or an NRC request for amendment. Holtec, as the CoC holder, is not protected by the backfitting provisions under 10 CFR 72.62.

In addition, the changes in Amendment No. 1 do not apply to casks which were manufactured to the initial CoC 1040. Amendment No. 1 applies only to new casks fabricated and used under Amendment No. 1. Therefore, these changes do not affect existing users of the Holtec UMAX Canister Storage System. For these reasons, Amendment No. 1 to CoC No. 1040 does not constitute backfitting under 10 CFR 72.62, 10 CFR 50.109(a)(1), or otherwise represent an inconsistency with the issue finality provisions applicable to combined licenses in 10 CFR part 52. Accordingly, no backfit analysis or additional documentation addressing the issue finality criteria in 10 CFR part 52 has been prepared by the staff.

**XIII. Congressional Review Act**

This action is not a rule as defined in the Congressional Review Act (5 U.S.C. 801-808).

**XIV. Availability of Documents**

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document	ADAMS Accession No./ Web link/ Federal Register citation
Proposed CoC No. 1040, Amendment No. 1 .....	ML15070A151
Appendix A of Proposed TSs .....	ML15070A153
Appendix B of Proposed TS .....	ML15070A152

Document	ADAMS Accession No./ Web link/ Federal Register citation
Preliminary SER .....	ML15070A149
Request for Amendment Application dated July 11, 2014 .....	ML14202A029
Supplemental Information for Proposed Action, dated October 31, 2014 .....	ML14308A164

The NRC may post materials related to this document, including public comments, on the Federal Rulemaking Web site at <http://www.regulations.gov> under Docket ID NRC-2015-0067. The Federal Rulemaking Web site allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: (1) Navigate to the docket folder (NRC-2015-0067); (2) click the "Sign up for Email Alerts" link; and (3) enter your email address and select how frequently you would like to receive emails (daily, weekly, or monthly).

**List of Subjects in 10 CFR Part 72**

Administrative practice and procedure, Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, Spent fuel, Whistleblowing.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the Nuclear Waste Policy Act of 1982, as amended; and 5 U.S.C. 552 and 553; the NRC is adopting the following amendments to 10 CFR part 72.

**PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL, HIGH-LEVEL RADIOACTIVE WASTE, AND REACTOR-RELATED GREATER THAN CLASS C WASTE**

■ 1. The authority citation for part 72 continues to read as follows:

**Authority:** Atomic Energy Act secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 223, 234, 274 (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2239, 2273, 2282, 2021); Energy Reorganization Act secs. 201, 202, 206, 211 (42 U.S.C. 5841, 5842, 5846, 5851); National Environmental Policy Act sec. 102 (42 U.S.C. 4332); Nuclear Waste Policy Act secs. 131, 132, 133, 135, 137, 141, 148 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168); Government Paperwork Elimination Act sec. 1704 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. 109-58, 119 Stat. 788 (2005).

Section 72.44(g) also issued under Nuclear Waste Policy Act secs. 142(b) and 148(c), (d) (42 U.S.C. 10162(b), 10168(c), (d)).

Section 72.46 also issued under Atomic Energy Act sec. 189 (42 U.S.C. 2239); Nuclear Waste Policy Act sec. 134 (42 U.S.C. 10154).

Section 72.96(d) also issued under Nuclear Waste Policy Act sec. 145(g) (42 U.S.C. 10165(g)).

Subpart J also issued under Nuclear Waste Policy Act secs. 117(a), 141(h) (42 U.S.C. 10137(a), 10161(h)).

Subpart K also issued under Nuclear Waste Policy Act sec. 218(a) (42 U.S.C. 10198).

■ 2. In § 72.214, Certificate of Compliance No. 1040 is revised to read as follows:

**§ 72.214 List of approved spent fuel storage casks.**

\* \* \* \* \*

Certificate Number: 1040.  
Initial Certificate Effective Date: April 6, 2015.

Amendment No. 1 Effective Date: September 8, 2015.

SAR Submitted by: Holtec International, Inc.

SAR Title: Final Safety Analysis Report for the Holtec International HI-STORM UMAX Canister Storage System.

Docket Number: 72-1040.  
Certificate Expiration Date: April 6, 2035.

Model Number: MPC-37, MPC-89.

Dated at Rockville, Maryland, this 11th day of June, 2015.

For the Nuclear Regulatory Commission.

**Mark A. Satorius,**  
*Executive Director for Operations.*

[FR Doc. 2015-15476 Filed 6-22-15; 8:45 am]

**BILLING CODE 7590-01-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 71**

[Docket No. FAA-2014-0457; Airspace Docket No. 14-AWP-4]

**Establishment of Class E Airspace; Cloverdale, CA**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This action establishes Class E airspace at Cloverdale Municipal Airport, Cloverdale CA. to accommodate Area Navigation (RNAV) Global Positioning System (GPS) standard instrument approach procedures at Cloverdale Municipal Airport. This action enhances the safety and management of IFR operations at the airport.

**DATES:** Effective 0901 UTC, August 20, 2015. The Director of the Federal Register approves this incorporation by reference action under title 1, Code of Federal Regulations, part 51, subject to the annual revision of FAA Order 7400.9 and publication of conforming amendments.

**ADDRESSES:** FAA Order 7400.9Y, Airspace Designations and Reporting Points, and subsequent amendments can be viewed on line at <http://www.faa.gov/airtraffic/publications/>. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to [http://www.archives.gov/federal-register/code\\_of\\_federal-regulations/ibr\\_locations.html](http://www.archives.gov/federal-register/code_of_federal-regulations/ibr_locations.html).

FAA Order 7400.9, Airspace Designations and Reporting Points, is published yearly and effective on September 15. For further information, you can contact the Airspace Policy and ATC Regulations Group, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 29591; telephone: 202-267-8783.

**FOR FURTHER INFORMATION CONTACT:** Richard Roberts, Federal Aviation Administration, Operations Support Group, Western Service Center, 1601 Lind Avenue SW., Renton, WA 98057; telephone (425) 203-4517.

**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 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 establishes controlled airspace at Cloverdale Municipal Airport, Cloverdale, CA.

### History

On September 2, 2014 the FAA published in the **Federal Register** a notice of proposed rulemaking (NPRM) to establish Class E airspace extending upward from 700 feet above the surface at Cloverdale Municipal Airport, Cloverdale, CA. (79 FR 51919). Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. No comments were received.

Class E airspace designations are published in paragraph 6005, of FAA Order 7400.9Y, dated August 6, 2014, and effective September 15, 2014, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designation listed in this document will be published subsequently in the Order.

### Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014. FAA Order 7400.9Y is publicly available as listed in the **ADDRESSES** section of this final rule. FAA Order 7400.9Y lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

### The Rule

This amendment to Title 14, Code of Federal Regulations (14 CFR) part 71 establishes Class E airspace extending upward from 700 feet above the surface at Cloverdale, CA, with a segment that extends 6.3 miles south of the airport. Controlled airspace is needed for the RNAV (GPS) standard instrument approaches and departures at the airport.

### Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative

comments. 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 1050.1E, "Environmental Impacts: Policies and Procedures," paragraph 311a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

### Lists of Subjects in 14 CFR Part 71:

Airspace, Incorporation by reference, Navigation (air).

### Adoption of the Amendment:

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

### PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

- 1. The authority citation for Part 71 continues to read as follows:

**Authority:** 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

#### § 71.1 [Amended]

- 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014, is amended as follows:

*Paragraph 6005 Class E airspace areas extending upward from 700 feet or more above the surface of the earth.*

\* \* \* \* \*

#### AWP CA E5 Cloverdale, CA [New]

Cloverdale Municipal Airport, CA  
(lat. 38°46'34" N., long. 122°59'33" W.)  
That airspace extending upward from 700 feet above the surface within a 3.5-mile radius of Cloverdale Municipal Airport and

2 miles either side of the 152° radial from the 3.5-mile radius to 6.3 miles south of the airport.

Issued in Seattle, Washington, on June 15, 2015.

**Christopher Ramirez,**

*Acting Manager, Operations Support Group,  
Western Service Center.*

[FR Doc. 2015–15315 Filed 6–22–15; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Food and Drug Administration

#### 21 CFR Part 107

[Docket No. FDA–2013–N–0067]

### Infant Formula: The Addition of Minimum and Maximum Levels of Selenium to Infant Formula and Related Labeling Requirements

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Final rule.

**SUMMARY:** The Food and Drug Administration (FDA or we) is amending the regulations on nutrient specifications and labeling for infant formula to add the mineral selenium to the list of required nutrients and to establish minimum and maximum levels of selenium in infant formula.

**DATES:** This final rule is effective June 22, 2016. See section VII of this document for information on the filing of objections. Submit either electronic or written objections and requests for a hearing by July 23, 2015.

**ADDRESSES:** You may submit either electronic or written objections and/or requests for a hearing, identified by Docket No. FDA–2013–N–0067, by any of the following methods:

#### Electronic Submissions

Submit electronic objections in the following way:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

#### Written Submissions

Submit written objections in the following ways:

- *Mail/Hand delivery/Courier (for paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

*Instructions:* All submissions received must include the Docket No. FDA–2013–N–0067 for this rulemaking. All objections received may be posted

without change to <http://www.regulations.gov>, including any personal information provided. For additional information on submitting objections, see the "Objections" heading of the **SUPPLEMENTARY INFORMATION** section of this document.

*Docket:* For access to the docket to read background documents, comments, or objections received, go to <http://www.regulations.gov> and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

**FOR FURTHER INFORMATION CONTACT:**

Leila Beker, Center for Food Safety and Applied Nutrition (HFS-850), Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, 240-402-1451.

**SUPPLEMENTARY INFORMATION:**

**I. What is the background and legal authority of this final rule?**

*A. Background*

Section 412(i) of the Federal Food, Drug, and Cosmetic Act (the FD&C Act) (21 U.S.C. 350a(i)) establishes requirements for the nutrient content of infant formulas. Under section 412(i)(2) of the FD&C Act, the Secretary of Health and Human Services (the Secretary) is authorized to revise the list of required nutrients and the required level for any required nutrient. This authority has been delegated to the Commissioner of Food and Drugs (the Commissioner). The table in section 412(i) of the FD&C Act, and in FDA regulations at § 107.100(a) (21 CFR 107.100(a)), specifies that infant formulas must contain 29 nutrients; minimum levels for each nutrient and maximum levels for 9 of the nutrients are also specified. In 1989, the Food and Nutrition Board of the National Research Council established a Recommended Dietary Allowance for selenium for infants 0 to 6 months of age of 10.0 micrograms per day ( $\mu\text{g}/\text{day}$ ), a level extrapolated from adult values on the basis of body weight and with a factor allowed for growth (Ref. 1).

In the **Federal Register** of April 16, 2013 (78 FR 22442), we proposed to amend the nutrient specifications for infant formula to include selenium as a required nutrient in § 107.100(a). We also proposed to establish minimum and maximum levels for selenium in infant formulas because evidence exists for both deficiency and toxicity of selenium. We proposed 2.0  $\mu\text{g}$  selenium per 100 kilocalories ( $/100$  kcal) as the minimum level of selenium in infant

formulas and 7.0  $\mu\text{g}/100$  kcal as the maximum level of selenium in infant formulas.

Scientific evidence from multiple sources supported the proposed levels. Specifically, for the proposed requirements, we considered scientific evidence in: (1) The Institute of Medicine's (IOM) "Dietary Reference Intakes for Vitamin C, Vitamin E, Selenium, and Carotenoids" (Ref. 2); (2) the Life Sciences Research Office's "Assessment of Nutrient Requirements for Infant Formulas" by Raiten et al. (Ref. 3); (3) "Global Standard for the Composition of Infant Formula. Recommendations of an ESPGHAN [European Society for Paediatric Gastroenterology, Hepatology and Nutrition] Coordinated International Expert Group" by Koletzko et al. (Ref. 4); and (4) "Selenium Status of Term Infants Fed Selenium-Supplemented Formula in a Randomized Dose-Response Trial" by Daniels et al. (Ref. 5). We also searched the scientific literature from 1998 through 2012 for published studies not included in these reports.

In addition, we proposed to amend the labeling requirements for infant formula in § 107.10(a)(2) to add selenium to the list of nutrients along with the requirement to list the amount of selenium per 100 kcal in the formula.

*B. Legal Authority*

Section 412(i) of the FD&C Act contains a table of nutrients (including minimum and, in some cases, maximum levels for nutrients) that are required to be in an infant formula. Section 412(i)(2) of the FD&C Act authorizes the Secretary to revise the statutory table of nutrients and to revise the level of any required nutrient. The Secretary has delegated this authority to the Commissioner. Our regulations establishing the table of nutrients are codified at § 107.100.

The final rule amends § 107.100 to add selenium to the list of nutrients required for infant formula. The legal authority for the amendment to § 107.100 comes from section 412(i)(2) of the FD&C Act.

The final rule also requires adding selenium to the statement of the amounts of nutrients required for infant formula labeling in § 107.10(a)(2). "Infant formula" is defined as a food for "special dietary use" under section 201(z) of the FD&C Act (21 U.S.C. 321(z)). Under sections 403(j) and 701(e) of the FD&C Act (21 U.S.C. 343(j) and 21 U.S.C. 371(e)), the Secretary, and by delegation the Commissioner, may prescribe regulations concerning the vitamin and mineral content of foods for

special dietary uses to fully inform purchasers as to the value of the food for such uses. As such, FDA has the authority to revise the statement of the amounts of nutrients required for infant formula labeling in § 107.10(a)(2) under sections 201(z), 403(j), 412(i), and 701(e) of the FD&C Act.

**II. What issues did the comments raise? What are FDA's responses to the comments?**

We invited public comment on the proposed rule. The comment period closed on July 1, 2013. We received fewer than 20 comments. Overall, the comments supported the addition of selenium to infant formula and agreed that selenium is an essential nutrient. We summarize and respond to the comments on the proposed rule and describe the final rule in this section. For ease of reading, we preface each comment discussion with a numbered "Comment," and each response by a corresponding numbered "Response." We have numbered each comment to help distinguish among different topics. The number assigned is for organizational purposes only and does not signify the comment's value, importance, or the order in which it was received.

*A. The Addition of Selenium to the Statement of the Amounts of Nutrients (§ 107.10(a)(2))*

The proposed rule would amend the infant formula nutrient labeling and nutrient specification regulations at §§ 107.10 and 107.100, respectively. Proposed § 107.10(a)(2) would add selenium to the statement of the amounts of nutrients required for infant formula labeling.

We did not receive any comments on proposed § 107.10(a)(2). However, we note that we have revised § 107.10(a)(2) in this final rule to correspond to changes resulting from an interim final rule that appeared in the **Federal Register** on February 10, 2014 (79 FR 7934), and later affirmed in a final rule that appeared in the **Federal Register** on June 10, 2014 (79 FR 33057). In brief, § 107.10(a)(2) was reworded by replacing "A statement of the amount of each of the following nutrients supplied by 100 kilocalories" with "A statement of the amount, supplied by 100 kilocalories, of each of the following nutrients and of any other nutrient added by the manufacturer."

*B. Minimum and Maximum Levels of Selenium (§ 107.100)*

Proposed § 107.100(a) would add selenium to the list of required nutrients in infant formula. The proposal also

would establish minimum and maximum levels for selenium in infant formula because evidence exists for both deficiency and toxicity of selenium, and there is no room for error in production of a food that serves as the sole source of nutrition for infants. We proposed to set 2.0 µg selenium/100 kcal as the minimum level of selenium in infant formulas and 7.0 µg/100 kcal as the maximum level of selenium in infant formulas. Since the publication of the proposed rule, we have conducted a search of the scientific literature to identify whether additional studies on selenium requirements of infants were published after we issued our proposal. We did not find any relevant studies in our search.

(Comment 1) One comment suggested we decrease the minimum level of selenium to 1.6 µg/100 kcal. The comment pointed to analytical variability that can occur between laboratories when testing the levels of selenium. According to the comment, due to this analytical variability, a minimum selenium level of 1.6 µg/100 kcal will likely result in manufacturers' formulating to deliver selenium levels close to 2.0 µg/100 kcal to ensure products do not fall below the minimum.

(Response 1) We decline to lower the minimum level of selenium in infant formula to 1.6 µg/100 kcal to accommodate analytical variability that can occur between laboratories as the comment suggested. The level of any substance (including nutrients, food additives, or contaminants) established for regulatory purposes must be a value that is based on and true to the available scientific evidence. We recognize that analytical variability is always present and manage this matter under our compliance program. We also note that lowering the minimum level of selenium would not change the analytical variability, and the tested level of selenium might fall below whatever minimum level is set, due to analytical variability. For example, if the minimum level was lowered to 1.6 µg/100 kcal, the tested level of selenium might fall below 1.6 µg/100 kcal due to analytical variability. However, on our own initiative we have revised proposed § 107.100(a) to insert the word "level" between the words "minimum" and "specified" in light of an inadvertent omission in the proposed rule.

(Comment 2) One comment said that the minimum level of selenium should be in the range reported in breast milk and specifically recommended the level of 1.6 µg selenium/100 kcal, consistent with the mean concentration of selenium in breast milk reported by

Daniels et al. (2008). The comment continued, saying it was not aware of any reports of selenium deficiency in breast-fed infants or at this concentration of selenium in infant formula. The comment also stated that we did not consider the data from the breast-fed control group in the Daniels et al. study.

(Response 2) With regard to this comment suggesting that the selenium concentration in human milk (and more specifically, the level of 1.6 µg/100 kcal reported in the Daniels et al. study) be used as the basis for the required minimum selenium level in infant formula, the scientific evidence we discussed in the proposed rule (78 FR 22442 at 22444) was more broadly based. The discussion in the proposed rule considered the levels of selenium in human milk from the studies used to establish the adequate intake (AI) for selenium by the IOM and the levels of selenium in infant formulas fed in the randomized and double-blinded dose-response study in infants by Daniels et al. (2008).

Specifically, as discussed in the proposed rule (78 FR 22442 at 22444), the IOM established an AI for selenium of 15.0 µg/day (approximately 2.1 µg/kg body weight/day) for infants 0 to 6 months of age based on the average concentration of selenium in human milk from healthy women from 2 to 6 months of lactation as reported in four studies. The study by Daniels et al. was published after the IOM established the AI for selenium for infants 0 to 6 months of age, and the concentration of selenium in human milk reported in that study was not among the studies considered in the establishment of the AI. We note that the mean concentration of selenium in human milk in the studies included by the IOM in setting the AI for infants 0 to 6 months of age was 18 µg/L and that reported by Daniels et al. was 10.7 µg/L.

The study by Daniels et al. provides direct evidence of the effect of selenium concentration of infant formula on the circulating biochemical indicators of selenium status in infants. As described in the proposed rule (78 FR 22442 at 22444), this study included a control formula that contained 0.9 µg selenium/100 kcal (considered by the investigators to be a low-selenium formula) and two test formulas that contained 1.9 µg selenium/100 kcal or 3.1 µg selenium/100 kcal. The level of selenium in the formula containing 1.9 µg/100 kcal was somewhat higher than the level in human milk reported in the Daniels et al. study and close to the AI set by the IOM. In our consideration of the study by Daniels et al., we regarded

the data from the human milk-fed infants as reference data, with the direct comparators being the indicators of selenium status of infants fed the formulas containing the three levels of selenium. The plasma and erythrocyte indicators of selenium status for both test formulas did not differ from each other but differed with statistical significance from the control formula. Compared to the infants fed the formula containing 1.9 µg selenium/100 kcal, infants fed the formula containing 3.1 µg selenium/100 kcal excreted more selenium in the urine. This increase in urinary selenium was found to be statistically significant. Combined with the finding of no dose-related changes in the circulating indicators of selenium status in infants fed formulas containing 1.9 µg selenium/100 kcal or 3.1 µg selenium/100 kcal, this dose-related increase in urinary selenium suggests that infants fed the formula containing a level of 1.9 µg selenium/100 kcal received sufficient selenium to meet their nutritional needs. Much of the selenium intake above the level of 1.9 µg selenium/100 kcal was apparently eliminated from the body through the body's homeostatic mechanisms.

As effects on indicators of selenium status have not been evaluated in infants fed formulas with concentrations of selenium between 0.9 µg selenium/100 kcal and 1.9 µg selenium/100 kcal, there are no data to support lowering the minimum level of selenium in infant formula from 2.0 µg/100 kcal to 1.6 µg/100 kcal. The scientific evidence discussed previously and in section III.A. of the proposed rule (78 FR 22442 at 22443) continues to justify 2.0 µg selenium/100 kcal as the minimum level for selenium in infant formulas.

(Comment 3) In support of a lower minimum level for selenium in infant formula, one comment pointed out that the Codex Alimentarius infant formula standard and the European Union Directive on Infant Formulae and Follow-On Formulae recommend a minimum level of selenium in infant formula of 1.0 µg selenium/100 kcal.

(Response 3) The level of 1.0 µg/100 kcal as the minimum level for selenium in infant formula was adopted by the Codex Alimentarius in 2007 for its Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (Codex Stan 72–1981) (Ref. 6) based on recommendation of this level by an International Expert Group (IEG) of the ESPGHAN (Ref. 4). The IEG recommended 1.0 µg selenium/100 kcal for infant formula based on the median selenium content of human milk and an established history of apparent safe use. However, as



described in the proposed rule (78 FR 22442 at 22444), no information was provided regarding the details of how such information was used in making the recommendation for 1.0 µg selenium/100 kcal in infant formula. In addition, the recommendation of the IEG was made in 2005 before the dose-response study of Daniels et al. was published in 2008, and data from that study suggest that a level of 1.9 µg selenium/100 kcal in infant formula meets infants' selenium needs. Further, although, as noted in the comment, the level of 1.0 µg/100 kcal was also adopted as the minimum level for selenium by the European Union in 2006 for its Directive on Infant Formulae and Follow-On Formulae (Commission Directive 2006/141/EC), identification of a scientific basis for the selection of 1.0 µg selenium/100 kcal was not included in the European Union Commission Directive.

(Comment 4) One comment suggested raising the maximum level of selenium added to infant formula to 9.0 µg/100 kcal. The comment said that the 9.0 µg selenium/100 kcal would align the maximum level of selenium with the upper levels recommended in the Codex Alimentarius Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants, and with the European Union Directive on Infant Formulae and Follow-on Formulae. The comment also stated that 9.0 µg selenium/100 kcal is more aligned with the use of 8.0 µg/100 kcal as the maximum value for selenium in the FDA Compliance Program Guidance Manual (CPGM).

(Response 4) We decline to increase the maximum level of selenium in infant formula to 9.0 µg selenium/100 kcal as the comment suggested. As noted in the response to comment 1 concerning the minimum level of selenium in infant formula, the maximum level of any substance (including nutrients, food additives, or contaminants) established for regulatory purposes must also be a value that is based on and true to the available scientific evidence.

The level of 9.0 µg selenium/100 kcal suggested in the comment is the maximum level recommended by the ESPGHAN IEG for infant formula. The report of the IEG stated that its recommendation was based on a history of safe use (not further described) and did not identify scientific data or other information relied upon for its recommendation for a maximum level of 9.0 µg selenium/100 kcal that was subsequently adopted by Codex Alimentarius in 2007 for its Standard for Infant Formula and Formulas for

Special Medical Purposes Intended for Infants (Codex Stan 72–1981). The level of 9.0 µg selenium/100 kcal was also listed in the European Union Directive on Infant Formulae and Follow-on Formulae. We considered the level of 9.0 µg selenium/100 kcal; however, we could not determine the scientific basis for this level.

Although we expressly invited comment regarding the proposed maximum level in infant formula of 7.0 µg selenium/100 kcal, including whether such a maximum level is needed and the scientific data or information that form the basis of any comments (78 FR 22442 at 22445), we did not receive any comments that disagreed with the need for a maximum level or that provided a scientific basis that would support a change from the proposed level. The report of the IOM, which we relied upon to propose the maximum level of 7.0 µg selenium/100 kcal, identified the data (concentration of selenium in human milk not associated with known adverse effects) and the method of calculation used to estimate a Tolerable Upper Intake Level (UL) of 7.0 µg/kg body weight/day for selenium intake of infants from 0 to 6 months of age. (As explained in the proposed rule (78 FR 22442 at 22444), a level of intake expressed as µg/kg body weight/day is consistent with an infant formula concentration expressed in µg/100 kcal.)

With regard to the use of 8.0 µg/100 kcal as a maximum in our CPGM, this level was incorporated into the CPGM when infant formula manufacturers in the United States began adding selenium to infant formulas starting as early as 1990 and preceded the establishment of the UL for infants 0 to 6 months of age by the IOM. We will update the minimum and maximum values for selenium in infant formula in our CPGM to align with the final rule.

(Comment 5) One comment said that setting 7.0 µg selenium/100 kcal as the maximum level of selenium, which is the amount we proposed, would mean some manufacturers would need to reformulate their products that currently meet the 8.0 µg selenium/100 kcal level that is listed in the FDA CPGM.

(Response 5) Although the comment said that some manufacturers whose products currently meet the 8.0 µg selenium/100 kcal level listed in the FDA CPGM would need to reformulate, it did not specify how many manufacturers or products would likely be affected or whether label changes would be required following any reformulations. It also did not provide estimates of possible costs resulting from establishing a maximum of 7.0 µg

selenium/100 kcal. Other comments indicated that any formula changes could be made in a cost effective and timely manner with an effective date 12 months after publication of the final rule (see comment 7).

If some manufacturers who currently meet the 8.0 µg selenium/100 kcal level need to reformulate their products to avoid exceeding a selenium level of 7.0 µg/100 kcal, such a reformulation would involve only a small reduction in the amount of selenium added to the formula. Manufacturers routinely make such small changes in the rates of addition of ingredients (which may or may not result in the need for label changes) as a fundamental part of their current good manufacturing practices and quality control programs to ensure the consistent production of infant formulas of high quality. These types of changes are generally not considered to be major changes and are reported to FDA in a "before first processing" submission by the manufacturers if the change may adulterate the product, as required by section 412(d)(3) of the FD&C Act and our regulations in 21 CFR 106.140.

#### C. Allowance for Analytical Variability

(Comment 6) One comment suggested that, in the absence of setting a higher maximum selenium level, FDA would need to establish a specific allowance for method bias to ensure that manufacturers can meet both the minimum and maximum selenium levels. The comment suggested an allowance of 30 percent to account for analytical variability.

(Response 6) As noted in the response to comment 4, the maximum level of any substance must be a value that is based on and true to the available scientific evidence. For this reason, we are not setting a higher maximum value that would include an allowance for analytical variability or method bias. We are not aware of method bias (consistent over- or under-measurement of the actual concentration) in the analysis of selenium in infant formula. We acknowledge that analytical variability occurs between laboratories when testing the levels of nutrients in infant formula, and we manage this matter under our compliance program as necessary. Further, we decline to set a 30 percent allowance for analytical variation for the chemical analysis of selenium in infant formula. The comment did not provide a reason for setting such a high allowance for analytical variation, and 30 percent variability is much higher than performance requirements for commonly used methods for chemical



analysis of minerals in infant formula, which typically is about 10 to 15 percent.

#### D. Effective Date

In the Regulatory Impact Analysis of the proposed rule, we analyzed three options with respect to an effective date: (1) Take no new regulatory action (baseline); (2) require the provisions of this proposed rule and make the provisions of the rule effective 180 days after publication; and (3) require the provisions of this proposed rule, but make the provisions of the rule effective 12 months after publication (78 FR 22442 at 22446).

(Comment 7) Two comments supported FDA's option 3 in the proposed rule to make the final rule effective 12 months after publication to allow for cost effective and timely changes with no anticipated impact on infant health. One comment explained that because there have been no reports of full-term, breast-fed infants in the United States with evidence of selenium deficiency, there would be no anticipated impact to infant health due to a 6-month delay in the rule's effective date (from 6 months in option 2 to 12 months in option 3 of the Regulatory Impact Analysis of the proposed rule).

(Response 7) The final rule will be effective 12 months after publication of this document (see **DATES**). This will allow the industry to make any needed reformulations and label changes to their infant formula products in the 12-month period that the comment identified as cost effective and timely for needed changes.

#### E. Miscellaneous Comments

Several comments addressed matters that were not specific to a particular provision in the proposed rule and/or that were not covered by the rule. We summarize and address those comments here.

(Comment 8) One comment suggested that FDA recommend or encourage the use of the organic form of selenium, selenomethionine, rather than the inorganic forms, sodium selenite or sodium selenate. The comment explained that selenomethionine is the selenium compound incorporated into body proteins and is available in dietary supplements or from brewer's yeast.

(Response 8) FDA's specifications for infant formula composition in § 107.100 identify nutrients that must be included in the formula. The regulations do not specify ingredients that can serve as sources of the nutrients, except for vitamin K in § 107.100(c). We decline to specify the form of selenium in infant formula because we do not have

information that indicates that any specific source of selenium should be used in infant formula. Our recently published current good manufacturing practices for infant formulas require that ingredients used in infant formulas be safe and suitable for use in infant formula. Specifically, under § 106.40(a), the only substances that may be used in an infant formula are substances that are safe and suitable for use in infant formula under the applicable food safety provisions of the FD&C Act; that is, a substance is used in accordance with the Agency's food additive regulations, is generally recognized as safe for such use, or is authorized by a prior sanction.

(Comment 9) One comment agreed with the proposed selenium levels "unless a pediatrician otherwise recommends an alternative dosage because of a peculiar deficiency of selenium." The comment did not explain the circumstances under which a pediatrician would recommend an "alternative dosage."

(Response 9) The final rule adds selenium to the list of required nutrients in infant formula and establishes minimum and maximum levels of selenium in infant formula. Manufacturers will be required to add selenium to infant formula within the established bounds as of the effective date of this rule. The rule does not apply to what physicians may do within the practice of medicine. Thus, matters pertaining to the practice of pediatric medicine are outside the scope of this rulemaking.

(Comment 10) Another comment suggested that FDA consider establishing a higher maximum for vitamin D based on recent American Academy of Pediatrics and IOM recommendations.

(Response 10) The final rule adds selenium to the list of required nutrients in infant formula and establishes minimum and maximum levels of selenium in infant formula. With respect to vitamin D and infant formula, we may, as resources permit, reevaluate all the minimum and maximum required nutrient levels for infant formula in separate rulemakings.

(Comment 11) One comment supported the proposal to require the addition of selenium in infant formula. The comment stated that a child that does not receive enough selenium in the diet is at risk of developing Keshan disease.

(Response 11) FDA agrees that Keshan disease is linked to selenium deficiency. The preamble to the proposed rule discussed the known biological functions of selenium and Keshan disease (a cardiomyopathy that occurs

almost exclusively in children) (see 78 FR 22442 at 22443).

#### III. What is the environmental impact of this final rule?

FDA has determined under 21 CFR 25.32(n) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

#### IV. Federalism

FDA has analyzed this final rule in accordance with the principles set forth in Executive Order 13132. We have determined that the rule does not contain policies that 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. Accordingly, we have concluded that the rule does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

#### V. Executive Order 12866 and Executive Order 13563: Cost Benefit Analysis

On April 16, 2013, we proposed to amend our regulations on nutrient specifications and labeling for infant formula to add the mineral selenium to the list of required nutrients and to establish minimum and maximum levels of selenium in infant formula (78 FR 22442). The Economic Impact Analysis in the proposed rule explained the economic impact of the changes to regulations at part 107. We did not receive any comments on the economic analysis of the proposed rule.

FDA has examined the impacts of this final rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). Executive Orders 12866 and 13563 direct Agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). FDA has developed a regulatory impact analysis that presents the benefits and costs of this proposed rule (Ref. 7). We believe that the final rule will not be a

significant regulatory action as defined by Executive Order 12866.

**VI. Paperwork Reduction Act of 1995**

This final rule contains information collection provisions that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3520). The title, description, and respondent description of the information collection provisions are shown in the following paragraphs with an estimate of the annual third-party disclosure burden. Included in the estimate is the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing each collection of information.

*Title:* Third-Party Disclosure Requirements for Selenium in Infant Formula

*Description of Respondents:* The respondents to this information collection are manufacturers of infant formula marketed in the United States.

*Description:* The final rule revises § 107.10(a)(2) to require that selenium be listed in the nutrient list on the label for all infant formulas. In particular, in the nutrient list, selenium must be listed between iodine and sodium and the amount per 100 calories declared; and because selenium is a required ingredient in infant formula, selenium is required to be declared in the formula’s ingredient statement by its common or usual name and positioned according to the descending order of its predominance in the formula, under § 101.4 (21 CFR 101.4). The present version of § 107.10(a)(2) is approved by OMB in accordance with the PRA and has been assigned OMB control number 0910–0256. This final rule modifies the

information collection associated with the present version of § 107.10(a)(2) by adding 23 hours to the burden associated with the collection. A manufacturer not in compliance with the new minimum and maximum levels for selenium in infant formula would be required to make a one-time change to the nutrient list information disclosed to consumers on the label of its infant formula, to account for the required change in the amount of selenium in its products. The nutrient information disclosed by manufacturers on the infant formula label is necessary to inform purchasers of the value of the infant formula. As discussed previously in this document, FDA has the authority to revise the statement of the amounts of nutrients required for infant formula labeling in § 107.10(a)(2).

FDA estimates the burden of this collection of information as follows:

TABLE 1—ESTIMATED ANNUAL THIRD-PARTY DISCLOSURE BURDEN <sup>1</sup>

21 CFR section	Number of respondents	Number of disclosures per respondent	Total annual disclosures	Average burden per disclosure	Total hours	Total capital cost
§ 107.10(a)(2)—Nutrient labeling for infant formula.	1	46	46	0.5 (30 minutes)	23	\$792,439

<sup>1</sup> There are no operating and maintenance costs associated with this collection of information.

FDA concludes that there will be no additional burden associated with the requirement to disclose selenium in the ingredient statement as required under § 101.4 because all infant formula manufacturers currently add selenium as an ingredient to their infant formula products that are sold in the United States, and all manufacturers currently disclose selenium in the ingredient statement, as specified by § 101.4. Additionally, all manufacturers currently disclose selenium in the nutrient list, as required by § 107.10(b)(5). Under § 107.10(a)(2), only one manufacturer would need to make a one-time labeling change to modify the amount of selenium shown in the nutrient list on the labels of its infant formula.

The third-party disclosure burden consists of the setup time required to design a revised label and incorporate it into the manufacturing process. Based upon our knowledge of food and dietary supplement labeling, we estimate that the affected manufacturer would require less than 0.5 hour per product to modify the label’s nutrient list to reflect the addition of more selenium to the product. We estimate that this manufacturer produces 46 separate infant formulas that would require

relabeling. The one-time third-party disclosure burden is estimated in table 1 of this document.

The final column of table 1 gives the estimated capital cost associated with relabeling. This is the cost of designing a revised label and incorporating it into the manufacturing process. The cost stated in table 1, \$792,439, is estimated based on an effective date of 1 year after publication. These costs are based on the cost model estimate that, over a longer period of time, any labeling change is more likely to be coordinated with a change in a label that may already be scheduled, and will diminish the need to, for example, purchase and apply stickers to packages affected by the change.

The information collection provisions in this final rule have been submitted to OMB for review as required by section 3507(d) of the PRA. The requirements were approved and assigned OMB control number 0910–0256. This approval expires on 04/30/2018.

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 OMB control number.

**VII. Objections**

This rule is effective as shown in the **DATES** section, except as to any provisions that may be stayed by the filing of proper objections. If you will be adversely affected by one or more provisions of this regulation, you may file with the Division of Dockets Management (see **ADDRESSES**) either electronic or written objections. You must number each objection separately, and, within each numbered objection, you must specify with particularity the provision(s) to which you object, and the grounds for your objection. Within each numbered objection, you must specifically state whether you are requesting a hearing on the particular provision that you specify in that numbered objection. If you do not request a hearing for any particular objection, we will consider the absence of such a request as waiving the right to a hearing on that objection. If you request a hearing, your objection should include a detailed description and analysis of the specific factual information you intend to present in support of the objection in the event that a hearing is held.

It is only necessary to send one set of documents. Identify documents with the

docket number found in brackets in the heading of this document. Any objections received in response to the regulation may be seen in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday, and will be posted to the docket at <http://www.regulations.gov>. We will publish notice of the objections that we have received or lack thereof in the **Federal Register**.

**VIII. References**

The following references have been placed on display in the Division of Dockets Management (see **ADDRESSES**) and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday, and are available electronically at <http://www.regulations.gov>.

1. Food and Nutrition Board, National Research Council, "Recommended Dietary Allowances," 10th ed., Washington, DC: The National Academies Press, p. 221, 1989.
2. Food and Nutrition Board, Institute of Medicine, "Dietary Reference Intakes for Vitamin C, Vitamin E, Selenium, and Carotenoids," Washington, DC: The National

- Academies Press, pp. 21–33; 292–299; 315–316, 2000.
3. Raiten, D. J., J. M. Talbot, and J. H. Waters, "Assessment of Nutrient Requirements for Infant Formulas," *Journal of Nutrition*, 128:2059S–2249S, 1998.
4. Koletzko, B., S. Baker, G. Cleghorn, U.F. Neto, et al., "Global Standard for the Composition of Infant Formula. Recommendations of an ESPGHAN Coordinated International Expert Group," *Journal of Pediatric Gastroenterology and Nutrition*, 41:584–599, 2005.
5. Daniels, L., R. A. Gibson, K. Simmer, P. Van Dael, and M. Makrides, "Selenium Status of Term Infants Fed Selenium-Supplemented Formula in a Randomized Dose-Response Trial," *American Journal of Clinical Nutrition*, 88:70–76, 2008.
6. Codex Alimentarius Commission, "Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants, Codex Stan 72–1981," 1981. Revised 2007.
7. FDA/Center for Food Safety and Applied Nutrition, "Infant Formula: The Addition of Minimum and Maximum Levels of Selenium to Infant Formula and Related Labeling Requirements, Final Regulatory Impact Analysis and Regulatory Flexibility Analysis," 2015. Available at: <http://www.fda.gov/AboutFDA/>

*ReportsManualsForms/Reports/EconomicAnalyses/.*

**List of Subjects in 21 CFR Part 107**

Food labeling, Infants and children, Nutrition, Reporting and recordkeeping requirements, Signs and symbols.  
 For the reasons discussed in the preamble, under the Federal Food, Drug, and Cosmetic Act, and under authority delegated to the Commissioner of Food and Drugs, the Food and Drug Administration amends 21 CFR part 107 as follows:

**PART 107—INFANT FORMULA**

■ 1. The authority citation for 21 CFR part 107 continues to read as follows:

**Authority:** 21 U.S.C. 321, 343, 350a, 371.

■ 2. In § 107.10, revise paragraph (a)(2) to read as follows:

**§ 107.10 Nutrient information.**

(a) \* \* \*

(2) A statement of the amount, supplied by 100 kilocalories, of each of the following nutrients and of any other nutrient added by the manufacturer:

Nutrients	Unit of measurement
Protein .....	Grams
Fat .....	Do.
Carbohydrate .....	Do.
Water .....	Do.
Linoleic acid .....	Milligrams
<b>Vitamins</b>	
Vitamin A .....	International Units
Vitamin D .....	Do.
Vitamin E .....	Do.
Vitamin K .....	Micrograms
Thiamine (Vitamin B <sub>1</sub> ) .....	Do.
Riboflavin (Vitamin B <sub>2</sub> ) .....	Do.
Vitamin B <sub>6</sub> .....	Do.
Vitamin B <sub>12</sub> .....	Do.
Niacin .....	Do.
Folic acid (Folacin) .....	Do.
Pantothenic acid .....	Do.
Biotin .....	Do.
Vitamin C (Ascorbic acid) .....	Milligrams
Choline .....	Do.
Inositol .....	Do.
<b>Minerals</b>	
Calcium .....	Milligrams
Phosphorus .....	Do.
Magnesium .....	Do.
Iron .....	Do.
Zinc .....	Do.
Manganese .....	Micrograms
Copper .....	Do.
Iodine .....	Do.
Selenium .....	Do.
Sodium .....	Milligrams
Potassium .....	Do.
Chloride .....	Do.

\* \* \* \* \*

■ 3. In § 107.100, revise paragraph (a) to read as follows:

**§ 107.100 Nutrient specifications.**

(a) An infant formula shall contain the following nutrients at a level not less than the minimum level specified and not more than the maximum level

specified for each 100 kilocalories of the infant formula in the form prepared for consumption as directed on the container:

Nutrients	Unit of measurement	Minimum level	Maximum level
Protein	Grams	1.8	4.5
Fat	Do.	3.3	6.0
	Percent calories	30	54
Linoleic acid	Milligrams	300	
	Percent calories	2.7	
<b>Vitamins</b>			
Vitamin A	International Units	250	750
Vitamin D	Do.	40	100
Vitamin E	Do.	0.7	
Vitamin K	Micrograms	4	
Thiamine (Vitamin B <sub>1</sub> )	Do.	40	
Riboflavin (Vitamin B <sub>2</sub> )	Do.	60	
Vitamin B <sub>6</sub>	Do.	35	
Vitamin B <sub>12</sub>	Do.	0.15	
Niacin <sup>1</sup>	Do.	250	
Folic acid (Folacin)	Do.	4	
Pantothenic acid	Do.	300	
Biotin <sup>2</sup>	Do.	1.5	
Vitamin C (Ascorbic acid)	Milligrams	8	
Choline <sup>2</sup>	Do.	7	
Inositol <sup>2</sup>	Do.	4	
<b>Minerals</b>			
Calcium	Do.	60	
Phosphorus	Do.	30	
Magnesium	Do.	6	
Iron	Do.	0.15	3.0
Zinc	Do.	0.5	
Manganese	Micrograms	5	
Copper	Do.	60	
Iodine	Do.	5	75
Selenium	Do.	2	7
Sodium	Milligrams	20	60
Potassium	Do.	80	200
Chloride	Do.	55	150

<sup>1</sup> The generic term "niacin" includes niacin (nicotinic acid) and niacinamide (nicotinamide).

<sup>2</sup> Required only for non-milk-based infant formulas.

\* \* \* \* \*

Dated: June 17, 2015.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2015-15394 Filed 6-22-15; 8:45 am]

BILLING CODE 4164-01-P

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Food and Drug Administration**

**21 CFR Part 558**

[Docket No. FDA-2010-N-0155]

RIN 0910-AG95

**Veterinary Feed Directive; Correction**

AGENCY: Food and Drug Administration, HHS.

**ACTION:** Final rule; correction.

**SUMMARY:** The Food and Drug Administration (FDA) is correcting a final rule entitled "Veterinary Feed Directive" that appeared in the **Federal Register** of June 3, 2015 (80 FR 31708). The rule amended FDA's animal drug regulations regarding veterinary feed directive (VFD) drugs. The document published with typographical and formatting errors. This document corrects those errors.

**DATES:** *Effective:* October 1, 2015.

**FOR FURTHER INFORMATION CONTACT:** Sharon Benz, Center for Veterinary Medicine (HFV-220), Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855, 240-402-5939, email: [Sharon.Benz@fda.hhs.gov](mailto:Sharon.Benz@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** In FR Doc. 2015-13393, appearing on page 31708

in the **Federal Register** of Wednesday, June 3, 2015, the following corrections are made:

**§ 558.6 [Corrected]**

■ 1. On page 31734, in the second column, in § 558.6 *Veterinary feed directive drugs*, in paragraph (b)(5), remove "(b)(2)(vi)," and add in its place "(b)(3)(vi)."

■ 2. On page 31734, in the third column, in § 558.6 *Veterinary feed directive drugs*, the introductory text of paragraph (c) "Responsibilities of any person who distributes an animal feed containing a VFD drug or a combination VFD drug:" is corrected as a paragraph heading to read "*Responsibilities of any person who distributes an animal feed containing a VFD drug or a combination VFD drug.*"

Dated: June 18, 2015.

**Leslie Kux,**

*Associate Commissioner for Policy.*

[FR Doc. 2015-15388 Filed 6-22-15; 8:45 am]

BILLING CODE 4164-01-P

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Food and Drug Administration

#### 21 CFR Part 876

[Docket No. FDA-2015-N-1297]

#### Medical Devices; Gastroenterology-Urology Devices; Classification of the Vibrator for Climax Control of Premature Ejaculation; Republication

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Final order; republication.

**SUMMARY:** The Food and Drug Administration (FDA) is republishing in its entirety a final order entitled “Medical Devices; Gastroenterology-Urology Devices; Classification of the Vibrator for Climax Control of Premature Ejaculation” that published in the **Federal Register** on May 28, 2015 (80 FR 30353). FDA is republishing to correct an inadvertent omission of information. FDA is classifying the vibrator for climax control of premature ejaculation into class II (special controls). The special controls that will apply to the device are identified in this order and will be part of the codified language for the classification of the vibrator for climax control of premature ejaculation. The Agency is classifying the device into class II (special controls) in order to provide a reasonable assurance of safety and effectiveness of the device.

**DATES:** This order is effective June 23, 2015. The classification was applicable on March 20, 2015.

**FOR FURTHER INFORMATION CONTACT:** Tuan Nguyen, Center for Devices and Radiological Health, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 66, Rm. G118, Silver Spring, MD 20993-0002, 301-796-5174, [tuan.nguyen@fda.hhs.gov](mailto:tuan.nguyen@fda.hhs.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Background

In accordance with section 513(f)(1) of the Federal Food, Drug, and Cosmetic Act (the FD&C Act) (21 U.S.C. 360c(f)(1)), devices that were not in

commercial distribution before May 28, 1976 (the date of enactment of the Medical Device Amendments of 1976), generally referred to as postamendments devices, are classified automatically by statute into class III without any FDA rulemaking process. These devices remain in class III and require premarket approval, unless and until the device is classified or reclassified into class I or II, or FDA issues an order finding the device to be substantially equivalent, in accordance with section 513(i) of the FD&C Act, to a predicate device that does not require premarket approval. The Agency determines whether new devices are substantially equivalent to predicate devices by means of premarket notification procedures in section 510(k) of the FD&C Act (21 U.S.C. 360(k)) and part 807 (21 CFR part 807) of the regulations.

Section 513(f)(2) of the FD&C Act, as amended by section 607 of the Food and Drug Administration Safety and Innovation Act (Pub. L. 112-144), provides two procedures by which a person may request FDA to classify a device under the criteria set forth in section 513(a)(1). Under the first procedure, the person submits a premarket notification under section 510(k) of the FD&C Act for a device that has not previously been classified and, within 30 days of receiving an order classifying the device into class III under section 513(f)(1) of the FD&C Act, the person requests a classification under section 513(f)(2). Under the second procedure, rather than first submitting a premarket notification under section 510(k) of the FD&C Act and then a request for classification under the first procedure, the person determines that there is no legally marketed device upon which to base a determination of substantial equivalence and requests a classification under section 513(f)(2) of the FD&C Act. If the person submits a request to classify the device under this second procedure, FDA may decline to undertake the classification request if FDA identifies a legally marketed device that could provide a reasonable basis for review of substantial equivalence with the device or if FDA determines that the device submitted is not of “low-moderate risk” or that general controls would be inadequate to control the risks and special controls to mitigate the risks cannot be developed.

In response to a request to classify a device under either procedure provided

by section 513(f)(2) of the FD&C Act, FDA will classify the device by written order within 120 days. This classification will be the initial classification of the device. On November 21, 2013, Auris Medtech Europe, Ltd., submitted a request for classification of the Prolong™ under section 513(f)(2) of the FD&C Act. The manufacturer recommended that the device be classified into class II (Ref. 1). On June 17, 2014, the request for classification of Prolong™ was transferred from Auris Medtech Europe, Ltd., to Ergon Medical, Ltd., through an amendment to the request (Ref. 2).

In accordance with section 513(f)(2) of the FD&C Act, FDA reviewed the request in order to classify the device under the criteria for classification set forth in section 513(a)(1). FDA classifies devices into class II if general controls by themselves are insufficient to provide reasonable assurance of safety and effectiveness, but there is sufficient information to establish special controls to provide reasonable assurance of the safety and effectiveness of the device for its intended use. After review of the information submitted in the request, FDA determined that the device can be classified into class II with the establishment of special controls. FDA believes these special controls, in addition to general controls, will provide reasonable assurance of the safety and effectiveness of the device.

Therefore, on March 20, 2015, FDA issued an order to the requestor classifying the device into class II. FDA is codifying the classification of the device by adding 21 CFR 876.5025.

Following the effective date of this final classification order, any firm submitting a premarket notification (510(k)) for a vibrator for climax control of premature ejaculation will need to comply with the special controls named in this final order. The device is assigned the generic name vibrator for climax control of premature ejaculation, and it is identified as a device used for males who suffer from premature ejaculation. It is designed to increase the time between arousal and ejaculation using the stimulating vibratory effects of the device on the penis.

FDA has identified the following risks to health associated specifically with this type of device, as well as the measures required to mitigate these risks in table 1.

TABLE 1—VIBRATOR FOR CLIMAX CONTROL OF PREMATURE EJACULATION RISKS AND MITIGATION MEASURES

Identified risk	Mitigation measures
Pain or Discomfort due to Misuse of Device .....	Labeling.
Burns .....	Electrical and Thermal Safety Testing Labeling.
Electrical Shock .....	Electrical Safety Testing Labeling.
Adverse Skin Reactions .....	Biocompatibility Testing.
Patient Injury due to Device Breakage or Failure .....	Mechanical Safety Testing Labeling.
Interference With Other Devices/Electrical Equipment .....	Electromagnetic Compatibility Testing Labeling.

FDA believes that the following special controls, in combination with the general controls, address these risks to health and provide reasonable assurance of the safety and effectiveness:

- The labeling must include specific instructions regarding the proper placement and use of the device.
- The portions of the device that contact the patient must be demonstrated to be biocompatible.
- Appropriate analysis/testing must demonstrate electromagnetic compatibility safety, electrical safety, and thermal safety of the device.
- Mechanical safety testing must demonstrate that the device will withstand forces encountered during use.

Section 510(m) of the FD&C Act provides that FDA may exempt a class II device from the premarket notification requirements under section 510(k) of the FD&C Act, if FDA determines that premarket notification is not necessary to provide reasonable assurance of the safety and effectiveness of the device. For this type of device, FDA has determined that premarket notification is necessary to provide reasonable assurance of the safety and effectiveness of the device. Therefore, this device type is not exempt from premarket notification requirements. Persons who intend to market this type of device must submit to FDA a premarket notification, prior to marketing the device, which contains information about the vibrator for climax control of premature ejaculation they intend to market.

**II. Environmental Impact**

The Agency has determined under 21 CFR 25.34(b) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

**III. Paperwork Reduction Act of 1995**

This final order establishes special controls that refer to previously approved collections of information

found in other FDA regulations. These collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The collections of information in part 807, subpart E, regarding premarket notification submissions have been approved under OMB control number 0910–0120, and the collections of information in 21 CFR part 801, regarding labeling have been approved under OMB control number 0910–0485.

**IV. References**

The following references have been placed on display in the Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852, and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday, and are available electronically at <http://www.regulations.gov>.

1. DEN130047: De Novo Request per 513(f)(2) from Auris Medtech Europe Ltd., dated November 21, 2013.
2. Amendment to De Novo Request from Auris Medtech Europe Ltd., dated June 17, 2014.

**List of Subjects in 21 CFR Part 876**

Medical devices.  
Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 876 is amended as follows:

**PART 876—GASTROENTEROLOGY—UROLOGY DEVICES**

- 1. The authority citation for 21 CFR part 876 continues to read as follows:  
**Authority:** 21 U.S.C. 351, 360, 360c, 360e, 360j, 360l, 371.
- 2. Republish § 876.5025 to read as follows:

**§ 876.5025 Vibrator for climax control of premature ejaculation.**

(a) *Identification.* A vibrator for climax control of premature ejaculation is used for males who suffer from premature ejaculation. It is designed to increase the time between arousal and ejaculation using the stimulating

vibratory effects of the device on the penis.

(b) *Classification.* Class II (special controls). The special controls for this device are:

- (1) The labeling must include specific instructions regarding the proper placement and use of the device.
- (2) The portions of the device that contact the patient must be demonstrated to be biocompatible.
- (3) Appropriate analysis/testing must demonstrate electromagnetic compatibility safety, electrical safety, and thermal safety of the device.
- (4) Mechanical safety testing must demonstrate that the device will withstand forces encountered during use.

Dated: June 16, 2015.

**Leslie Kux,**  
*Associate Commissioner for Policy.*  
[FR Doc. 2015–15328 Filed 6–22–15; 8:45 am]

**BILLING CODE 4164–01–P**

**DEPARTMENT OF HOMELAND SECURITY**

**Coast Guard**

**33 CFR Part 100**

[Docket No. USCG–2013–0103]

**RIN 1625–AA08**

**Regattas and Marine Parades; Great Lakes Annual Marine Events**

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of enforcement of regulation.

**SUMMARY:** The Coast Guard will enforce various special local regulations for annual regattas and marine parades in the Captain of the Port Detroit zone from 9 a.m. on June 26, 2015 through 7 p.m. on August 23, 2015. Enforcement of these regulations is necessary and intended to ensure safety of life on the navigable waters immediately prior to, during, and immediately after these regattas or marine parades. During the aforementioned period, the Coast Guard will enforce restrictions upon, and control movement of, vessels in a

specified area immediately prior to, during, and immediately after regattas or marine parades.

**DATES:** The regulations in 33 CFR 100.914, 100.915, 100.918, 100.919, and 100.920 will be enforced at specified dates and times between June 26, 2015 and August 23, 2015.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this document, call or email Petty Officer First Class Todd Manow, Prevention Department, U.S. Coast Guard Sector Detroit, 110 Mount Elliot Ave., Detroit MI, 48207; telephone (313)568-9580, email [Todd.M.Manow@uscg.mil](mailto:Todd.M.Manow@uscg.mil).

**SUPPLEMENTARY INFORMATION:** The Coast Guard will enforce the following special local regulations listed in 33 CFR part 100, Safety of Life on Navigable Waters, on the following dates and times, which are listed in chronological order:

(1) *§ 100.919 International Bay City River Roar, Bay City, MI.* This special local regulation will be enforced from 9 a.m. to 6 p.m. on June 26, 27, and 28, 2015. A regulated area is established to include all waters of the Saginaw River bounded on the north by the Liberty Bridge, located at 43°36.3' N, 083°53.4' W, and bounded on the south by the Veterans Memorial Bridge, located at 43°35.8' N, 083°53.6' W. In case of rain on any of the race days, this special local regulation may be enforced an additional day on June 29, 2015 from 9 a.m. until 6 p.m.

(2) *§ 100.920 Tug Across the River, Detroit, MI.* This special local regulation will be enforced from 6 p.m. to 6:45 p.m. on July 10, 2015. A regulated area is established to include all waters of the Detroit River, Detroit, Michigan, bounded on the south by the International boundary, on the west by 083°03' W, on the east by 083°02' W, and on the north by the U.S. shoreline. This position is located on the Detroit River in front of Hart Plaza, Detroit, MI.

(3) *§ 100.914 Trenton Rotary Roar on the River, Trenton, MI.* This special local regulation will be enforced from 8 a.m. to 8 p.m. on July 17, 18, and 19, 2015. The regulated area is established to include all waters of the Detroit River, Trenton, Michigan, bounded by an east/west line beginning at a point of land at the northern end of Elizabeth Park in Trenton, MI, located at position 42°8.2' N; 083°10.6' W, extending east to a point near the center of the Trenton Channel located at position 42°8.2' N; 083°10.4' W, extending south along a north/south line to a point at the Grosse Ile Parkway Bridge located at position 42°7.7' N; 083°10.5' W, extending west along a line bordering the Grosse Ile Parkway Bridge to a point on land

located at position 42°7.7' N; 083°10.7' W, and along the shoreline to the point of origin. This area is in the Trenton Channel between Trenton and Grosse Isle, MI.

(4) *§ 100.915 St. Clair River Classic Offshore Race, St. Clair, MI.* This special local regulation will be enforced from 10 a.m. to 7 p.m. each day from July 20, 2015 through July 26, 2015. A regulated area is established to include all waters of the St. Clair River, St. Clair, Michigan, bounded by latitude 42°52'00" N to the north; latitude 42°49'00" N to the south; the shoreline of the St. Clair River on the west; and the international boundary line on the east.

*Special Local Regulations:*

(1) In accordance with § 100.901, entry into, transiting, or anchoring within these regulated areas is prohibited unless authorized by the Coast Guard patrol commander (PATCOM). The PATCOM may restrict vessel operation within the regulated area to vessels having particular operating characteristics.

(2) Vessels permitted to enter this regulated area must operate at a no wake speed and in a manner that will not endanger race participants or any other craft.

(3) The PATCOM may direct the anchoring, mooring, or movement of any vessel within this regulated area. A succession of sharp, short signals by whistle or horn from vessels patrolling the area under the direction of the PATCOM shall serve as a signal to stop. Vessels so signaled shall stop and shall comply with the orders of the PATCOM. Failure to do so may result in expulsion from the area, a Notice of Violation for failure to comply, or both.

(4) If it is deemed necessary for the protection of life and property, the PATCOM may terminate at any time the marine event or the operation of any vessel within the regulated area.

(5) In accordance with the general regulations in § 100.35 of this part, the Coast Guard will patrol the regatta area under the direction of a designated Coast Guard Patrol Commander (PATCOM). The PATCOM may be contacted on Channel 16 (156.8 MHz) by the call sign "Coast Guard Patrol Commander."

(6) The rules in this section shall not apply to vessels participating in the event or to government vessels patrolling the regulated area in the performance of their assigned duties.

This document is issued under authority of 33 CFR 100.35 and 5 U.S.C. 552(a). If the Captain of the Port determines that any of these special local regulations need not be enforced

for the full duration stated in this document, he may suspend such enforcement and notify the public of the suspension via a Broadcast Notice to Mariners.

Dated: June 8, 2015.

**Scott B. Lemasters,**

*Captain, U. S. Coast Guard, Captain of the Port Detroit.*

[FR Doc. 2015-15408 Filed 6-22-15; 8:45 am]

**BILLING CODE 9110-04-P**

## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

#### 33 CFR Part 165

[Docket Number USCG-2015-0496]

RIN 1625-AA00

#### Safety Zone; Black River Kayak-a-thon; Black River, Lorain, OH

**AGENCY:** Coast Guard, DHS.

**ACTION:** Temporary final rule.

**SUMMARY:** The Coast Guard is establishing a temporary safety zone on Black River, Lorain, OH. This safety zone is intended to restrict vessels from a portion of the Black River during the Black River Kayak-a-thon. This temporary safety zone is necessary to protect participants and mariners from the navigational hazards associated with a paddle sport regatta.

**DATES:** This rule is effective from 7:45 a.m. until 2:15 p.m. on June 27, 2015.

**ADDRESSES:** Documents mentioned in this preamble are part of docket [USCG-2015-0496]. To view documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>, type the docket number in the "SEARCH" box and click "SEARCH." Click on Open Docket Folder on the line associated with this rulemaking. You may also visit the Docket Management Facility in Room W12-140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this rule, call LT Stephanie Pitts, Chief of Waterways Management, U.S. Coast Guard Marine Safety Unit Cleveland; telephone 216-937-0128. If you have questions on viewing the docket, call Ms. Cheryl Collins, Program Manager, Docket Operations, telephone 202-366-9826 or 1-800-647-5527.

**SUPPLEMENTARY INFORMATION:****Table of Acronyms**

DHS Department of Homeland Security  
 FR Federal Register  
 NPRM Notice of Proposed Rulemaking  
 TFR Temporary Final Rule

**A. Regulatory History and Information**

The Coast Guard is issuing this temporary final rule without prior notice and opportunity to comment pursuant to authority under section 4(a) of the Administrative Procedure Act (APA) (5 U.S.C. 553(b)). This provision authorizes an agency to issue a rule without prior notice and opportunity to comment when the agency for good cause finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under 5 U.S.C. 553(b)(B), the Coast Guard finds that good cause exists for not publishing a notice of proposed rulemaking (NPRM) with respect to this rule because doing so would be impracticable. The final details for this event were not known to the Coast Guard until there was insufficient time remaining before the event to publish an NPRM. Thus, delaying the effective date of this rule to wait for a comment period to run would be impracticable because it would inhibit the Coast Guard’s ability to protect spectators and vessels from the hazards associated with a paddle sport regatta. Therefore, under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making this temporary rule effective less than 30 days after publication in the **Federal Register**. For the same reasons discussed in the preceding paragraph, waiting for a 30 day notice period to run would be impracticable.

**B. Basis and Purpose**

The legal basis and authorities for this rule are found in 33 U.S.C. 1231, 46 U.S.C. Chapter 701, 3306, 3703; 50 U.S.C. 191, 195; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Public Law 107–295, 116 Stat. 2064; and Department of Homeland Security Delegation No. 0170.1, which collectively authorize the Coast Guard to establish and define regulatory safety zones.

Between 7:45 a.m. and 2:15 p.m. on June 27, 2015, a paddle sport regatta will be held on the Black River, Lorain, OH, from French Creek at river mile marker 5.0 to the Bascule Bridge at river mile marker 0.3. It is anticipated that up to 75 paddle craft will participate in the event. The Captain of the Port Buffalo has determined that such a gathering of watercraft poses a significant risk to public safety and property. Such

hazards include vessels restricted in maneuverability, vessels with low visibility, and high traffic congestion within a narrow channel.

**C. Discussion of the Final Rule**

With the aforementioned hazards in mind, the Captain of the Port Buffalo has determined that this temporary safety zone is necessary to ensure the safety of spectators and vessels during the Black River Kayak-a-thon. This zone will be enforced from 7:45 a.m. until 2:15 p.m. on June 27, 2015. This zone will encompass all waters of Black River; Lorain, OH from position 41°27′28″ N and 082°06′10″ W (NAD 83) in the vicinity of French Creek at river mile marker 5.0 to position 41°28′11″ N and 082°10′32″ W (NAD 83) in the vicinity of the Bascule Bridge at river mile marker 0.3.

Entry into, transiting, or anchoring within the safety zone is prohibited unless authorized by the Captain of the Port Buffalo or his designated on-scene representative. The Captain of the Port or his designated on-scene representative may be contacted via VHF Channel 16.

**D. Regulatory Analyses**

We developed this rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on these statutes and executive orders.

**1. Regulatory Planning and Review**

This rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by Executive Order 13563, Improving Regulation and Regulatory Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of Executive Order 12866 or under section 1 of Executive Order 13563. The Office of Management and Budget has not reviewed it under those Orders.

We conclude that this rule is not a significant regulatory action because we anticipate that it will have minimal impact on the economy, will not interfere with other agencies, will not adversely alter the budget of any grant or loan recipients, and will not raise any novel legal or policy issues. The safety zone created by this rule will be relatively small and enforced for a relatively short time. Also, the safety zone is designed to minimize its impact on navigable waters. Furthermore, the safety zone has been designed to allow vessels to transit around it. Thus, restrictions on vessel movement within

that particular area are expected to be minimal. Under certain conditions, moreover, vessels may still transit through the safety zone when permitted by the Captain of the Port.

**2. Impact on Small Entities**

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered the impact of this rule on small entities. 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. 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. This rule will affect the following entities, some of which might be small entities: The owners or operators of vessels intending to transit or anchor in a portion of Black River on the morning of June 27, 2015.

This safety zone will not have a significant economic impact on a substantial number of small entities for the following reasons: This safety zone would be effective, and thus subject to enforcement, for only six and a half hours. Traffic may be allowed to pass through the zone with the permission of the Captain of the Port. The Captain of the Port can be reached via VHF channel 16. Before the enforcement of the zone, we would issue local Broadcast Notice to Mariners.

**3. Assistance for Small Entities**

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 above.

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.



#### 4. 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).

#### 5. Federalism

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 determined that this rule does not have implications for federalism.

#### 6. 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.

#### 7. 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 an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

#### 8. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

#### 9. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

#### 10. Protection of Children

We have analyzed this rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and does not create an environmental risk to

health or risk to safety that may disproportionately affect children.

#### 11. Indian Tribal Governments

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.

#### 12. Energy Effects

This action is not a “significant energy action” under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.

#### 13. Technical Standards

This rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

#### 14. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.ID, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (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 the establishment of a safety zone and, therefore 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.

#### List of Subjects in 33 CFR Part 165

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

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

### PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

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

**Authority:** 33 U.S.C. 1231; 46 U.S.C. Chapters 701, 3306, 3703; 50 U.S.C. 191, 195; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Pub. L. 107–295, 116 Stat. 2064; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add temporary § 165.T09–0496 to read as follows:

#### § 165.T09–0496 Safety Zone; Black River Kayak-a-thon; Black River, Lorain, OH.

(a) *Location.* This zone will encompass all waters of Black River; Lorain, OH from position 41°27′28″ N. and 082°06′10″ W. (NAD 83) in the vicinity of French Creek at river mile marker 5.0 to position 41°28′11″ N. and 082°10′32″ W. (NAD 83) in the vicinity of the Bascule Bridge at river mile marker 0.3.

(b) *Enforcement period.* This regulation will be enforced on June 27, 2015 from 7:45 a.m. until 2:15 p.m.

(c) *Regulations.* (1) In accordance with the general regulations in § 165.23 of this part, entry into, transiting, or anchoring within this safety zone is prohibited unless authorized by the Captain of the Port Buffalo or his designated on-scene representative.

(2) This safety zone is closed to all vessel traffic, except as may be permitted by the Captain of the Port Buffalo or his designated on-scene representative.

(3) The “on-scene representative” of the Captain of the Port Buffalo is any Coast Guard commissioned, warrant or petty officer who has been designated by the Captain of the Port Buffalo to act on his behalf.

(4) Vessel operators desiring to enter or operate within the safety zone must contact the Captain of the Port Buffalo or his on-scene representative to obtain permission to do so. The Captain of the Port Buffalo or his on-scene representative may be contacted via VHF Channel 16. Vessel operators given permission to enter or operate in the safety zone must comply with all directions given to them by the Captain of the Port Buffalo, or his on-scene representative.

Dated: June 8, 2015.

**B.W. Roche,**

*Captain, U.S. Coast Guard, Captain of the Port Buffalo.*

[FR Doc. 2015–15409 Filed 6–22–15; 8:45 am]

**BILLING CODE 9110–04–P**

**DEPARTMENT OF HOMELAND SECURITY****Coast Guard****33 CFR Part 165**

[Docket No. USCG–2015–0393]

**Safety Zones; Fireworks Events in Captain of the Port New York Zone****AGENCY:** Coast Guard, DHS.**ACTION:** Notice of enforcement of regulation.

**SUMMARY:** The Coast Guard will enforce various safety zones within the Captain of the Port New York Zone on the specified dates and times. This action is necessary to ensure the safety of vessels and spectators from hazards associated with fireworks displays. During the enforcement period, no person or vessel may enter the safety zones without permission of the Captain of the Port (COTP).

**DATES:** The regulation for the safety zones described in 33 CFR 165.160 will

be enforced on the dates and times listed in the table below.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this notice, call or email Lieutenant Douglas Neumann, Coast Guard; telephone 718–354–4154, email [douglas.w.neumann@uscg.mil](mailto:douglas.w.neumann@uscg.mil).

**SUPPLEMENTARY INFORMATION:** The Coast Guard will enforce the safety zones listed in 33 CFR 165.160 on the specified dates and times as indicated in Table 1 below. This regulation was published in the **Federal Register** on November 9, 2011 (76 FR 69614).

TABLE 1

1. Brooklyn Law School, Ellis Island Safety Zone, 33 CFR 165.160(2.2)	<ul style="list-style-type: none"> <li>• Launch site: A barge located between Federal Anchorages 20–A and 20–B, in approximate position 40°41'45" N. 074°02'09" W. (NAD 1983) about 365 yards east of Ellis Island. This Safety Zone is a 360-yard radius from the barge.</li> <li>• Date: June 11, 2015.</li> <li>• Time: 10:10 p.m.–11:20 p.m.</li> </ul>
2. Bronx Salutes America, Orchard Beach, The Bronx Safety Zone, 33 CFR 165.160(3.11).	<ul style="list-style-type: none"> <li>• Launch site: All waters of Long Island Sound in an area bound by the following points: 40°51'43.5" N. 073°47'36.3" W.; thence to 40°52'12.2" N. 073°47'13.6" W.; thence to 40°52'02.5" N. 073°46'47.8" W.; thence to 40°51'32.3" N. 073°47'09.9" W. (NAD 1983), thence to the point of origin.</li> <li>• Date: June 25, 2015.</li> <li>• Time: 08:50 p.m.–10:10 p.m.</li> </ul>
3. City of Poughkeepsie Independence Day Celebration, Poughkeepsie, NY, Hudson River Safety Zone, 33 CFR 165.160(5.13).	<ul style="list-style-type: none"> <li>• Launch site: A barge located in approximate position 41°42'24.50" N. 073°56'44.16" W. (NAD 1983), approximately 420 yards north of the Mid Hudson Bridge. This Safety Zone is a 300-yard radius from the barge.</li> <li>• Date: July 04, 2015.</li> <li>• Time: 9:00 p.m.–10:00 p.m.</li> </ul>
4. City of Yonkers July 4th Celebration, Yonkers, NY, Hudson River Safety Zone, 33 CFR 165.160(5.5).	<ul style="list-style-type: none"> <li>• Launch site: A barge located in approximate position 40°56'14.5" N. 073°54'33" W. (NAD 1983), approximately 475 yards northwest of the Yonkers Municipal Pier, New York. This Safety Zone is a 360-yard radius from the barge.</li> <li>• Date: July 04, 2015.</li> <li>• Time: 08:45 p.m.–10:15 p.m.</li> </ul>
5. Peekskill July 4th Celebration, Peekskill Bay, Hudson River Safety Zone, 33 CFR 165.160(5.10).	<ul style="list-style-type: none"> <li>• Launch site: A barge located in approximate position 41°17'16" N. 073°56'18" W. (NAD 1983), approximately 670 yards north of Travis Point. This Safety Zone is a 360-yard radius from the barge.</li> <li>• Date: July 04, 2015.</li> <li>• Rain Date: July 05, 2015.</li> <li>• Time: 08:30 p.m.–10:30 p.m.</li> </ul>

Under the provisions of 33 CFR 165.160, vessels may not enter the safety zones unless given permission from the COTP or a designated representative. Spectator vessels may transit outside the safety zones but may not anchor, block, loiter in, or impede the transit of other vessels. The Coast Guard may be assisted by other Federal, State, or local law enforcement agencies in enforcing this regulation.

This notice is issued under authority of 33 CFR 165.160(a) and 5 U.S.C. 552(a). In addition to this notice in the **Federal Register**, the Coast Guard will provide mariners with advanced notification of enforcement periods via the Local Notice to Mariners and marine information broadcasts. If the COTP

determines that a safety zone need not be enforced for the full duration stated in this notice, a Broadcast Notice to Mariners may be used to grant general permission to enter the safety zone.

Dated: May 11, 2015.

**G. Loebel,**

*Captain, U.S. Coast Guard, Captain of the Port New York.*

[FR Doc. 2015–15410 Filed 6–22–15; 8:45 am]

**BILLING CODE 9110–04–P**

### **COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED**

#### **41 CFR 51–6**

#### **Military Resale (MR) Commodities; Correction**

**AGENCY:** Committee for Purchase From People Who Are Blind or Severely Disabled.

**ACTION:** Correcting amendments.

**SUMMARY:** The Committee published a Final Rule in the **Federal Register** of June 5, 2015, adding MR numbers to a series of MR numbers that already exist. In the Final Rule, new MR series 11000 and 12000 were designated as

“Exclusive”. This document removes MR series 11000 and 12000 from being designated as “Exclusive”. All other parameters of the Final Rule remain the same as published on June 5, 2015.

**DATES:** Effective June 23, 2015.

**FOR FURTHER INFORMATION CONTACT:**

Barry S. Lineback, Telephone: (703) 603-2118.

**SUPPLEMENTARY INFORMATION:** This document corrects § 51-6.4 by removing MR series 11000 and 12000 from paragraphs (b), (c)(4), and (d) so the series are no longer designated as “Exclusive”. All other parameters of the Final Rule remain the same as published on June 5, 2015.

**List of Subjects in 41 CFR Part 51-6 Procurement procedures.**

For the reasons set out in the preamble, the Committee amends 41 CFR part 51-6 as follows:

**PART 51-6—PROCUREMENT PROCEDURES**

- 1. The authority citation for part 51-6 continues to read as follows:

**Authority:** 41 U.S.C. 8501-8506.

**§ 51-6.4 [Amended]**

- 2. In § 51-6.4, in paragraphs (b), (c)(4), and (d), remove “, 11000 (11000-11999); 12000 (12000-12999)”.

Dated: June 17, 2015.

**Barry S. Lineback,**

*Director, Business Operations.*

[FR Doc. 2015-15284 Filed 6-22-15; 8:45 am]

**BILLING CODE 6353-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**42 CFR Part 100**

**RIN 0906-AB00**

**National Vaccine Injury Compensation Program: Addition of Intussusception as Injury for Rotavirus Vaccines to the Vaccine Injury Table**

**AGENCY:** Health Resources and Services Administration (HRSA), Department of Health and Human Services (HHS).

**ACTION:** Final rule.

**SUMMARY:** On July 24, 2013, the Secretary of Health and Human Services (the Secretary) published in the **Federal Register** a Notice of Proposed Rulemaking (NPRM) proposing changes to the regulations governing the National Vaccine Injury Compensation Program (VICP). Specifically, the Secretary proposed revisions to the Vaccine Injury Table (Table). The basis

for this change is consistent with the Secretary’s findings that intussusceptions can reasonably be determined in some circumstances to be caused by rotavirus vaccines. The Secretary is now making this amendment to the Table and to the Qualifications and Aids to Interpretation (QAI), described below under Background Information, as proposed in the NPRM. These regulations will apply only to petitions for compensation under the VICP filed after this final rule becomes effective.

**DATES:** This final rule is effective July 23, 2015.

**FOR FURTHER INFORMATION CONTACT:** Dr. Avril M. Houston, Director, Division of Injury Compensation Programs, Healthcare Systems Bureau, HRSA, Parklawn Building, Room 11C-06, 5600 Fishers Lane, Rockville, MD 20857, or by telephone: (800) 338-2382. This is a toll-free number.

**SUPPLEMENTARY INFORMATION:**

**I. Background Information**

Under Title XXI of the Public Health Service Act, as amended (PHS Act), individuals who demonstrate a vaccine-related injury or death may receive compensation through the VICP. To be eligible for compensation from the VICP, a petitioner must demonstrate that the injured or deceased individual received a vaccine set forth in the Table (a “covered vaccine”) and sustained a vaccine-related injury or death. A petitioner can prove a vaccine-related injury or death in three ways. First, the petitioner can show, by a preponderance of the evidence, that the vaccine recipient suffered an injury listed in the Table corresponding with the vaccine received, that the onset of such injury occurred within the timeframe specified in the Table, and that the injury meets the requirements set forth in the Table’s QAI. A Table injury or death is given the legal presumption that it was caused by the vaccination. Sections 2111(c)(1)(C)(i), 2113(a)(1)(B), and 2114(a) of the PHS Act. Second, if the petitioner cannot demonstrate a Table injury, the petitioner can prevail by proving, by a preponderance of the evidence, that the vaccine caused the injury or death (off-Table injury). Third, a petitioner can prevail by proving, by a preponderance of the evidence, that the vaccine significantly aggravated a pre-existing condition. In all three cases, a petitioner must also show that the injury was sufficiently severe by demonstrating that such person suffered the residual effects of the injury for more than 6 months; died from the administration of

the vaccine; or that the alleged injury resulted in inpatient hospitalization and surgical intervention. Section 2111(c)(1)(D) of the PHS Act. If the petitioner can prove a Table injury, off-Table injury, or significant aggravation of a pre-existing condition, the petitioner is entitled to compensation unless it is affirmatively shown that the injury was caused by some factor unrelated to the vaccination.

Under section 2114(e)(2) of the PHS Act, when the Centers for Disease Control and Prevention (CDC) recommends a vaccine for routine administration to children, the Secretary is required to amend the Table to include such vaccine. Coverage becomes effective when an excise tax is imposed on the vaccine. Additionally, the Secretary is authorized to include specific injuries on the Table with respect to each covered vaccine, including the timeframe when the first symptom or manifestation of the onset of such adverse event may occur. The Secretary may also define such injuries through the QAI. Under section 2114(c) of the PHS Act, the Secretary may make such modifications to the Table by promulgating regulations, with notice and opportunity for a public hearing, and at least 180 days of public comment.

**II. Discussion of the Final Rule**

As discussed in the NPRM (78 FR 44512, July 24, 2013), the Secretary has reviewed the currently available data regarding the Rotarix and RotaTeq vaccines and the risk of intussusception. The background of the RotaShield experience in the U.S. and the published literature from Mexico, Brazil, Australia, and the U.S. supports a small attributable risk of intussusception after the first and second doses of Rotarix and RotaTeq (with a greater amount of data supporting an association with the first dose of both vaccines). Evidence shows the increased risk within the 1-7 days following immunization with peaks in the fourth and fifth days. As a consequence, the Secretary is amending the Table to add the injury of intussusception to the general Table category of “rotavirus vaccines” to allow a presumption of causation for claims that meet the requirements set forth in the Table for that injury. To allow for a generous timeframe that will capture any cases related to the vaccine after day 7, the Secretary has assigned an onset interval of 1-21 days under sections 2114(c) and (e) of the PHS Act.

The Secretary will stay informed of new information in the scientific and medical field about intussusception and

rotavirus vaccines and may propose changes in the future if such information warrants changes to the Table. In addition, the Secretary recognizes that one goal of the VICP is to provide compensation to petitioners harmed by vaccines through a less adversarial system. Therefore, the Secretary feels that adding the Table injury of intussusception after the first and second doses of rotavirus vaccines with a window of 1–21 days is appropriate.

The QAI section of the Table defines the injury of “intussusception” as the invagination of a segment of intestine into the next segment of intestine, resulting in bowel obstruction, diminished arterial blood supply, and blockage of the venous blood flow. This is characterized by a sudden onset of abdominal pain that may be manifested by anguished crying, irritability, vomiting, abdominal swelling, and/or passing of stools mixed with blood and mucus. The definition for presumption of vaccine causation only applies to the first and second dose of vaccine, and excludes intussusception occurring with or after the third dose. The third dose of rotavirus vaccines lacks sufficient evidence showing risk.

The definition also delineates the alternative causes of intussusception which, if present in a case, would prevent it from qualifying as a Table injury. The alternative causes were classified into four categories: infectious diseases; anatomic lead points; anatomic bowel abnormalities; and underlying gastrointestinal or systemic diseases. Cases of intussusception where the onset was within 14 days after an infectious disease secondary to non-enteric or enteric adenovirus, other enteric viruses (such as Enterovirus), enteric bacteria (such as *Campylobacter jejuni*), or enteric parasites (such as *Ascaris lumbricoides*) would not qualify as a Table injury. Proof of these alternate causes may be demonstrated by clinical signs and symptoms and need not be confirmed by culture or serologic testing.

Cases of intussusception in a person with a pre-existing condition identified as the lead point for intussusception, such as intestinal masses and cystic structures (e.g., polyps; tumors; Meckel’s diverticulum; lymphoma; or duplication cysts), would not qualify as a Table injury. Additionally, cases of intussusception in a person with abnormalities of the bowel, including congenital anatomic abnormalities, anatomic changes after abdominal surgery, and other anatomic bowel abnormalities caused by mucosal hemorrhage, trauma, or abnormal

intestinal blood vessels (such as Henoch Schölein purpura, hematoma, or hemangioma); or in a person with underlying conditions or systemic diseases associated with intussusception (such as cystic fibrosis, celiac disease, or Kawasaki disease) would not qualify as a Table injury.

Petitioners may be eligible for compensation for vaccine-related cases of intussusception in which the onset is before 1 day or beyond 21 days, or where the condition does not satisfy the criteria under the QAI for intussusception (an “off-Table” claim); however, the petitioners will be required to prove causation-in-fact. Regardless of whether the claim satisfies the criteria in the Table, all petitioners must demonstrate sufficient severity of the injury by proving that the injured person: 1) suffered the residual effects or complications of the alleged vaccine-related injury for more than 6 months after vaccine’s administration; 2) died from administration of the vaccine; or 3) sustained inpatient hospitalization and surgery as a result of the alleged vaccine-related injury. Section 2111(c)(1)(D), PHS Act (42 U.S.C. 300aa–11(c)(1)(D)). In the case of rotavirus vaccine administration and subsequent intussusception, the Secretary does not consider a reduction of intussusception with therapeutic enemas to be “surgical intervention.”

Petitions must also be filed within the applicable statute of limitations. The general statute of limitations applicable to petitions filed with the VICP, set forth in section 2116(a) of the PHS Act (42 U.S.C. 300aa–16(a)), continues to apply. In addition, section 2116(b) of the PHS Act identifies a specific exception to this statute of limitations that applies when the effect of a revision to the Table makes a previously ineligible person eligible to receive compensation or when an eligible person’s likelihood of obtaining compensation significantly increases. Under this section, individuals who may be eligible to file petitions based on the revised Table may file a petition for compensation not later than two years after the effective date of the revision if the injury or death occurred not more than eight years before the effective date of the revision of the Table (42 U.S.C. 300aa–16(b)).

### III. Comments and Responses

The comment period for this regulation ran for 6 months (July 24, 2013–January 21, 2014) and included two public hearings that were held on January 13, 2014, and April 28, 2014. The Secretary received ten comments as a result of this process. None of the commenters objected to the Secretary’s

proposal to add intussusception as an injury for rotavirus vaccines to the Table, and the overwhelming majority of commenters expressed their support for the proposal. In addition, commenters raised four additional points. Below is a summary of those points and the Secretary’s responses to them.

#### 1. Notice to Potential Petitioners

COMMENT: A commenter suggested that the Secretary make additional efforts to increase public awareness about expanding the Table and to increase the general public awareness about the VICP.

RESPONSE: The Secretary will continue efforts to increase the general public’s awareness about the VICP, including revisions to the Table.

#### 2. Demonstrating Severity of Injury

COMMENT: One commenter suggested that the definition of surgical intervention be broadened to include therapeutic enema treatment.

RESPONSE: Defining the term “surgical intervention” is beyond the scope of the Table amendments. While the preamble to both the NPRM and final rule includes the Secretary’s view that a reduction of intussusception with an enema is not a “surgical intervention,” such language is not included in the regulatory text. Further, the definition of “surgical intervention” is decided by the court.

#### 3. Onset Time Frame

COMMENT: A commenter stated that none of the data for either vaccine supports an association with intussusception for days 8–21 after dose 2 and suggested that the Secretary consider revising the time frame for qualification as a Table injury after dose 2 to 1–7 days.

RESPONSE: The Secretary has considered the approach suggested by the commenter and also the recommendation of the Advisory Commission on Childhood Vaccines (ACCV). The ACCV unanimously recommended the proposed change of 1–21 days for all rotavirus vaccines.

The ACCV’s “Guiding Principles for Recommending Changes to the Vaccine Injury Table,” consist of two overarching principles: (1) the Table should be scientifically and medically credible; and (2) where there is credible scientific and medical evidence both to support and to reject a proposed change (addition or deletion) to the Table, the change should, whenever possible, be made to the benefit of petitioners. The Guiding Principles were established in 2006 to assist the ACCV in evaluating

proposed Table revisions and determining whether to recommend Table changes to the Secretary. The ACCV followed these Guiding Principles in making its recommendations to the Secretary for revising this Table. Therefore, the Secretary has decided that the 1–21 day timeframe for both vaccines is the best approach to capture any cases related to the vaccine after day 7.

#### 4. Published Studies since the Publication of the NPRM

COMMENT: A commenter identified studies that have been published since the initial NPRM was published.

RESPONSE: The Secretary has reviewed these studies and found that the most recent data have shown a small but statistically significant increased risk of intussusception within 7 days after the first and second doses of the licensed rotavirus vaccines. However, as discussed above, following the Guiding Principles, the ACCV unanimously recommended the proposed change of 1–21 days for all rotavirus vaccines. Therefore, the Secretary has decided that the 1–21 day timeframe for both vaccines is the best approach to capture any cases related to the vaccine after day 7.

#### IV. Regulatory Impact Analysis

HHS has examined the impact of this rulemaking as required by Executive Order 12866 on Regulatory Planning and Review, Executive Order 13563 on Improving Regulation and Regulatory Review, the Congressional Review Act (5 U.S.C. 804(2)), the Regulatory Flexibility Act (RFA), section 202 of the Unfunded Mandates Reform Act of 1995, section 654(c) of the Treasury and General Government Appropriations Act of 1999, and Executive Order 13132 on Federalism.

Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when rulemaking is necessary, to select regulatory approaches that provide the greatest net benefits (including potential economic, environmental, public health, safety, distributive, and equity effects). In addition, under the Regulatory Flexibility Act, if a rule has a significant economic effect on a substantial number of small entities, the Secretary must specifically consider the economic

effect of a rule on small entities and analyze regulatory options that could lessen the impact of the rule.

Executive Order 12866 requires that all regulations reflect consideration of alternatives, costs, benefits, incentives, equity, and available information. Regulations must meet certain standards, such as avoiding an unnecessary burden. Regulations that are “significant” because of cost, adverse effects on the economy, inconsistency with other agency actions, effects on the budget, or novel legal or policy issues, require special analysis.

The Secretary has determined that no resources are required to implement the requirements in this rule. Compensation will be made in the same manner used prior to the revisions of this final rule. The only purpose of this rule is to lessen the burden of proof for potential petitioners. Therefore, in accordance with the Regulatory Flexibility Act of 1980 (RFA) and the Small Business Regulatory Enforcement Act of 1996, which amended the RFA, the Secretary certifies that this rule will not have a significant impact on a substantial number of small entities.

The Secretary has also determined that this rule does not meet the criteria for a major rule as defined by Executive Order 12866, and it would not have a major effect on the economy or federal expenditures. The Secretary has determined that this rule is not a “major rule” within the meaning of the statute providing for Congressional Review of Agency Rulemaking, 5 U.S.C. 801. Similarly, it will not have effects on State, local, and tribal governments, or on the private sector such as to require consultation under the Unfunded Mandates Reform Act of 1995.

The Secretary finds that the provisions of this rule will not have an adverse effect on family well-being, because this rule does not affect the following family elements: family safety; family stability; marital commitment; parental rights in the education, nurture, and supervision of their children; family functioning; disposable income or poverty; or the behavior and personal responsibility of youth, as determined under section 654(c) of the Treasury and General Government Appropriations Act of 1999.

This rule is not being treated as a “significant regulatory action” under section 3(f) of Executive Order 12866. Accordingly, the rule has not been reviewed by the Office of Management and Budget. As stated above, this rule would modify the Table based on legal authority.

#### Impact of the New Rule

This rule will have the effect of making it easier for future VICP petitioners alleging the injury of intussusception as the result of a rotavirus vaccine that meets the criteria in the Table to receive the Table’s presumption of causation (which relieves them of having to prove that the vaccine actually caused or significantly aggravated the injury).

#### Paperwork Reduction Act of 1995

This final rule has no information collection requirements.

#### List of Subjects in 42 CFR Part 100

Biologics, Health insurance, and Immunization.

Dated: May 27, 2015.

**James Macrae,**

*Acting Administrator, Health Resources and Services Administration.*

Approved: June 5, 2015.

**Sylvia M. Burwell,**

*Secretary.*

Therefore, for the reasons stated in the preamble, the Department of Health and Human Services amends 42 CFR part 100 as follows:

#### PART 100—VACCINE INJURY COMPENSATION

■ 1. The authority citation for part 100 is revised to read as follows:

**Authority:** Secs. 312 and 313 of Public Law 99–660 (42 U.S.C. 300aa–1 note); 42 U.S.C. 300aa–10 to 300aa–34; 26 U.S.C. 4132(a); and sec. 13632(a)(3) of Public Law 103–66.

■ 2. Amend § 100.3 as follows:

■ a. Amend paragraph (a) by revising Item XI in the table.

■ b. Add paragraph (b)(3).

The revision and addition read as follows:

#### § 100.3 Vaccine injury table.

(a) \* \* \*

Vaccine	Illness, disability, injury or condition covered	Time period for first symptom or manifestation of onset or of significant aggravation after vaccine administration
XI. Rotavirus vaccines .....	A. Intussusception ..... B. Any acute complication or <i>sequela</i> (including death) of an illness, disability, injury, or condition referred to above which illness, disability, injury, or condition arose within the time period prescribed.	1–21 days Not applicable

(b) \* \* \*

(3) *Intussusception*. (i) For purposes of paragraph (a) of this section, intussusception means the invagination of a segment of intestine into the next segment of intestine, resulting in bowel obstruction, diminished arterial blood supply, and blockage of the venous blood flow. This is characterized by a sudden onset of abdominal pain that may be manifested by anguished crying, irritability, vomiting, abdominal swelling, and/or passing of stools mixed with blood and mucus.

(ii) For purposes of paragraph (a) of this section, the following shall not be considered to be a Table intussusception:

(A) Onset that occurs with or after the third dose of a vaccine containing rotavirus;

(B) Onset within 14 days after an infectious disease associated with intussusception, including viral disease (such as those secondary to non-enteric or enteric adenovirus, or other enteric viruses such as Enterovirus), enteric bacteria (such as *Campylobacter jejuni*), or enteric parasites (such as *Ascaris lumbricoides*), which may be demonstrated by clinical signs and symptoms and need not be confirmed by culture or serologic testing;

(C) Onset in a person with a pre-existing condition identified as the lead point for intussusception such as intestinal masses and cystic structures (such as polyps, tumors, Meckel's diverticulum, lymphoma, or duplication cysts);

(D) Onset in a person with abnormalities of the bowel, including congenital anatomic abnormalities, anatomic changes after abdominal surgery, and other anatomic bowel abnormalities caused by mucosal hemorrhage, trauma, or abnormal intestinal blood vessels (such as Henoch Schölein purpura, hematoma, or hemangioma); or

(E) Onset in a person with underlying conditions or systemic diseases associated with intussusception (such as

cystic fibrosis, celiac disease, or Kawasaki disease).  
 \* \* \* \* \*  
 [FR Doc. 2015-14771 Filed 6-22-15; 8:45 am]  
**BILLING CODE 4165-15-P**

**DEPARTMENT OF HOMELAND SECURITY**

**Federal Emergency Management Agency**

**44 CFR Part 64**

[Docket ID FEMA-2015-0001; Internal Agency Docket No. FEMA-8385]

**Suspension of Community Eligibility**

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Final rule.

**SUMMARY:** This rule identifies communities where the sale of flood insurance has been authorized under the National Flood Insurance Program (NFIP) that are scheduled for suspension on the effective dates listed within this rule because of noncompliance with the floodplain management requirements of the program. If the Federal Emergency Management Agency (FEMA) receives documentation that the community has adopted the required floodplain management measures prior to the effective suspension date given in this rule, the suspension will not occur and a notice of this will be provided by publication in the **Federal Register** on a subsequent date. Also, information identifying the current participation status of a community can be obtained from FEMA's Community Status Book (CSB). The CSB is available at <http://www.fema.gov/fema/csb.shtm>.

**DATES:** The effective date of each community's scheduled suspension is the third date ("Susp.") listed in the third column of the following tables.

**FOR FURTHER INFORMATION CONTACT:** If you want to determine whether a

particular community was suspended on the suspension date or for further information, contact Bret Gates, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-4133.

**SUPPLEMENTARY INFORMATION:** The NFIP enables property owners to purchase Federal flood insurance that is not otherwise generally available from private insurers. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding. Section 1315 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4022, prohibits the sale of NFIP flood insurance unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed in this document no longer meet that statutory requirement for compliance with program regulations, 44 CFR part 59. Accordingly, the communities will be suspended on the effective date in the third column. As of that date, flood insurance will no longer be available in the community. We recognize that some of these communities may adopt and submit the required documentation of legally enforceable floodplain management measures after this rule is published but prior to the actual suspension date. These communities will not be suspended and will continue to be eligible for the sale of NFIP flood insurance. A notice withdrawing the suspension of such communities will be published in the **Federal Register**.

In addition, FEMA publishes a Flood Insurance Rate Map (FIRM) that identifies the Special Flood Hazard Areas (SFHAs) in these communities. The date of the FIRM, if one has been published, is indicated in the fourth column of the table. No direct Federal financial assistance (except assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency

Assistance Act not in connection with a flood) may be provided for construction or acquisition of buildings in identified SFHAs for communities not participating in the NFIP and identified for more than a year on FEMA's initial FIRM for the community as having flood-prone areas (section 202(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4106(a), as amended). This prohibition against certain types of Federal assistance becomes effective for the communities listed on the date shown in the last column. The Administrator finds that notice and public comment procedures under 5 U.S.C. 553(b), are impracticable and unnecessary because communities listed in this final rule have been adequately notified.

Each community receives 6-month, 90-day, and 30-day notification letters addressed to the Chief Executive Officer stating that the community will be suspended unless the required floodplain management measures are met prior to the effective suspension date. Since these notifications were made, this final rule may take effect within less than 30 days.

*National Environmental Policy Act.* This rule is categorically excluded from the requirements of 44 CFR part 10, Environmental Considerations. No environmental impact assessment has been prepared.

*Regulatory Flexibility Act.* The Administrator has determined that this rule is exempt from the requirements of the Regulatory Flexibility Act because the National Flood Insurance Act of 1968, as amended, Section 1315, 42 U.S.C. 4022, prohibits flood insurance coverage unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed no longer comply with the statutory requirements, and after the effective date, flood insurance will no longer be available in the communities unless remedial action takes place.

*Regulatory Classification.* This final rule is not a significant regulatory action under the criteria of section 3(f) of Executive Order 12866 of September 30, 1993, Regulatory Planning and Review, 58 FR 51735.

*Executive Order 13132, Federalism.* This rule involves no policies that have

federalism implications under Executive Order 13132.

*Executive Order 12988, Civil Justice Reform.* This rule meets the applicable standards of Executive Order 12988.

*Paperwork Reduction Act.* This rule does not involve any collection of information for purposes of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

**List of Subjects in 44 CFR Part 64**

Flood insurance, Floodplains.

Accordingly, 44 CFR part 64 is amended as follows:

**PART 64—[AMENDED]**

■ 1. The authority citation for Part 64 continues to read as follows:

**Authority:** 42 U.S.C. 4001 *et seq.*; Reorganization Plan No. 3 of 1978, 3 CFR, 1978 Comp.; p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp.; p. 376.

**§ 64.6 [Amended]**

■ 2. The tables published under the authority of § 64.6 are amended as follows:

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain Federal assistance no longer available in SFHAs
<b>Region I</b>				
Maine:				
Belfast, City of, Waldo County .....	230129	July 8, 1975, Emerg; May 3, 1990, Reg; July 6, 2015, Susp.	July 6, 2015 .....	July 6, 2015
Brooks, Town of, Waldo County .....	230253	July 23, 1975, Emerg; September 18, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Burnham, Town of, Waldo County .....	230130	November 3, 1977, Emerg; June 3, 1991, Reg; July 6, 2015, Susp.	.....do .....	Do.
Frankfort, Town of, Waldo County .....	230254	June 5, 1975, Emerg; May 17, 1990, Reg; July 6, 2015, Susp.	.....do .....	Do.
Freedom, Town of, Waldo County .....	230255	October 1, 1975, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Isleboro, Town of, Waldo County .....	230256	May 30, 1975, Emerg; May 15, 1991, Reg; July 6, 2015, Susp.	.....do .....	Do.
Knox, Town of, Waldo County .....	230258	July 30, 1975, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Liberty, Town of, Waldo County .....	230259	July 23, 1975, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Lime Island, Waldo County .....	230985	April 4, 1979, Emerg; April 30, 1984, Reg; July 6, 2015, Susp.	.....do .....	Do.
Lincolville, Town of, Waldo County .....	230172	October 1, 1975, Emerg; May 3, 1990, Reg; July 6, 2015, Susp.	.....do .....	Do.
Little Bermuda Island, Waldo County .....	230984	April 4, 1979, Emerg; April 30, 1984, Reg; July 6, 2015, Susp.	.....do .....	Do.
Monroe, Town of, Waldo County .....	230260	May 22, 1975, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Montville, Town of, Waldo County .....	230261	October 2, 2008, Emerg; April 1, 2009, Reg; July 6, 2015, Susp.	.....do .....	Do.
Morrill, Town of, Waldo County .....	230262	July 16, 1975, Emerg; September 18, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Northport, Town of, Waldo County .....	230179	July 23, 1975, Emerg; May 15, 1991, Reg; July 6, 2015, Susp.	.....do .....	Do.
Palermo, Town of, Waldo County .....	230263	July 15, 1975, Emerg; March 1, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain Federal assistance no longer available in SFHAs
Searsmont, Town of, Waldo County .....	230265	July 16, 1975, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Searsport, Town of, Waldo County .....	230185	July 2, 1975, Emerg; May 17, 1990, Reg; July 6, 2015, Susp.	.....do .....	Do.
Stockton Springs, Town of, Waldo County.	230266	July 30, 1975, Emerg; February 4, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Swanville, Town of, Waldo County .....	230267	June 11, 1975, Emerg; February 4, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Thorndike, Town of Waldo County .....	230268	June 14, 1976, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Troy, Town of, Waldo County .....	230269	March 15, 1976, Emerg; April 17, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Unity, Town of, Waldo County .....	230131	July 15, 1975, Emerg; September 27, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
Winterport, Town of, Waldo County .....	230271	October 1, 1975, Emerg; May 3, 1990, Reg; July 6, 2015, Susp.	.....do .....	Do.
<b>Region III</b>				
Virginia:				
Charles City County, Unincorporated Areas.	510198	October 20, 1975, Emerg; September 5, 1990, Reg; July 6, 2015, Susp.	.....do .....	Do.
<b>Region IV</b>				
Florida:				
Clewistown, City of, Hendry County .....	120108	September 29, 1972, Emerg; March 15, 1977, Reg; July 6, 2015, Susp.	.....do .....	Do.
Hendry County, Unincorporated Areas	120107	August 27, 1974, Emerg; May 17, 1982, Reg; July 6, 2015, Susp.	.....do .....	Do.
LaBelle, City of, Hendry County .....	120109	July 30, 1974, Emerg; January 20, 1982, Reg; July 6, 2015, Susp.	.....do .....	Do.
<b>Region V</b>				
Michigan:				
Fruitland, Township of, Muskegon County.	260265	December 11, 1973, Emerg; September 1, 1986, Reg; July 6, 2015, Susp.	.....do .....	Do.
Montague, City of, Muskegon County ...	260160	April 12, 1974, Emerg; May 1, 1978, Reg; July 6, 2015, Susp.	.....do .....	Do.
Muskegon, Charter Township, Muskegon County.	260163	September 6, 1974, Emerg; August 1, 1977, Reg; July 6, 2015, Susp.	.....do .....	Do.
Muskegon, City of, Muskegon County ..	260161	May 25, 1973, Emerg; June 1, 1977, Reg; July 6, 2015, Susp.	.....do .....	Do.
Muskegon Heights, City of, Muskegon County.	260162	May 9, 1975, Emerg; February 18, 1981, Reg; July 6, 2015, Susp.	.....do .....	Do.
North Muskegon, City of, Muskegon County.	260164	December 11, 1973, Emerg; May 2, 1977, Reg; July 6, 2015, Susp.	.....do .....	Do.
Norton Shores, City of, Muskegon County.	260162	May 9, 1975, Emerg; February 18, 1981, Reg; July 6, 2015, Susp.	.....do .....	Do.
Muskegon Heights, City of, Muskegon County.	260162	May 9, 1975, Emerg; February 18, 1981, Reg; July 6, 2015, Susp.	.....do .....	Do.
North Muskegon, City of, Muskegon County.	260164	December 11, 1973, Emerg; May 2, 1977, Reg; July 6, 2015, Susp.	.....do .....	Do.
Norton Shores, City of, Muskegon County.	260165	April 6, 1973, Emerg; September 15, 1977, Reg; July 6, 2015, Susp.	.....do .....	Do.
Ravenna, Township of, Muskegon County.	260731	October 6, 1982, Emerg; May 17, 1989, Reg; July 6, 2015, Susp.	.....do .....	Do.
White River, Township of, Muskegon County.	260299	June 21, 1974, Emerg; January 16, 1981, Reg; July 6, 2015, Susp.	.....do .....	Do.
Whitehall, City of, Muskegon County ....	260166	May 13, 1975, Emerg; October 15, 1980, Reg; July 6, 2015, Susp.	.....do .....	Do.
<b>Region VI</b>				
Arkansas:				
Alexander, Town of, Pulaski and Saline Counties..	050377	September 26, 1980, Emerg; January 20, 1982, Reg; July 6, 2015, Susp.	.....do .....	Do.
Jacksonville, City of, Pulaski County ....	050180	November 26, 1973, Emerg; September 29, 1978, Reg; July 6, 2015, Susp.	.....do .....	Do.
Little Rock, City of, Pulaski County .....	050181	March 16, 1973, Emerg; March 4, 1980, Reg; July 6, 2015, Susp.	.....do .....	Do.
Maumelle, City of, Pulaski County .....	050577	March 6, 1979, Emerg; February 29, 1988, Reg; July 6, 2015, Susp.	.....do .....	Do.



State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain Federal assistance no longer available in SFHAs
North Little Rock, City of, Pulaski County.	050182	January 17, 1974, Emerg; July 16, 1980, Reg; July 6, 2015, Susp.	.....do .....	Do.
Pulaski County, Unincorporated Areas	050179	March 6, 1979, Emerg; July 16, 1981, Reg; July 6, 2015, Susp.	.....do .....	Do.
Sherwood, City of, Pulaski County .....	050235	February 15, 1974, Emerg; October 17, 1978, Reg; July 6, 2015, Susp.	.....do .....	Do.
Louisiana: Campti, Town of, Natchitoches Parish.	220401	August 28, 1992, Emerg; July 3, 2003, Reg; July 6, 2015, Susp.	.....do .....	Do.
Clarence, Village of, Natchitoches Parish.	220130	March 8, 1976, Emerg; September 18, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Goldonna, Village of, Natchitoches Parish.	220290	April 2, 1981, Emerg; June 29, 1982, Reg; July 6, 2015, Susp.	.....do .....	Do.
Natchez, Village of, Natchitoches Parish.	220370	September 29, 1975, Emerg; September 18, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Natchitoches, City of, Natchitoches Parish.	220131	April 17, 1974, Emerg; September 18, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Natchitoches Parish, Unincorporated Areas.	220129	May 10, 1973, Emerg; September 18, 1987, Reg; July 6, 2015, Susp.	.....do .....	Do.
Provencal, Village of, Natchitoches Parish..	220132	June 27, 1975, Emerg; November 1, 1992, Reg; July 6, 2015, Susp.	.....do .....	Do.
Robeline, Village of, Natchitoches Parish..	220133	August 11, 1975, Emerg; August 5, 1985, Reg; July 6, 2015, Susp.	.....do .....	Do.
<b>Region VIII</b>				
Montana:				
Missoula, City of, Missoula County .....	300049	March 14, 1975, Emerg; January 6, 1983, Reg; July 6, 2015, Susp.	.....do .....	Do.
Missoula County, Unincorporated Areas	300048	January 15, 1975, Emerg; August 15, 1983, Reg; July 6, 2015, Susp.	.....do .....	Do.

\* do = Ditto.

Code for reading third column: Emerg.—Emergency; Reg.—Regular; Susp.—Suspension.

Dated: April 22, 2015.

**Roy E. Wright,**

*Deputy Associate Administrator, Federal Insurance and Mitigation Administration, Department of Homeland Security, Federal Emergency Management Agency.*

[FR Doc. 2015-15346 Filed 6-22-15; 8:45 am]

**BILLING CODE 9110-12-P**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 76**

[CS Docket No. 98-120; FCC 15-65]

**Carriage of Digital Television Broadcast Signals**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** The Federal Communications Commission (Commission) adopts a proposal filed jointly by the American Cable Association and the National Association of Broadcasters that modifies and extends the exemption from the requirement to carry high definition (“HD”) broadcast signals under “material degradation” provisions of the Communications Act

of 1934, as amended (“the Act”) that the Commission granted to certain small cable systems in 2012 (“HD carriage exemption”).

**DATES:** Effective July 23, 2015, except for the requirement described in paragraph III.4.b of the Supplementary Information. That paragraph contains information collection requirements that have not been approved by the Office of Management and Budget (OMB). The Commission will publish a document in the **Federal Register** announcing OMB approval and the effective date of that paragraph.

**FOR FURTHER INFORMATION CONTACT:** Raelynn Remy, *Raelynn.Remy@fcc.gov*, Federal Communications Commission, Media Bureau, (202) 418-2936.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission’s *Sixth Report and Order*, CS Docket No. 98-120, FCC 15-65, which was adopted and released on June 10, 2015. The full text of this document is available for public inspection and copying during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street SW., Room CY-A257, Washington, DC 20554. This document will also be available via ECFS at

<http://fjallfoss.fcc.gov/ecfs/>. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an email to *fcc504@fcc.gov* or calling the Commission’s Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

**Paperwork Reduction Act of 1995 Analysis**

This document contains new information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13. It will be submitted to OMB for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection

burden for small business concerns with fewer than 25 employees.

## I. Introduction

1. In this *Sixth Report and Order*, we adopt a proposal filed jointly by the American Cable Association (“ACA”) and the National Association of Broadcasters (“NAB”)<sup>1</sup> that modifies and extends the exemption from the requirement to carry high definition (“HD”) broadcast signals under “material degradation” provisions of the Communications Act of 1934, as amended (“the Act”)<sup>2</sup> that the Commission granted to certain small cable systems in 2012 (“HD carriage exemption”).<sup>3</sup> As discussed below, we find that the joint proposal strikes a reasonable balance between the interests of broadcast stations in having their HD signals transmitted without material degradation and the technical and financial constraints that some small cable operators continue to experience. We set forth below a brief history of the HD carriage exemption and explain the basis for our decision.

## II. Background

2. Sections 614(b)(4)(A) and 615(g)(2) of the Act require that cable operators carry signals of commercial and noncommercial broadcast television stations, respectively, “without material degradation.” In the context of the carriage of digital signals, the Commission has interpreted this requirement: (i) To prohibit cable operators from discriminating in their carriage between broadcast and non-broadcast signals; and (ii) to require cable operators to carry HD broadcast signals to their viewers in HD. To address concerns expressed by small cable operators about cost and technical capacity, the Commission in 2008 granted a three-year exemption from the HD carriage requirement to certain small

cable systems. In particular, the Commission applied the exemption to small cable systems with 2,500 or fewer subscribers that are not affiliated with a cable operator serving more than 10 percent of all MVPD subscribers, and those with an activated channel capacity of 552 MHz or less. In 2012, the Commission extended the HD carriage exemption for those cable systems until June 12, 2015.

3. In January 2015, ACA filed a Petition for Rulemaking asking the Commission: (i) To commence a rulemaking proceeding to extend for an additional three years the HD carriage exemption; and (ii) to clarify that analog-only cable systems are not subject to the HD carriage requirement because carriage of HD signals by such systems is not “technically feasible” under Section 614(b)(4)(A) of the Act. On March 12, 2015, the Commission issued a *Fifth Further Notice of Proposed Rulemaking* in this proceeding that, among other things, proposed to extend the HD carriage exemption for three more years.<sup>4</sup> In their initial pleadings responsive to the *Fifth Further Notice*, multichannel video programming distributors (“MVPDs”) supported the Commission’s proposal to extend the HD carriage exemption and broadcasters opposed it. After a series of discussions aimed at resolving their differences, ACA and NAB, on May 14, 2015, filed the joint proposal with the Commission.<sup>5</sup>

## III. Discussion

4. We conclude that it would serve the public interest to adopt the joint proposal put forth by ACA and NAB. Throughout the course of this proceeding, ACA and NAB have expressed differing views about the appropriate scope and duration of the HD carriage exemption, among other issues. We find that the compromise reached by ACA and NAB as reflected in the joint proposal reasonably balances the interest of broadcast stations in having their HD signals transmitted in HD and the interest of small cable operators in upgrading their systems to carry HD broadcast signals in a manner that is cost efficient. We note that no industry commenter has lodged

any objection to the joint proposal. We, therefore, find that the public interest would be served by adopting ACA and NAB’s joint proposal, as set forth below:<sup>6</sup>

*a. HD Carriage Exemption Eligibility after June 12, 2015:* A small cable system not offering any programming in HD is exempt from the HD carriage requirement. Beginning December 12, 2016, a system utilizing the HD carriage exemption shall no longer be eligible to use it once the system offers any programming in HD.

*b. Notice:* Beginning December 12, 2016, at the time a small cable system utilizing the HD carriage exemption offers any programming in HD, the system must give notice that it is offering HD programming to all broadcast stations in its market that are carried on its system.

*c. Transition for Some Systems:* A cable system utilizing the HD carriage exemption on June 12, 2015 that does not qualify for the HD carriage exemption on or after June 13, 2015 must come into compliance by December 12, 2016. A cable system that becomes ineligible for the HD carriage exemption after December 12, 2016 would be expected to come into compliance promptly.

*d. Revisions to Definition of “Small” Cable System:* “Small” cable systems eligible for the HD carriage exemption would be redefined as those: (i) Serving 1,500 (rather than 2,500) or fewer subscribers, and not affiliated with a cable operator serving more than 2 percent (rather than 10 percent) of all MVPD subscribers, or (ii) having an activated channel capacity of 552 MHz or less.

## IV. Procedural Matters

### A. Regulatory Flexibility Act

5. *Final Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act of 1980, as amended (“RFA”)<sup>7</sup> an Initial Regulatory Flexibility Act Analysis (“IRFA”) was incorporated in the *Fifth Further Notice*

<sup>6</sup> See *Joint Proposal; Joint Clarification*. We need not resolve in this order the issue whether analog-only cable systems are subject to the HD carriage requirement under Section 614(b)(4)(A) of the Act because under the terms of the joint proposal, cable systems that do not offer any programming in HD, including analog-only systems, will be exempt from the HD carriage requirement. See *Joint Proposal* at 1. Thus, our adoption of the joint proposal renders this issue moot.

<sup>7</sup> See 5 U.S.C. 603. The RFA, see 5 U.S.C. 601–612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (“SBREFA”), Pub. L. 104–121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (“CWAAA”).

<sup>1</sup> See Letter from Ross Lieberman, Senior Vice President of Government Affairs, American Cable Association and Erin L. Dozier, Senior Vice President and Deputy General Counsel, National Association of Broadcasters, to Marlene H. Dortch, Secretary, FCC, in CS Docket No. 98–120 (filed May 14, 2015) (“*Joint Proposal*”); Letter from Ross Lieberman, Senior Vice President of Government Affairs, American Cable Association and Erin L. Dozier, Senior Vice President and Deputy General Counsel, National Association of Broadcasters, to Marlene H. Dortch, Secretary, FCC, in CS Docket No. 98–120 (filed May 27, 2015) (clarifying two points in the joint proposal) (“*Joint Clarification*”).

<sup>2</sup> See 47 U.S.C. 534(b)(4)(A), 535(g)(2) (material degradation requirements relating to signals of local commercial and noncommercial television stations, respectively).

<sup>3</sup> See *Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission’s Rules*, CS Docket No. 98–120, Fifth Report and Order, 77 FR 36178 (2012) (“*Fifth Report and Order*”).

<sup>4</sup> See *Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission’s Rules*, CS Docket No. 98–120, Fifth Further Notice of Proposed Rulemaking, 80 FR 16347 (2015) (“*Fifth Further Notice*”).

<sup>5</sup> See *Joint Proposal*. See also *Joint Clarification*; Letter from Erin L. Dozier, Senior Vice President and Deputy General Counsel, National Association of Broadcasters, and Ross Lieberman, Senior Vice President of Government Affairs, American Cable Association, to Marlene H. Dortch, Secretary, FCC, in CS Docket No. 98–120 (filed May 13, 2015).

in this proceeding.<sup>8</sup> The Commission sought written public comment on the proposals in the *Fifth Further Notice*, including comment on the IRFA. The Commission received no comments on the IRFA. This Final Regulatory Flexibility Act Analysis (“FRFA”) conforms to the RFA.<sup>9</sup>

#### 1. Need for, and Objectives of, the Sixth Report and Order

6. This proceeding stems from a Petition for Rulemaking filed by the American Cable Association in January 2015 principally requesting that the Commission extend the exemption from the requirement to carry high definition (“HD”) broadcast signals under the “material degradation” provisions of the Communications Act of 1934, as amended, that it granted to certain small cable systems in the 2012 *Fifth Report and Order* (“HD carriage exemption”). The HD carriage exemption will expire on June 12, 2015 without action by the Commission.

7. In the accompanying *Sixth Report and Order*, the Commission adopts a proposal filed jointly by the American Cable Association (“ACA”) and the National Association of Broadcasters (“NAB”) that modifies and extends the HD carriage exemption. The joint proposal reflects a compromise between ACA and NAB on issues concerning, among other things, the appropriate scope and duration of the HD carriage exemption. The *Sixth Report and Order* concludes that the joint proposal strikes a reasonable balance between the interests of broadcast stations in having their HD signals transmitted without material degradation and the interests of small cable operators in upgrading their systems to provide HD broadcast signals in a manner that is cost efficient.

8. In particular, the *Sixth Report and Order* adopts the following provisions that are set forth in the joint proposal:

- *HD Carriage Exemption Eligibility after June 12, 2015*: A small cable system not offering any programming in HD is exempt from the HD carriage requirement. Beginning December 12, 2016, a system utilizing the HD carriage exemption shall no longer be eligible to use it once the system offers any programming in HD.

- *Notice*: Beginning December 12, 2016, at the time a small cable system utilizing the HD carriage exemption offers any programming in HD, the system must give notice that it is offering HD programming to all broadcast stations in its market that are carried on its system.

- *Transition for Some Systems*: A cable system utilizing the HD carriage exemption on June 12, 2015 that does not qualify for the HD carriage exemption on or after June 13, 2015 must come into compliance by December 12, 2016. A cable system that becomes ineligible for the HD carriage exemption after December 12, 2016 would be expected to come into compliance promptly.

- *Revisions to Definition of “Small” Cable System*: “Small” cable systems eligible for the HD carriage exemption would be redefined as those: (i) Serving 1,500 (rather than 2,500) or fewer subscribers, and not affiliated with a cable operator serving more than 2 percent (rather than 10 percent) of all MVPD subscribers, or (ii) having an activated channel capacity of 552 MHz or less.

#### 2. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

9. The Commission did not receive any comments in response to the IRFA.

#### 3. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

10. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed actions if adopted.<sup>10</sup> The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>11</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>12</sup> A “small business concern” is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>13</sup> The action taken in the accompanying *Sixth Report and Order* will affect small cable system operators and small television broadcast stations. A description of these small entities, as

<sup>10</sup> 5 U.S.C. 603(b)(3).

<sup>11</sup> 5 U.S.C. 601(b).

<sup>12</sup> 5 U.S.C. 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. 632). Pursuant to 5 U.S.C. 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the *Federal Register*.”

<sup>13</sup> 15 U.S.C. 632.

well as an estimate of the number of such small entities, is provided below.

11. *Cable Companies and Systems*. The Commission has developed its own small business size standards for the purpose of cable rate regulation. Under the Commission’s rules, a “small cable company” is one serving 400,000 or fewer subscribers nationwide.<sup>14</sup> Industry data indicate that there are currently 660 cable operators.<sup>15</sup> Of this total, all but ten cable operators nationwide are small under this size standard.<sup>16</sup> In addition, under the Commission’s rate regulation rules, a “small system” is a cable system serving 15,000 or fewer subscribers.<sup>17</sup> Current Commission records show 4,629 cable systems nationwide.<sup>18</sup> Of this total, 4,057 cable systems have less than 20,000 subscribers, and 572 systems have 20,000 or more subscribers, based on the same records. Thus, under this standard, we estimate that most cable systems are small entities.

12. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is “a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”<sup>19</sup> There are approximately 54 million cable video subscribers in the United States today.<sup>20</sup> Accordingly, an operator serving fewer than 540,000 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.<sup>21</sup> Based on available data, we find that all but ten incumbent cable operators are small entities under this size standard.<sup>22</sup> We note that the

<sup>14</sup> 47 CFR 76.901(e).

<sup>15</sup> NCTA, Industry Data, Number of Cable Operators and Systems, <http://www.ncta.com/Statistics.aspx> (visited October 13, 2014).

<sup>16</sup> See SNL Kagan, “Top Cable MSOs—12/12 Q”; available at <http://www.snl.com/InteractiveX/TopCableMSOs.aspx?period=2012Q4&sortcol=subscribersbasic&sortorder=desc>.

<sup>17</sup> 47 CFR 76.901(c).

<sup>18</sup> The number of active, registered cable systems comes from the Commission’s Cable Operations and Licensing System (COALS) database on October 10, 2014. A cable system is a physical system integrated to a principal headend.

<sup>19</sup> 47 U.S.C. 543(m)(2); see 47 CFR 76.901(f) & nn. 1–3.

<sup>20</sup> See NCTA, Industry Data, Cable’s Customer Base, <http://www.ncta.com/industry-data> (visited October 13, 2014).

<sup>21</sup> 47 CFR 76.901(f).

<sup>22</sup> See NCTA, Industry Data, Top 25 Multichannel Video Service Customers (2012), <http://>

<sup>8</sup> See *Fifth Further Notice*, Appendix.

<sup>9</sup> See 5 U.S.C. 604.

Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.<sup>23</sup> Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

13. *Open Video Systems.* The open video system (OVS) framework was established in 1996, and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers.<sup>24</sup> The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,<sup>25</sup> OVS falls within the SBA small business size standard covering cable services, which is “Wired Telecommunications Carriers.”<sup>26</sup> The SBA has developed a small business size standard for this category, which is: all such businesses having 1,500 or fewer employees.<sup>27</sup> Census data for 2007 shows that there were 3,188 firms that operated for that entire year.<sup>28</sup> Of this total, 2,940 firms

had fewer than 100 employees, and 248 firms had 100 or more employees.<sup>29</sup> Therefore, under this size standard, we estimate that the majority of these businesses can be considered small entities.

14. *Television Broadcasting.* This economic Census category “comprises establishments primarily engaged in broadcasting images together with sound.”<sup>30</sup> The SBA has created the following small business size standard for such businesses: those having \$38.5 million or less in annual receipts.<sup>31</sup> The 2007 U.S. Census indicates that 808 firms in this category operated in that year. Of that number, 709 had annual receipts of \$25,000,000 or less, and 99 had annual receipts of more than \$25,000,000.<sup>32</sup> Because the Census has no additional classifications that could serve as a basis for determining the number of stations whose receipts exceeded \$38.5 million in that year, we conclude that the majority of television broadcast stations were small under the applicable SBA size standard.

15. Apart from the U.S. Census, the Commission has estimated the number of licensed commercial television stations to be 1,387 stations.<sup>33</sup> Of this total, 1,221 stations (or about 88 percent) had revenues of \$38.5 million or less, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) on July 2, 2014. In addition, the Commission has estimated the number of licensed noncommercial educational (NCE) television stations to be 395.<sup>34</sup> NCE stations are non-profit, and therefore considered to be small entities.<sup>35</sup> Based on these data, we estimate that the majority of television broadcast stations are small entities.

16. We note, however, that in assessing whether a business concern qualifies as “small” under the above definition, business (control) affiliations<sup>36</sup> must be included. Because

we do not include or aggregate revenues from affiliated companies in determining whether an entity meets the revenue threshold noted above, our estimate of the number of small entities affected is likely overstated. In addition, we note that one element of the definition of “small business” is that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific television broadcast station is dominant in its field of operation. Accordingly, our estimate of small television stations potentially affected by the proposed rules includes those that could be dominant in their field of operation. For this reason, such estimate likely is over-inclusive.

#### 4. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

17. In this section, we describe the reporting, recordkeeping, and other compliance requirements that the Commission adopts in the *Sixth Report and Order*.

18. *Reporting Requirements.* The *Sixth Report and Order* does not adopt reporting requirements.

19. *Recordkeeping Requirements.* The joint proposal adopted in the *Sixth Report and Order* requires that, “[b]eginning December 12, 2016, at the time a small cable system utilizing the HD carriage exemption offers any programming in HD, the system must give notice that it is offering HD programming to all broadcast stations in its market that are carried on its system.” This requirement obligates certain small cable operators to notify broadcast stations, and thus, to make and keep records of such notification.

20. *Other Compliance Requirements.* The joint proposal adopted in the *Sixth Report and Order*:

- Requires “[a] cable system utilizing the HD carriage exemption on June 12, 2015 that does not qualify for the HD carriage exemption on or after June 13, 2015 [to] come into compliance [with the HD carriage requirement] by December 12, 2016. A cable system that becomes ineligible for the HD carriage exemption after December 12, 2016 would be expected to come into compliance promptly.”

- Requires that “[b]eginning December 12, 2016, a system utilizing the HD carriage exemption shall no longer be eligible to use it once the system offers any programming in HD.”

or has the power to control both.”<sup>13</sup> 13 CFR 21.103(a)(1).

[www.ncta.com/industry-data](http://www.ncta.com/industry-data) (visited Aug. 30, 2013).

<sup>23</sup> The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to 76.901(f) of the Commission’s rules. See 47 CFR 76.901(f).

<sup>24</sup> 47 U.S.C. 571(a)(3)–(4).

<sup>25</sup> See 47 U.S.C. 573.

<sup>26</sup> See 13 CFR 121.201, 2012 NAICS code 517110. This category of Wired Telecommunications Carriers is defined in part as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services.” U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Carriers,” at <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

<sup>27</sup> 13 CFR 121.201; 2012 NAICS code 517110.

<sup>28</sup> U.S. Census Bureau, 2007 Economic Census. See U.S. Census Bureau, American FactFinder, “Information: Subject Series—Estab and Firm Size: Employment Size of Establishments for the United States: 2007—2007 Economic Census,” NAICS code 517110, Table EC0751SSSZ5; available at [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN\\_2007\\_US\\_51SSSZ5&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ5&prodType=table).

<sup>29</sup> *Id.*

<sup>30</sup> U.S. Census Bureau, 2012 NAICS Definitions, “515120 Television Broadcasting,” at <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

<sup>31</sup> 13 CFR 121.201; 2012 NAICS code 515120.

<sup>32</sup> U.S. Census Bureau, Table No. EC0751SSSZ4, Information: Subject Series—Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 (515120), [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN\\_2007\\_US\\_51SSSZ4&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ4&prodType=table).

<sup>33</sup> See Broadcast Station Totals as of June 30, 2014, Press Release (MB rel. July 9, 2014)

(Broadcast Station Totals) at [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-328096A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-328096A1.pdf).

<sup>34</sup> See Broadcast Station Totals, *supra*.

<sup>35</sup> See generally 5 U.S.C. 601(4), (6).

<sup>36</sup> “[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls

#### 5. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

21. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>37</sup> We seek comment on the applicability of any of these alternatives to affected small entities.

22. The HD carriage exemption, as modified in the *Sixth Report and Order*, provides continued regulatory relief to operators of certain small cable systems, *i.e.*, those that (i) serve 1,500 or fewer subscribers and are not affiliated with a cable operator serving more than two percent of all MVPD subscribers; or (ii) have an activated channel capacity of 552 MHz or less. Although some eligible cable systems will no longer qualify for the exemption as a result of the *Sixth Report and Order*, the joint proposal adopted in the order gives such systems until December 12, 2016 to come into compliance with the HD carriage requirement. We note that the modifications made to the exemption in the *Sixth Report and Order* were an outgrowth of discussions between ACA and NAB and thus reflect the interests of both small cable operators and broadcasters (including small broadcasters), respectively. The HD carriage exemption has a positive economic impact on any cable system operator that takes advantage of the exemption, and imposes no significant burdens on small television stations.

#### 6. Report to Congress

23. The Commission will send a copy of this *Sixth Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the SBREFA.<sup>38</sup> In addition, the Commission will send a copy of this *Sixth Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of this *Sixth Report and Order* and the FRFA (or summaries thereof) also will be published in the **Federal Register**.<sup>39</sup>

#### B. Paperwork Reduction Act

24. This *Sixth Report and Order* contains new information collection requirements subject to the Paperwork Reduction Act of 1995. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

#### C. Congressional Review Act

25. The Commission will send a copy of this *Sixth Report and Order* in a report to be sent to Congress and the Government Accountability Office, pursuant to the Congressional Review Act.<sup>40</sup>

#### D. Additional Information

26. For more information, contact Raelynn Remy, *Raelynn.Remy@fcc.gov*, Policy Division, Media Bureau, (202) 418-2936.

#### V. Ordering Clauses

27. Accordingly, *it is ordered* that, pursuant to the authority found in sections 4, 303, 614, and 615 of the Communications Act of 1934, as amended, 47 U.S.C. 154, 303, 534, and 535, this *Sixth Report and Order* is adopted and will become effective July 23, 2015, except that the requirement described in paragraph III.4.b of the Supplementary Information, which contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13, will not become effective until the Federal Communications Commission publishes a notice in the **Federal Register** announcing OMB approval and the effective date of that rule.

28. *It is further ordered* that, pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A), the Commission will send a copy of this *Sixth Report and Order* in CS Docket No. 98-120 in a report to Congress and the Government Accountability Office.

29. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of

this *Sixth Report and Order* in CS Docket No. 98-120, including the Final Regulatory Flexibility Act Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

Federal Communications Commission.

**Marlene H. Dortch**,  
Secretary.

[FR Doc. 2015-15251 Filed 6-22-15; 8:45 am]

BILLING CODE 6712-01-P

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## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

#### 49 CFR Part 572

[Docket No. NHTSA-2011-0175]

RIN 2127-AJ49

#### Hybrid III 10-Year-Old Child Test Dummy; Corrections; Incorporation by Reference

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Technical amendments.

**SUMMARY:** NHTSA published a document in the **Federal Register** on February 27, 2012 (77 FR 11651), establishing specifications and qualification requirements for a Hybrid III 10-year-old child size test dummy. The regulatory text adopted by that document contained errors, as did some of the drawings of the test dummy and other materials incorporated by reference pertaining to the test dummy. This document corrects those errors by revising regulatory text and incorporating by reference a corrected drawing package. We have also made conforming changes to the parts list and users' manual for the dummy, which this document also incorporates by reference.

**DATES:** Effective date: June 23, 2015. The incorporation by reference of the publications listed in this document has been approved by the Director of the Federal Register as of June 23, 2015.

**FOR FURTHER INFORMATION CONTACT:** Peter Martin, NHTSA Office of Crashworthiness Standards, 1200 New Jersey Avenue SE., Washington, DC 20590, telephone (202) 366-5668, fax (202) 493-2990, or Deirdre Fujita, NHTSA Office of Chief Counsel, 1200 New Jersey Avenue SE., Washington, DC 20590, telephone (202) 366-2992, fax (202) 366-3820.

#### SUPPLEMENTARY INFORMATION:

This document corrects 49 CFR part 572, "Anthropomorphic Test Devices,"

<sup>37</sup> 5 U.S.C. 603(c)(1)-(c)(4).

<sup>38</sup> See *id.* 801(a)(1)(A).

<sup>39</sup> See *id.* 604(b).

<sup>40</sup> See 5 U.S.C. 801(a)(1)(A).

Subpart T, “Hybrid III 10-Year-Old Child Test Dummy (HIII–10C).” NHTSA published a final rule on February 27, 2012 (77 FR 11651), establishing Subpart T, which contains specifications and qualification requirements for the HIII–10C. The regulatory text adopted by that document contains errors, as do some of the drawings and other materials incorporated by reference pertaining to the test dummy. This document corrects those errors by revising regulatory text and incorporating by reference a corrected drawing package, parts list and users’ manual.

### Need for Correction

#### *Corrected Regulatory Text*

The following corrections are made to the regulatory text.

a. Sections 572.170 and 572.171 of subpart T incorporate by reference a drawings and inspection package, a parts/drawing list, and a users’ manual (“Procedures for Assembly, Disassembly and Inspection” (“PADI”)) for the HIII–10C by name and by date. NHTSA is correcting several drawings in the package, and is making conforming changes to the parts list and to several figures in the PADI. For ease of use, rather than switch out individual drawings from the previous drawings package and individual pages from the original PADI and risk confusion by users in the future about which drawings and pages were replaced, NHTSA is incorporating by reference a new set of materials. We are referencing a new drawings and inspection package that has the corrected drawings, a new parts/drawing list, and a new PADI. All these new materials are dated March 2015. We are amending § 572.170 and § 572.171 to reference the new versions of the materials.

b. The February 2012 final rule incorrectly specifies in 49 CFR 572.177(a)(1) that the thorax impact probe mass is  $6.89 \pm 0.012$  kilograms (kg) ( $15.2 \pm 0.05$  pounds (lb)). Figure T4 of subpart T correctly lists the thorax impact probe mass as “ $6.89 \pm 0.05$  kg ( $15.2 \pm 0.1$  lb).” We are correcting the second sentence of 49 CFR 572.177(a)(1) so that it refers to “ $6.89 \pm 0.05$  kg ( $15.2 \pm 0.1$  lb).”

Likewise, the February 2012 final rule incorrectly specifies in § 572.177(a)(2) that the knee impact probe mass is  $1.91 \pm 0.01$  kg ( $4.21 \pm 0.02$  lb). Figure T6 of subpart T correctly lists the knee impact probe mass as “ $1.91 \pm 0.05$  kg ( $4.2 \pm 0.1$  lb).” We are correcting the second sentence of 49 CFR 572.177(a)(2) to reference a mass of  $1.91 \pm 0.05$  kg ( $4.21 \pm 0.1$  lb).

c. The February 2012 final rule inadvertently excluded a specification for the filter class used for the knee probe acceleration and for the thorax probe acceleration. The filter class used for the knee probe acceleration is SAE International (SAE) Channel Frequency Class (CFC) 600. CFC 600 has historically been applied to other dummy knee probe accelerations and NHTSA used CFC 600 in developmental testing of the HIII–10C. The filter class used for the thorax probe acceleration is CFC 180. NHTSA specifies the CFC 180 filter class with other test dummies and used it in developing the HIII–10C. Accordingly, NHTSA corrects 49 CFR 572.177(c) by adding the filter classes for the knee and thorax probe accelerations.

#### *Corrected Drawings*

##### Drawing 420–5120, Upper Leg Flesh

In the revisions table for this drawing, in Rev F, the overall Upper Leg Flesh height dimension is correctly specified as “ $4.50 +.06 / -.18$  (was  $4.5 +.16 / -.13$ ).” Elsewhere on the drawing, the height dimension next to the part does not match this value in the table. We have corrected the height dimension next to the part to match that of the table.

In Drawing 420–5120, the dimension for the overall Upper Leg Flesh width is correctly listed, next to the part, as “ $4.92 +.05 / -.20$ .” In the revisions table, Rev F, the width dimension is different and incorrect. We have corrected the revisions table to match the dimension listed next to the part.

##### Drawing 420–4300, Abdomen

In the revision history table, Rev F, the width of the abdomen pocket is correctly stated as (3.77) and the depth is correctly stated as (2.14). Elsewhere on the drawing, the dimensions listed for those parts do not match those correct dimensions in the revision history table. We have corrected the drawing to match the correct dimensions in the table.

In the revision history table, Rev E, Note #2 had read: “All Dimensional Tolerances Are  $\pm 0.12$  inch.” The note was incorrectly removed, and in Rev F, a  $\pm 0.06$  inch tolerance was incorrectly added to two dimensions ( $0.75 \pm 0.06$  and  $0.62 \pm 0.06$ ). The  $\pm 0.06$  inch tolerance is in error; it is an unrealistic dimensional requirement for a molded part. We have revised the drawing to reestablished the  $\pm 0.12$  inch tolerance for this part.

##### Drawing 420–1001, Skull, Machining, 6-Axis

The drawing package incorporated by the February 2012 final rule had drawing 880105–102, which had an error with respect to the dimensions called out for the center of gravity (CG) location of the skull. The correct CG dimensions for the head assembly are in drawing 420–0000, Sheet 4 of 5, as follows:  $CG_x = 2.330 \pm 0.100$  inch and  $CG_z = 1.200 \pm 0.100$  inch. We have removed drawing 880105–102 and have revised drawing 420–1001 (Rev D) to add information on the CG location.

#### Revisions Relating to Shoulder Assembly Drawings

Some of the drawings of the HIII–10C’s shoulder area are incorrect because they depict the design of the dummy at the time of our publication of the notice of proposed rulemaking (NPRM)<sup>1</sup> preceding the February 2012 final rule, and not the design of the HIII–10C as it was adopted by the final rule. As adopted by the final rule, the HIII–10C has a shoulder assembly design that can be modified by switching a part of the shoulder assembly (the shoulder yoke), to enable the dummy shoulder to accommodate either a load cell or a structural replacement (SR) in place of a load cell. The drawings adopted by the final rule show the shoulder yoke that accommodates an SR, but we inadvertently did not include drawings showing the HIII–10C with the shoulder yoke assembly that accommodates a load cell. We have corrected this oversight by including in the new drawing package drawings of the alternate shoulder yoke assembly that accommodates a load cell, and drawings of the load cell and assorted hardware.

#### Corrected PADI

We have revised various figures in the PADI to conform the manual to the changes discussed above. Most of the revisions relate to using the shoulder yoke assembly when using the HIII–10C with a shoulder load cell. The revised figures are: 12, 21, 22, 24, 29, 82 and 83.

#### List of Subjects in 49 CFR Part 572

Motor vehicle safety, Incorporation by reference.

Accordingly, 49 CFR part 572 is corrected by making the following correcting amendments:

<sup>1</sup> 70 FR 40281, July 13, 2005, Docket No. NHTSA–2004–21247.

**PART 572—ANTHROPOMORPHIC TEST DUMMIES**

■ 1. The authority citation for Part 572 is revised to read as follows:

**Authority:** 49 U.S.C. 322, 30111, 30115, 30117 and 30166; delegation of authority at 49 CFR 1.95

**Subpart T—Hybrid III 10-Year-Old Child Test Dummy (HIII–10C)**

■ 2. Section 572.170 is amended by revising paragraph (b)(1), the introductory text of paragraph (b)(2), and paragraph (b)(3), to read as follows:

**§ 572.170 Incorporation by reference.**

\* \* \* \* \*

(b) \* \* \*

(1) A parts/drawing list entitled, “Parts/Drawing List, Part 572 Subpart T, Hybrid III 10 Year Old Child Test Dummy (HIII–10C), March, 2015,” IBR approved for § 572.171.

(2) A drawings and inspection package entitled, “Parts List and Drawings, Part 572 Subpart T, Hybrid III 10 Year Old Child Crash Dummy (HIII–10C), March 2015,” IBR approved for § 572.171, including:

\* \* \* \* \*

(3) A procedures manual entitled “Procedures for Assembly, Disassembly, and Inspection (PADI) of the Hybrid III 10 Year Old Child Test Dummy (HIII–10C), March 2015” ; IBR approved for §§ 572.171 and 572.177.

\* \* \* \* \*

■ 3. Section 572.171 is amended by revising paragraphs (a)(1) and (a)(2), and the introductory text of paragraph (a)(3), to read as follows:

**§ 572.171 General description.**

(a) \* \* \*

(1) The parts enlisted in “Parts/ Drawing List, Part 572 Subpart T, Hybrid III 10 Year Old Child Test Dummy (HIII–10C), March, 2015” (incorporated by reference, see § 572.170),

(2) The engineering drawings and specifications contained in “Parts List and Drawings, Part 572 Subpart T, Hybrid III 10 Year Old Child Crash Dummy (HIII–10C), March 2015,” which includes the engineering drawings and specifications described in Drawing 420–0000, the titles of the assemblies of which are listed in Table A, and,

(3) A manual entitled “Procedures for Assembly, Disassembly, and Inspection (PADI) of the Hybrid III 10 Year Old Child Test Dummy (HIII–10C), March 2015.”

\* \* \* \* \*

■ 4. Section 572.177 is amended by revising the second sentence in paragraph (a)(1) and the second sentence in paragraph (a)(2), and by adding paragraphs (c)(18) and (c)(19), to read as follows:

**§ 572.177 Test conditions and instrumentation.**

(a) \* \* \*

(1) \* \* \* It has a mass of 6.89 ± 0.05 kg (15.2 ± 0.1 lb) and a minimum mass moment of inertia of 2040 kg-cm<sup>2</sup> (1.81 lbf-in-sec<sup>2</sup>) in yaw and pitch about the CG. \* \* \*

(2) \* \* \* It has a mass of 1.91 ± 0.05 kg (4.21 ± 0.1 lb) and a minimum mass moment of inertia of 140 kg-cm<sup>2</sup> (0.124 lbf-in-sec<sup>2</sup>) in yaw and pitch about the CG. \* \* \*

(c) \* \* \*

(18) Thorax probe acceleration, CFC 180,

(19) Knee probe acceleration, CFC 600.

\* \* \* \* \*

Issued May 22, 2015.

**Raymond R. Posten,**

*Associate Administrator For Rulemaking.*

[FR Doc. 2015–15279 Filed 6–22–15; 8:45 am]

**BILLING CODE 4910–59–P**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

[Docket No. FWS–R1–ES–2015–0031; FXES11130900000C6–156–FF09E42000]

**RIN 1018–BA89**

**Endangered and Threatened Wildlife and Plants; Technical Corrections for 54 Wildlife and Plant Species on the List of Endangered and Threatened Wildlife and Plants**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Direct final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce the revised taxonomy of 4 wildlife species and 50 plant species under the Endangered Species Act of 1973, as amended (Act). We are revising the List of Endangered and Threatened Wildlife and the List of Endangered and Threatened Plants to reflect the current scientifically accepted taxonomy and nomenclature of these species.

**DATES:** This rule is effective September 21, 2015 without further action, unless significant adverse comment is received by July 23, 2015. If significant adverse

comment is received regarding taxonomic changes for any of these species, we will publish in the **Federal Register** a timely withdrawal of the rule.

**ADDRESSES:** You may submit comments by one of the following methods:

• *Electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments to FWS–R1–ES–2015–0031, which is the docket number for this rulemaking.

• *By hard copy:* Submit comments by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R1–ES–2015–0031; Division of Policy, Performance, and Management Programs; U.S. Fish and Wildlife Service; 5275 Leesburg Pike MS: BPHC, Falls Church, VA 22041–3803.

See Public Comments in **SUPPLEMENTARY INFORMATION** for more information about submitting comments.

**FOR FURTHER INFORMATION CONTACT:**

Marilet Zablan, Program Manager for Restoration and Endangered Species Classification, U.S. Fish and Wildlife Service, Pacific Regional Office, Ecological Services, 911 NE 11th Avenue, Portland, OR 97232; telephone 503–231–6131. Individuals who are hearing impaired or speech impaired may call the Federal Relay Service at 800–877–8337 for TTY (telephone typewriter or teletypewriter) assistance 24 hours a day, 7 days a week.

**SUPPLEMENTARY INFORMATION:**

**Purpose of Direct Final Rule and Final Action**

The purpose of this direct final rule is to notify the public that we are revising the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations (50 CFR 17.11(h)) and the List of Endangered and Threatened Plants (50 CFR 17.12(h)) to reflect the scientifically accepted taxonomy and nomenclature of 4 wildlife species and 50 plant species listed under section 4 of the Act (16 U.S.C. 1531 *et seq.*). These changes to the List of Endangered and Threatened Wildlife and the List of Endangered and Threatened Plants reflect the most recently accepted scientific names in accordance with 50 CFR 17.11(b) and 50 CFR 17.12(b).

We are publishing this rule without a prior proposal because this is a noncontroversial action that is in the best interest of the public and should be undertaken in as timely a manner as possible. This rule will be effective, as published in this document, on the effective date specified in **DATES**, unless we receive significant adverse comments on or before the comment



due date specified in **DATES**. Significant adverse comments are comments that provide strong justifications as to why this rule should not be adopted or why it should be changed.

If we receive significant adverse comments regarding the taxonomic changes for any of these species, we will publish a document in the **Federal Register** withdrawing this rule before the effective date, and we will publish a proposed rule to initiate promulgation of those changes to 50 CFR 17.11 or 50 CFR 17.12.

### Public Comments

You may submit your comments and materials regarding this direct final rule by one of the methods listed in **ADDRESSES**. Please include sufficient information with your comments that allows us to verify any scientific or

commercial information you include. We will not consider comments sent by email or fax, or to an address not listed in **ADDRESSES**.

We will post all comments on <http://www.regulations.gov>. Before including your address, phone number, email address, or other personal 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.

Comments and materials we receive, as well as supporting documentation we use in preparing this direct final rule,

will be available for public inspection on the Internet at <http://www.regulations.gov> or by appointment, during normal business hours at the U.S. Fish and Wildlife Service office listed in the **ADDRESSES** section. Please note that comments posted to <http://www.regulations.gov> are not immediately viewable. When you submit a comment, the system receives it immediately. However, the comment will not be publicly viewable until we post it, which might not occur until several days after submission. Information regarding this rule is available in alternative formats upon request (see **FOR FURTHER INFORMATION CONTACT**). For information pertaining to specific species, please contact our Ecological Services field offices as follows:

Species	Contact person, phone, Email	Contact address
Hawaiian plants .....	Kristi Young, Fish and Wildlife Biologist; 808–792–9400, <a href="mailto:kristi_young@fws.gov">kristi_young@fws.gov</a> .	Pacific Islands Fish and Wildlife Office, U.S. Fish and Wildlife Service, 300 Ala Moana Blvd., Room 3–122, Honolulu, HI 96813.
Guam and Hawaiian birds .....	Kristi Young, Fish and Wildlife Biologist; 808–792–9400, <a href="mailto:kristi_young@fws.gov">kristi_young@fws.gov</a> .	Pacific Islands Fish and Wildlife Office, U.S. Fish and Wildlife Service, 300 Ala Moana Blvd., Room 3–122, Honolulu, HI 96813.
Willamette daisy and large-flowered woolly meadowfoam.	Jeff Dillon, Fish and Wildlife Biologist; 503–231–6179, <a href="mailto:jeff_dillon@fws.gov">jeff_dillon@fws.gov</a> .	Oregon Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2600 SE 98th Avenue, Portland, OR 97266.
Northern Idaho ground squirrel .....	Kim Garner, Fish and Wildlife Biologist; 208–378–5243, <a href="mailto:FW1NIDGSTaxonomy@fws.gov">FW1NIDGSTaxonomy@fws.gov</a> .	Idaho Fish and Wildlife Office, U.S. Fish and Wildlife Service, 1387 S. Vinnell Way, Room 368, Boise, ID 83709.

### Background

Sections 17.11(b) and 17.12(b) of title 50 of the Code of Federal Regulations (CFR) requires us to use the most recently accepted scientific name of any wildlife or plant species that we have determined to be an endangered or threatened species. Using the best available scientific information, this direct final rule documents taxonomic changes of the scientific names to 4 entries on the List of Endangered and Threatened Wildlife (50 CFR 17.11(h)) and 31 entries on the List of Endangered and Threatened Plants (50 CFR 17.12(h)). The basis for these taxonomic changes is supported by published studies in peer-reviewed journals. Accordingly, we revise the scientific names of these species under section 4 of the Act (16 U.S.C. 1531 *et seq.*) as follows: northern Idaho ground squirrel (*Urocitellus brunneus*); Hawaiian common gallinule (*Gallinula galeata sandvicensis*); Guam kingfisher (*Todiramphus cinnamominus*); Hawaiian petrel (*Pterodroma sandwichensis*); *Cyanea crispa* (haha); *Cyanea rivularis* (haha); *Cyperus fauriei* (no common name); *Erigeron*

*decumbens* (Willamette daisy); *Euphorbia celastroides* var. *kaenana* ('akoko); *Euphorbia depeana* ('akoko); *Euphorbia eleanoriae* ('akoko); *Euphorbia halemanui* ('akoko); *Euphorbia herbstii* ('akoko); *Euphorbia kuwaleana* ('akoko); *Euphorbia remyi* var. *kauaiensis* ('akoko); *Euphorbia remyi* var. *remyi* ('akoko); *Euphorbia rockii* ('akoko); *Euphorbia skottsbergii* var. *skottsbergii* ('Ewa Plains 'akoko); *Kadua cookiana* ('awiwi); *Kadua st-johnii* (no common name); *Limnanthes pumila* ssp. *grandiflora* (large-flowered woolly meadowfoam); *Lobelia koolauensis* (no common name); *Polyscias bisattenuata* (no common name); *Polyscias flynnii* (no common name); *Polyscias gymnocarpa* ('oh'e'oh'e); *Polyscias lydgatei* (no common name); *Polyscias racemosa* (no common name); *Pritchardia maideniana* (lo'ulu); *Schiedea lychnoides* (kuawawaenohu); *Schiedea viscosa* (no common name); *Sicyos albus* ('anunu); *Asplenium dielfalcatum* (no common name); *Asplenium dielmannii* (no common name); *Asplenium dielpallidum* (no common name); and *Asplenium unisorum* (no common name). We make these changes to the

List of Endangered and Threatened Wildlife and the List of Endangered and Threatened Plants to reflect the most recently accepted scientific names in accordance with 50 CFR 17.11(b) and 50 CFR 17.12(b).

Additionally, common names of 3 additional species (*Cyanea platyphylla* ('aku'aku), *Dubautia latifolia* (koholapehu), and *Geranium arboreum* (nohoanu)) are revised to reflect currently accepted usage. And family assignments of 16 species (*Flueggea neowawraea* (mehamehame), *Korthalsella degeneri* (hulumoa), *Lysimachia daphnoides* (lehua makanoe), *L. iniki* (no common name), *L. pendens* (no common name), *L. scopulensis* (no common name), *L. venosa* (no common name), *Myrsine juddii* (kolea), *M. knudsenii* (kolea), *M. linearifolia* (kolea), *M. mezii* (kolea), *M. vaccinioides* (kolea), *Pleomele hawaiiensis* (hala pepe), *Xylosma crenatum* (no common name), *Adenophorus periens* (pendent kihi fern), and *Diplazium molokaiense* (no common name)) are also revised.



### Taxonomic Classification

#### Northern Idaho ground squirrel

The northern Idaho ground squirrel was originally listed as threatened on April 5, 2000, under the scientific name *Spermophilus brunneus brunneus* (65 FR 17779). At that time this taxon and the southern Idaho ground squirrel (*S. b. endemicus*) were both considered to be subspecies of the Idaho ground squirrel, *Spermophilus brunneus* (Thorington and Hoffmann 2005, p. 805). Helgen *et al.* (2009, pp. 270–305) split the genus *Spermophilus* into eight genera: *Urocitellus* (including the Idaho ground squirrel), *Notocitellus*, *Otospermophilus*, *Callospermophilus*, *Spermophilus*, *Ictidomys*, *Poliocitellus*, and *Xerospermophilus*, based on skull morphology, pelage characteristics, and mitochondrial DNA analyses (Herron *et al.* 2004, pp. 1015–1030). The northern Idaho ground squirrel and the southern Idaho ground squirrel differ in pelage, life-history timing, and skull and bacular morphology (Yensen and Sherman 1997, pp. 1–3), and analysis of microsatellite and mitochondrial DNA shows no evidence of recent genetic exchange between the two taxa (Hoisington-Lopez *et al.* 2012, pp. 589–604). Consequently, Hoisington-Lopez *et al.* (2012, pp. 595–599) elevated both taxa to species rank, as *Urocitellus brunneus* and *U. endemicus*. This taxonomic change does not affect the range or threatened status of the northern Idaho ground squirrel. The Service has used the updated scientific name *U. endemicus* for the southern Idaho ground squirrel (currently a candidate for listing under the Endangered Species Act) since publication of the candidate notice of review on November 22, 2013 (78 FR 70104).

#### Hawaiian common gallinule

This subspecies was originally listed as endangered on March 11, 1967, under the name of Hawaiian common gallinule (*Gallinula chloropus sandvicensis*) (32 FR 4001). At that time, the range of *Gallinula chloropus* was considered to include both the Old World and New World, with the common name of “common gallinule” in American usage (American Ornithologists’ Union [AOU] 1957, pp. 160–161) and “moorhen” or “common moorhen” in British usage (*e.g.*, Dudley *et al.* 2006, p. 537). Subsequently the AOU (1982, p. 5CC) changed the common name of the species to “common moorhen” for consistency with international usage. The current List of Endangered and Threatened Wildlife is consistent with this approach, listing the species as

“Hawaiian common moorhen”.

However, more recent research indicates that the New World and Old World populations are separate species, based on differences in vocalizations and morphology of the bill and frontal shield (Constantine and the Sound Approach 2006, pp. 138–139) and mitochondrial DNA (Groenenberg *et al.* 2008, pp. 1–8). Based on this research, AOU accepts the two populations as distinct species (Chesser *et al.* 2011, p. 603), splitting them into the common gallinule (*Gallinula galeata*) of North and South America and the common moorhen (*Gallinula chloropus*) of Eurasia. Chesser *et al.* (2011, p. 603) includes the Hawaiian Islands within the range of the common gallinule. Data from Hawaiian birds were not analyzed by Constantine and the Sound Approach (2006, pp. 138–139) or Groenenberg *et al.* (2008, pp. 1–8); however, specimens from the Hawaiian Islands are similar to New World birds in frontal shield morphology, and a mitochondrial DNA sequence from a Hawaiian specimen is identical to those of New World specimens (T. Chesser *in litt.* 2012). Consequently, the Hawaiian subspecies is now classified as *Gallinula galeata sandvicensis*, and returns to its original common name of “Hawaiian common gallinule”. The taxonomic change does not affect the range or endangered status of the Hawaiian common gallinule.

The taxonomic position of the Mariana common moorhen, listed as endangered on August 27, 1984 (49 FR 33881) under the scientific name of *Gallinula chloropus guami*, has not been studied in detail; however, its frontal shield morphology appears more similar to Old World specimens (T. Chesser *in litt.* 2012). Consequently, the best available information indicates that its common and scientific names are still appropriate.

#### Guam kingfisher

This bird was originally listed as endangered within its range on Guam on August 27, 1984, under the name of Micronesian kingfisher (*Halcyon cinnamomina cinnamomina*) (49 FR 33881). The Service’s critical habitat designation (69 FR 62944; October 28, 2004) revised the common name of this taxon in the List of Endangered and Threatened Wildlife to “Guam Micronesian kingfisher”, given that two other subspecies of Micronesian kingfisher occur outside Guam.

At the time this taxon was listed, the genus *Halcyon* encompassed several dozen kingfisher species ranging from Africa to Australasia and the Pacific islands (Forshaw 1983; Fry *et al.* 1992,

as cited in Moyle 2006, p. 496; Howard and Moore 1991, pp. 168–169). The Australasian and Pacific species within this group are distinctive based on plumage pattern, myology, osteology, feather proteins, and DNA hybridization data (Sibley and Monroe 1990, pp. 89–90; Woodall 2001; Christidis and Boles 2008, p. 169). Analysis of nuclear and mitochondrial DNA (Moyle 2006, pp. 487–499) further indicates that the group of species originally classified under the genus *Halcyon* is not monophyletic (a monophyletic group consists of an ancestral species and all its descendants, typically being characterized by shared derived characteristics). Consequently most recent authorities (*e.g.*, Woodall 2001, p. 134; Dickinson 2003) have restricted *Halcyon* to the African species; other species in the group have been classified under the genera *Todiramphus* (including the Micronesian kingfisher), *Pelargopsis*, and *Syma*. When the Micronesian kingfisher was classified within *Todiramphus*, its specific epithet was changed to *cinnamominus* for consistency with the gender of the new genus name. Del Hoyo *et al.* (2014, p. 606) reviewed the three subspecies of Micronesian kingfisher (*T. cinnamominus* on Guam, *T. pelewensis* on Palau, and *T. reichenbachi* on Pohnpei) under the species delimitation criteria of Tobias *et al.* (2010, pp. 1–23), and concluded that they were distinct at the species level based on differences in plumage pattern, wing and tail proportions, body size, and voice. Consequently, the listed population on Guam is now classified as a full species, Guam kingfisher (*Todiramphus cinnamominus*). The taxonomic change does not affect the range or endangered status of the taxon.

#### Hawaiian petrel

This bird was originally listed as endangered on March 11, 1967, under the name of Hawaiian dark-rumped petrel (*Pterodroma phaeopygia sandwichensis*) (32 FR 4001). At that time, the dark-rumped petrel (*Pterodroma phaeopygia*) was considered to include two subspecies: *P. sandwichensis*, which breeds on the Hawaiian Islands; and *P. phaeopygia*, which breeds on the Galapagos Islands and is not known to occur in the United States (AOU 1983, p. 16). More recently, study of the morphology and vocalizations of these two taxa (Tomkins and Milne 1991, pp. 1–35; Browne *et al.* 1997, pp. 812–815) indicates that they are distinct at a level comparable to other species in the genus. Consequently, the AOU has split

them into two species, the Hawaiian petrel (*Pterodroma sandwichensis*) and the Galapagos petrel (*Pterodroma phaeopygia*) (Banks *et al.* 2002, p. 898). On January 5, 2010, the Galapagos petrel was also listed (as threatened), under the now accepted scientific name of *Pterodroma phaeopygia* (75 FR 235). The taxonomic change does not affect the range or endangered status of the Hawaiian petrel, nor does it affect the range or threatened status of the Galapagos petrel.

*Erigeron decumbens* (Willamette daisy)

The Willamette daisy was listed as endangered on January 25, 2000, under the scientific name *Erigeron decumbens* var. *decumbens* (65 FR 3875). At that time *E. decumbens* was considered to include two varieties, *decumbens* and *robustior*. Nesom (2004, pp. 19–39) elevated var. *robustior* to full species status, finding that the taxon was distinctive in morphology (involucre size, shape of phyllaries, length of corollas and cypselae) and soil habitat preference at a level similar to that of other species of *Erigeron*. Since var. *decumbens* was thus the only remaining variety within the species, rendering designation of a nominate variety superfluous, the taxon was renamed as the full species *E. decumbens*. This treatment has been adopted by the Flora of North America (Nesom 2006, pp. 274–279) and the Oregon Flora Project (Cook *et al.* 2014a, p. 64). Consequently, the current scientific name of the Willamette daisy is *Erigeron decumbens*. This taxonomic change does not affect the range or endangered status of the Willamette daisy.

*Limnanthes pumila* ssp. *grandiflora* (large-flowered woolly meadowfoam)

The large-flowered woolly meadowfoam was listed as endangered on November 7, 2002, under the scientific name *Limnanthes floccosa* ssp. *grandiflora* (67 FR 68004). At that time the species *L. floccosa* was considered to include five subspecies: *L. f.* ssp. *bellingieriana*, *L. f.* ssp. *californica*, *L. f.* ssp. *floccosa*, *L. f.* ssp. *grandiflora*, and *L. f.* ssp. *pumila* (Arroyo 1973, pp. 177–191; Ornduff 1993, pp. 736–738; Morin 2010, pp. 174–183). Meyers (2010) analyzed chloroplast, mitochondrial, and nuclear DNA of these subspecies and found they represented two clades: ssp. *grandiflora* and ssp. *pumila* in one, and ssp. *bellingieriana*, ssp. *californica*, and ssp. *floccosa* in the other; moreover, ssp. *grandiflora* and ssp. *floccosa* showed pre- and post-zygotic reproductive isolation from one another when crossed by hand. Consequently, Meyers

(2010, pp. 1–121) and Chambers and Meyers (2011, pp. 621–622) reclassified ssp. *grandiflora* and ssp. *pumila* within a separate species *L. pumila*. This treatment has been adopted by the Oregon Flora Project (Cook *et al.* 2014b, pp. 1–2). Consequently, the current scientific name of the large-flowered woolly meadowfoam is *Limnanthes pumila* ssp. *grandiflora*. This taxonomic change does not affect the range or endangered status of the large-flowered woolly meadowfoam.

*Schiedea species*

The Hawaiian plants *Alsinidendron lychnoides* (kuawawaenohu) and *A. viscosum* (no common name) were listed as endangered on October 10, 1996 (61 FR 53070). At that time *Alsinidendron* was considered to be a genus of four species distinct from *Schiedea* (Wagner *et al.* 1999, pp. 499–502). However, analysis of nuclear DNA sequence data and morphology by Wagner *et al.* (2005, pp. 1–169) showed that the *Alsinidendron* clade is nested within *Schiedea*, as a sister group to *Schiedea verticillata*; thus the species in *Alsinidendron* were reassigned to *Schiedea*. The specific epithet *viscosum* was changed to *viscosa* to conform to the gender of the new generic name. These changes have been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, p. 26). Consequently, the current scientific names of these species are *Schiedea lychnoides* and *Schiedea viscosa*. This taxonomic change does not affect the range or endangered status of either of these species.

The scientific names of *Alsinidendron trinerve* and *A. obovatum* (listed as endangered on October 29, 1991 (56 FR 55770)), were revised on the List of Endangered and Threatened Plants to their updated names of *Schiedea trinervis* and *S. obovata* when critical habitat was designated on September 18, 2012 (77 FR 57648); thus no further changes in nomenclature are needed for these two species.

*Euphorbia species* ('akoko)

The 'Ewa Plains 'akoko, a plant endemic to southwestern Oahu, was originally listed under the scientific name *Euphorbia skottsbergii* var. *kalaeloana* on August 24, 1982 (47 FR 36846), based on the taxonomy of Sherff (1938, pp. 1–94). Degener and Degener (1959, page unnumbered) moved this species to the genus *Chamaesyce*, as *C. skottsbergii* var. *kalaeloana*. Koutnik (1987, pp. 356–360; 1999, pp. 614–615) synonymized var. *kalaeloana* with var. *skottsbergii*, treating var. *skottsbergii* with a range including southwestern

Oahu and northwestern Molokai. Morden and Gregoritz (2005, pp. 969–979) found that the Oahu and Molokai populations of var. *skottsbergii* differed genetically, and recommended treating them as separate varieties: var. *audens* on Molokai, and var. *skottsbergii* on Oahu (including the same range as the originally listed entity). Consequently, the Service revised the List of Endangered and Threatened Plants to refer to the 'Ewa Plains 'akoko as *Chamaesyce skottsbergii* var. *skottsbergii* when critical habitat was designated on September 18, 2012 (77 FR 57648); however, current research supports classifying this plant in the genus *Euphorbia* as discussed below.

Several other endangered Hawaiian plants are classified in the genus *Chamaesyce* as recognized by Degener and Degener (1959). *Chamaesyce celastroides* var. *kaenana* and *C. kuwaleana* were listed as endangered on October 29, 1991 (56 FR 55770); *C. halemanui* was listed as endangered on May 13, 1992 (57 FR 20580); *C. deppeana* was listed as endangered on March 28, 1994 (59 FR 14482); *C. herbstii* and *C. rockii* were listed as endangered on October 10, 1996 (61 FR 53089); *C. eleanoriae*, *C. remyi* var. *kauaiensis*, and *C. remyi* var. *remyi* were listed as endangered on April 13, 2010 (75 FR 18960). No common name was given for *Chamaesyce halemanui* when it was listed; the other species above were listed with the common name of 'akoko.

Phylogenetic analysis of nuclear and chloroplast DNA sequence data for species in the tribe Euphorbieae (Steinmann and Porter 2002, pp. 453–490; Yang and Berry 2011, pp. 1486–1503) indicate that the genus *Euphorbia* was paraphyletic (*i.e.*, consisting of all the descendants of the last common ancestor of the group's members except for a small number of monophyletic groups of descendants), with *Chamaesyce* and several other genera nested within it. Steinman and Porter (2002, pp. 479–480) recommended expanding *Euphorbia* to include *Chamaesyce* and the other genera in the subtribe Euphorbiinae. This approach has been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, pp. 31–34). Consequently, the current scientific names of the listed *Chamaesyce* species are now *Euphorbia celastroides* var. *kaenana*, *E. deppeana*, *E. eleanoriae*, *E. halemanui*, *E. herbstii*, *E. kuwaleana*, *E. remyi* var. *kauaiensis*, *E. remyi* var. *remyi*, *E. rockii*, and *E. skottsbergii* var. *skottsbergii*. Although no common name was designated for *E. halemanui* when it was listed, the

common name of 'akoko is also appropriate for this species (Wagner *et al.* 1999, p. 607). These taxonomic changes do not affect the range or endangered status of any of these species.

*Euphorbia haeleleana* ('akoko), which was listed as endangered on October 10, 1996 (61 FR 53108), is not a member of the *Chamaesyce* group (Wagner *et al.* 1999, p. 619), and its taxonomy has not changed.

#### *Cyanea species (haha)*

The Hawaiian plant *Rollandia crispa* (haha) was listed as endangered on March 28, 1994 (59 FR 14482). Phylogenetic analyses of chloroplast DNA indicated that the species classified in *Rollandia* were nested within the paraphyletic genus *Cyanea* (Lammers *et al.* 1993, pp. 437–441), and the species in *Rollandia* were, therefore, merged into *Cyanea*; however, Wagner *et al.* (1999, pp. 480–481) continued to recognize *Rollandia* as a genus, including *Rollandia crispa*. When the Service designated critical habitat for the species on June 17, 2003 (68 FR 35950), the scientific name in the List of Endangered and Threatened Plants was revised to read "*Cyanea* (= *Rollandia*) *crispa*". The merger of *Rollandia* into *Cyanea* has since been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, p. 24); because *Rollandia* is no longer a recognized genus, the parenthetical reference to it as an alternative name is unnecessary. Consequently the current scientific name of the species, as it should read in the List of Endangered and Threatened Plants, is *Cyanea crispa*. The current listing of "*Cyanea* (= *Rollandia*) *crispa*" indicates that no common name exists; this is erroneous as the common name is *haha*. Therefore, we are correcting this error in this rule. These changes do not affect the range or endangered status of the species.

*Cyanea platyphylla* was listed as endangered on October 10, 1996 (61 FR 53137), with the common name of *haha*. Although this common name is generally used for species in the genus *Cyanea*, Wagner *et al.* (1999, p. 459) specifically identified 'aku'aku as the appropriate common name for *Cyanea platyphylla*. This change in common name does not affect the range or endangered status of the species.

*Delissea rivularis* (oha) was listed as endangered on October 10, 1996 (61 FR 53070). However, Lammers (2005, p. 13) found that the morphology of its leaves, flowers, and seeds is more similar to *Cyanea* and that molecular data indicate it is more closely related to *Cyanea*

*coriacea* than to species in *Delissea* and, therefore, recommended transferring the species to *Cyanea*. This change has been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, p. 23). Consequently, the current scientific name of this species is *Cyanea rivularis*. The common name is also changed to *haha* to correspond with the generally used common name for other species in *Cyanea* (Wagner *et al.* 1999, p. 437). This taxonomic change does not affect the range or endangered status of the species.

On June 11, 2012, a proposed critical habitat rule for multiple Hawaiian species (77 FR 34464) also included proposed scientific name changes for two additional *Cyanea* species: *Cyanea dunbarii* (changed to *C. dunbariae*) and *C. macrostegia* ssp. *gibsonii* (changed to *C. gibsonii*). We expect these changes to be finalized when the final critical habitat rule is published.

#### *Dubautia latifolia (koholapehu)*

The Hawaiian plant *Dubautia latifolia* was listed as endangered on May 13, 1992 (57 FR 20580), with the common name of *na'ena'e*. Although this common name is generally used for species in the genus *Dubautia*, Wagner *et al.* (1999, p. 299) specifically identified *koholapehu* as the appropriate common name for *D. latifolia*. This change in common name does not affect the range or endangered status of the species.

#### *Geranium arboreum (nohoanu)*

The Hawaiian plant *Geranium arboreum* was listed as endangered on May 13, 1992 (57 FR 20589), with the common name of Hawaiian red-flowered geranium. This common name was not historically used prior to listing of the species; however, Wagner *et al.* (1999, p. 729) identified *nohoanu* or *hinahina* as accepted common names for native Hawaiian species of *Geranium*, including *G. arboreum*. Use of the common name *nohoanu* is consistent with Service practice for other listed species of Hawaiian *Geranium*. This change in common name does not affect the range or endangered status of the species.

#### *Kadua species*

The Hawaiian plant *Hedyotis cookiana* ('awiwi) was listed as endangered on February 25, 1994 (59 FR 9304). *Hedyotis st.-johnii* (Na Pali Beach *hedyotis*) was listed as endangered on September 30, 1991 (56 FR 49639). Terrell *et al.* (2005, pp. 818–833) reviewed seed and fruit morphology and floral characteristics of Hawaiian and

South Pacific *Hedyotis* species and found that they were distinct from the Asian and North American species, reassigning them to the genus *Kadua*. This change has been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, pp. 63–65). Consequently, the current scientific names of these species are *Kadua cookiana* and *Kadua st.-johnii*. The common name given for *K. st.-johnii* in the List of Endangered and Threatened Plants, Na Pali Beach *hedyotis*, was not historically used prior to listing of the species. Because Wagner *et al.* (1999, p. 1150) did not identify an independently accepted common name for this species, we are revising the List of Endangered and Threatened Plants to indicate that no common name exists. These taxonomic changes do not affect the range or endangered status of either of these species.

On June 11, 2012, a proposed critical habitat rule for multiple Hawaiian species (77 FR 34464) also included proposed scientific name changes for two additional *Hedyotis* species: *Hedyotis schechtendahlia* var. *remyi* (changed to *Kadua cordata* ssp. *remyi*) and *Hedyotis mannii* (changed to *Kadua laxiflora*). We expect these changes to be finalized when the final critical habitat rule is published.

#### *Lobelia koolauensis*

The Hawaiian plant *Lobelia gaudichaudii* ssp. *koolauensis* (no common name) was listed as endangered on October 10, 1996 (61 FR 53089). While Wagner *et al.* (1999, p. 476) recognized two subspecies of *L. gaudichaudii* (ssp. *koolauensis* and ssp. *gaudichaudii*), differing in corolla color and branching of inflorescences, Lammers (2007, p. 797) determined that they do not interbreed where sympatric and elevated both taxa to full species status. This change has been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, p. 24). Consequently, the current scientific name of this species is *Lobelia koolauensis*. This taxonomic change does not affect the range or endangered status of the species.

#### *Cyperus fauriei*

The Hawaiian sedge species *Mariscus fauriei* (no common name) was listed as endangered on March 4, 1994 (59 FR 10305). Historically, the genus *Mariscus* has also been recognized as a subgenus of *Cyperus*, but taxonomists have noted that no consistent characters (*e.g.*, leaf anatomy, spikelet structure, photosynthetic metabolism type) separate the *Mariscus* group from other species in *Cyperus*, and recommend

merging it within *Cyperus* subg. *Cyperus* (Lye 1981, p. 57; Tucker 1994, p. 10; Strong and Wagner 1997, p. 39). This change has been accepted in the most recent update to the Manual of the Flowering Plants of Hawaii (Wagner *et al.* 2012, p. 81). Consequently, the current scientific name of this species is *Cyperus fauriei*. This taxonomic change does not affect the range or endangered status of the species.

#### *Polyscias species*

The Hawaiian plant *Munroidendron racemosum* (no common name) was listed as endangered on February 25, 1994 (59 FR 9304). *Tetraplasandra gymnocarpa* ('ohe'ohe) was listed as endangered on March 28, 1994 (59 FR 14482). *Tetraplasandra bisattenuata* (no common name) and *T. flynnii* (no common name) were listed as endangered on April 13, 2010 (75 FR 18960). *Tetraplasandra lydgatei* (no common name) was listed as endangered on September 18, 2012 (77 FR 57648).

Lowry and Plunkett (2010, pp. 55–84) determined, based on molecular phylogenetic studies (phylogenetics is the study of evolutionary relationships among groups of organisms that are discovered through molecular sequencing data and morphological data matrices) (Plunkett *et al.* 2001, pp. 213–230; 2004, pp. 861–873), that the genus *Polyscias*, as previously circumscribed, is paraphyletic, with six traditionally recognized genera (*Arthrophyllum*, *Cuphocarpus*, *Gastonia*, *Munroidendron*, *Reynoldsia*, and *Tetraplasandra*) nested within it. They recommended combining all of these genera into *Polyscias*. Species in the genera *Munroidendron* and *Tetraplasandra* were thus assigned to the genus *Polyscias*, subgenus *Tetraplasandra*. The specific epithet *racemosum* was changed to *racemosa* to conform with the gender of the new genus name. These changes have been accepted in the most recent update to the Manual of the Flowering Plants of Hawai'i (Wagner *et al.* 2012, pp. 7–8). Consequently, the current scientific names of these species are *P. racemosa*, *P. gymnocarpa*, *P. bisattenuata*, *P. flynnii*, and *P. lydgatei*. These taxonomic changes do not affect the range or endangered status of any of these species.

#### *Pritchardia maideniana* (lo'ulu)

The Hawaiian palm tree *Pritchardia affinis* (lo'ulu) was listed as endangered on March 4, 1994 (59 FR 10305). This listing followed the taxonomy of Beccari and Rock (1921, pp. 37–41), who described *P. affinis*, including three

additional varieties (var. *gracilis*, var. *halophila*, and var. *rhopalocarpa*) from localities on the island of Hawai'i. Previously, Beccari (1913, pp. 213–216) had described *P. maideniana* from cultivated plants in the Royal Botanic Gardens, Sydney, Australia, although the geographic origin of those individuals was unclear and no wild specimens had been located (Beccari and Rock 1921, p. 23). Hodel (2007, pp. S26–S27) examined an extant cultivated plant at the Royal Botanic Gardens, plants in Hawaii grown from its seeds, living plants within the native range of *P. affinis* on the island of Hawai'i, and photographs of type specimens attributed to both species, and found no differences between *P. affinis* and *P. maideniana*. Because *P. affinis* was the more recently described, Hodel reassigned the species (including all varieties) to *P. maideniana*. This change has been accepted in the most recent update to the Manual of the Flowering Plants of Hawai'i (Wagner *et al.* 2012, p. 76). Consequently, the current scientific name of this species is *P. maideniana*. This taxonomic change does not affect the range in the wild or the endangered status of the species.

#### *Sicyos albus* ('anunu)

The Hawaiian plant *Sicyos alba* ('anunu) was listed as endangered on October 10, 1996 (61 FR 53137). The most recent update to the Manual of the Flowering Plants of Hawai'i (Wagner *et al.* 2012, p. 30) corrected the specific epithet to *albus*, making it consistent with the gender of the genus name. Consequently, the current scientific name of the species is *Sicyos albus*. This correction does not affect the range or endangered status of the species.

#### *Asplenium species*

The Hawaiian fern *Diellia falcata* was listed as endangered on October 29, 1991 (56 FR 55770). *Diellia pallida* was listed as endangered on February 25, 1994 (59 FR 9304). *Diellia unisora* was listed as endangered on June 27, 1994 (59 FR 32932). *Diellia mannii* was listed as endangered on April 13, 2010 (75 FR 18960).

Kramer and Viane (1990, p. 55) and Viane and Reichstein (1991, p. 157) classified all species within the family Aspleniaceae, including the above species of *Diellia*, under the genus *Asplenium*. Analysis of molecular data by Schneider *et al.* (2005, pp. 455–460) indicated that *Asplenium* is paraphyletic and *Diellia* is a Hawaiian endemic clade nested within it. Therefore, Snow *et al.* (2011, p. 12) merged *Diellia* with *Asplenium*. Because different species had

previously been described under the names *A. falcatum*, *A. mannii*, and *A. pallidum*, these names were not available to designate the respective Hawaiian species after the generic change (Viane and Reichstein 1991; Snow *et al.* 2011, p. 12). Consequently, *D. falcata* has been renamed *A. dielfalcatum*; *D. mannii* has been renamed *A. dielmannii*; and *D. pallida* has been renamed *A. dielpallidum* (Viane and Reichstein 1991, pp. 159–160; Snow *et al.* 2011, p. 12). *Diellia unisora* was also renamed *A. unisorum*, with the specific epithet changing to conform to the gender of the new genus name (Viane and Reichstein 1991, p. 163; Snow *et al.* 2011, p. 12). These changes have been accepted in the most recent update to Hawaii's Ferns and Fern Allies (Wagner *et al.* 2012, pp. 103–104). These taxonomic changes do not affect the range or endangered status of any of these species.

On June 11, 2012, a proposed critical habitat rule for multiple Hawaiian species (77 FR 34464) also included proposed scientific name changes for two additional fern species: *Asplenium fragile* var. *insulare* (changed to *A. peruvianum* var. *insulare*) and *Diellia erecta* (changed to *A. dielirectum*). We expect these changes to be finalized when the final critical habitat rule is published.

#### Family reassignments

Several genera of Hawaiian plants have been recently reassigned to different families (Wagner *et al.* 2012, pp. 108–109), based on phylogenetic research summarized by Smith *et al.* (2006, pp. 705–731), Mabblerley (2008, pp. 14, 278, 341, 457, 508, 568, 916), the Angiosperm Phylogeny Group (2009, pp. 105–121), and Stevens (2015). These changes have resulted in a need for revisions in the List of Endangered and Threatened Plants where the family reassignments were not reflected in the original listing rules. *Flueggea neowawraea* (mehamehame) is listed as a member of the family Euphorbiaceae; this should be revised to Phyllanthaceae. *Korthalsella degeneri* (hulumoa) is listed as a member of the family Viscaceae; this should be revised to Santalaceae. *Lysimachia daphnoides* (lehua makanoe), *L. iniki* (no common name), *L. pendens* (no common name), *L. scopulensis* (no common name), *L. venosa* (no common name), *Myrsine juddii* (kolea), *M. knudsenii* (kolea), *M. linearifolia* (kolea), *M. mezii* (kolea), and *M. vaccinioides* (kolea) are listed as members of the family Myrsinaceae; this should be revised to Primulaceae. *Pleomele hawaiiensis* (hala pepe) is listed as a member of the family

Liliaceae; this should be revised to Asparagaceae. *Xylosma crenatum* (no common name) is listed as a member of the family Flacourtiaceae; this should be revised to Salicaceae. *Adenophorus periens* (pendent kihi fern) is listed as a member of the family Grammitidaceae; this should be revised to Polypodiaceae. *Diplazium molokaiense* (no common name) is listed as a member of the family Aspleniaceae; this should be revised to Woodsiaceae. These taxonomic changes do not affect the threatened or endangered status or range of any of these species.

**Required Determinations**

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any new collections of information that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. 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 OMB control number.

*National Environmental Policy Act*

We have determined that environmental assessments and environmental impact statements, as

defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), need not be prepared in connection with regulations issued pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (43 FR 49244).

*Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To help us to revise this rule, your comments should be as specific as possible.

**References Cited**

A complete list of the referenced materials is available upon request from the U.S. Fish and Wildlife Service (see **FOR FURTHER INFORMATION CONTACT**).

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Regulation Promulgation**

For the reasons given in the preamble, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—[AMENDED]**

■ 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

■ 2. Amend the List of Endangered and Threatened Wildlife in § 17.11(h) by:

- a. Revising the entry under MAMMALS for “Squirrel, northern Idaho ground” to read as set forth below;
- b. Removing the entries under BIRDS for “Kingfisher, Guam Micronesian”, “Moorhen, Hawaiian common”, and “Petrel, Hawaiian dark-rumped”; and
- c. Adding in alphabetic order under BIRDS entries for “Gallinule, Hawaiian common”, “Kingfisher, Guam”, and “Petrel, Hawaiian” to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*  
(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
* Squirrel, northern Idaho ground.	* <i>Urocitellus brunneus</i>	* U.S.A. (ID) .....	* Entire .....	* T	* 693	* NA	* NA
BIRDS							
* Gallinule, Hawaiian common.	* <i>Gallinula galeata sandvicensis</i> .	* U.S.A. (HI) .....	* Entire .....	* E	* 1	* NA	* NA
* Kingfisher, Guam .....	* <i>Todiramphus cinnamominus</i> .	* Western Pacific Ocean, U.S.A. (Guam).	* Entire .....	* E	* 156	* 17.95(b)	* NA
* Petrel, Hawaiian .....	* <i>Pterodroma sandwichensis</i> .	* U.S.A. (HI) .....	* Entire .....	* E	* 1	* NA	* NA
* 	* 	* 	* 	* 	* 	* 	* 

■ 3. Amend the List of Endangered and Threatened Plants in § 17.12(h) by:

■ a. Removing the entries under FLOWERING PLANTS for

“*Alsinidendron lychnoides*,”  
“*Alsinidendron viscosum*,”

“*Chamaesyce celastroides* var. *kaenana*,” “*Chamaesyce deppeana*,” “*Chamaesyce eleanoriae*,” “*Chamaesyce halemanui*,” “*Chamaesyce herbstii*,” “*Chamaesyce kuwaleana*,” “*Chamaesyce remyi* var. *kauaiensis*,” “*Chamaesyce remyi* var. *remyi*,” “*Chamaesyce rockii*,” “*Chamaesyce skottsbergii* var. *skottsbergii*,” and “*Cyanea* (= *Rollandia crispa*”;

■ b. Adding an entry in alphabetic order under FLOWERING PLANTS for “*Cyanea crispa*”;

■ c. Revising the entry under FLOWERING PLANTS for “*Cyanea platyphylla*”;

■ d. Adding entries in alphabetic order under FLOWERING PLANTS for “*Cyanea rivularis*” and “*Cyperus fauriei*”;

■ e. Removing the entry under FLOWERING PLANTS for “*Delissea rivularis*”;

■ f. Revising the entry under FLOWERING PLANTS for “*Dubautia latifolia*”;

■ g. Adding an entry in alphabetic order under FLOWERING PLANTS for “*Erigeron decumbens*”;

■ h. Removing the entry under FLOWERING PLANTS for “*Erigeron decumbens* var. *decumbens*”;

■ i. Adding entries in alphabetic order under FLOWERING PLANTS for “*Euphorbia celastroides* var. *kaenana*,” “*Euphorbia deppeana*,” “*Euphorbia eleanoriae*,” “*Euphorbia halemanui*,” “*Euphorbia herbstii*,” “*Euphorbia kuwaleana*,” “*Euphorbia remyi* var. *kauaiensis*,” “*Euphorbia remyi* var. *remyi*,” “*Euphorbia rockii*,” and “*Euphorbia skottsbergii* var. *skottsbergii*”;

■ j. Revising the entries under FLOWERING PLANTS for “*Flueggea*

*neowawraea*” and “*Geranium arboreum*”;

■ k. Removing the entries under FLOWERING PLANTS for “*Hedyotis cookiana*” and “*Hedyotis st-johnii*”;

■ l. Adding entries in alphabetic order under FLOWERING PLANTS for “*Kadua cookiana*” and “*Kadua st-johnii*”;

■ m. Revising the entry under FLOWERING PLANTS for “*Korthalsella degeneri*”;

■ n. Removing the entry under FLOWERING PLANTS for “*Limnanthes floccosa* ssp. *grandiflora*”;

■ o. Adding an entry in alphabetic order under FLOWERING PLANTS for “*Limnanthes pumila* ssp. *grandiflora*”;

■ p. Removing the entry under FLOWERING PLANTS for “*Lobelia gaudichaudii* ssp. *koolauensis*”;

■ q. Adding an entry in alphabetic order under FLOWERING PLANTS for “*Lobelia koolauensis*”;

■ r. Revising the entries under FLOWERING PLANTS for “*Lysimachia daphnoides*,” “*Lysimachia iniki*,” “*Lysimachia pendens*,” “*Lysimachia scopulensis*,” and “*Lysimachia venosa*”;

■ s. Removing the entries under FLOWERING PLANTS for “*Mariscus fauriei*” and “*Munroidendron racemosum*”;

■ t. Revising the entries under FLOWERING PLANTS for “*Myrsine juddii*,” “*Myrsine knudsenii*,” “*Myrsine linearifolia*,” “*Myrsine mezii*,” and “*Myrsine vaccinioides*”;

■ u. Revising the entry under FLOWERING PLANTS for “*Pleomele hawaiiensis*”;

■ v. Adding entries in alphabetic order under FLOWERING PLANTS for “*Polyscias bisattenuata*,” “*Polyscias flynnii*,” “*Polyscias gymnocarpa*,”

“*Polyscias lydgatei*,” and “*Polyscias racemosa*”;

■ w. Removing the entry under FLOWERING PLANTS for “*Pritchardia affinis*”;

■ x. Adding entries in alphabetic order under FLOWERING PLANTS for “*Pritchardia maideniana*,” “*Schiedea lychnoides*,” and “*Schiedea viscosa*”;

■ y. Removing the entry under FLOWERING PLANTS for “*Sicyos alba*”;

■ z. Adding an entry in alphabetic order under FLOWERING PLANTS for “*Sicyos albus*”;

■ aa. Removing the entries under FLOWERING PLANTS for “*Tetraplasandra bisattenuata*,” “*Tetraplasandra flynnii*,” “*Tetraplasandra gymnocarpa*,” and “*Tetraplasandra lydgatei*”;

■ bb. Revising the entry under FLOWERING PLANTS for “*Xylosma crenatum*” and the entry under FERNS AND ALLIES for “*Adenophorus periens*”;

■ cc. Adding entries in alphabetic order under FERNS AND ALLIES for “*Asplenium dielfalcatum*,” “*Asplenium dielmannii*,” “*Asplenium dielpallidum*,” and “*Asplenium unisorum*”;

■ dd. Removing the entries under FERNS AND ALLIES for “*Diellia falcata*,” “*Diellia mannii*,” “*Diellia pallida*,” and “*Diellia unisora*”; and

■ ee. Revising the entry under FERNS AND ALLIES for “*Diplazium molokaiense*”.

The additions and revisions read as follows:

**§ 17.12 Endangered and threatened plants.**  
 \* \* \* \* \*  
 (h) \* \* \*

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
* <i>Cyanea crispa</i> .....	* Haha .....	* U.S.A. (HI) .....	* Campanulaceae .....	* E	* 536	* 17.99(i)	* NA
* <i>Cyanea platyphylla</i> ..	* 'Aku'aku .....	* U.S.A. (HI) .....	* Campanulaceae .....	* E	* 595	* 17.99(k)	* NA
* <i>Cyanea rivularis</i> .....	* Haha .....	* U.S.A. (HI) .....	* Campanulaceae .....	* E	* 590	* 17.99(a)(1)	* NA
* <i>Cyperus fauriei</i> .....	* None .....	* U.S.A. (HI) .....	* Cyperaceae .....	* E	* 532	* 17.99(c) and (k)	* NA
* <i>Dubautia latifolia</i> .....	* Koholapehu .....	* U.S.A. (HI) .....	* Asteraceae .....	* E	* 464	* 17.99(a)(1)	* NA
* <i>Erigeron decumbens</i>	* Willamette daisy .....	* U.S.A. (OR) .....	* Asteraceae .....	* E	* 679	* 17.96(a)	* NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Euphorbia celastroides</i> var. <i>kaenana</i> .	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	448	17.99(i)	NA
<i>Euphorbia deppeana</i>	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	536	17.99(i)	NA
<i>Euphorbia eleanoriae</i>	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	765	17.99(a)	NA
<i>Euphorbia halemanui</i>	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	464	17.99(a)(1)	NA
<i>Euphorbia herbstii</i> ....	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	591	17.99(i)	NA
<i>Euphorbia kuwaleana</i> .	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	448	17.99(i)	NA
<i>Euphorbia remyi</i> var. <i>kauaiensis</i> .	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	765	17.99(a)	NA
<i>Euphorbia remyi</i> var. <i>remyi</i> .	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	765	17.99(a)	NA
<i>Euphorbia rockii</i> .....	'Akoko	U.S.A. (HI)	Euphorbiaceae	E	591	17.99(i)	NA
<i>Euphorbia skottsbergii</i> var. <i>skottsbergii</i> .	'Ewa Plains 'akoko	U.S.A. (HI)	Euphorbiaceae	E	120	17.99(i)	NA
<i>Flueggea neowawraea</i> .	Mehamehame	U.S.A. (HI)	Phyllanthaceae	E	559	17.99(a)(1), (c), (e)(1), (i) and (k)	NA
<i>Geranium arboreum</i>	Nohoanu	U.S.A. (HI)	Geraniaceae	E	465	17.99(e)(1)	NA
<i>Kadua cookiana</i> .....	'Awiwi	U.S.A. (HI)	Rubiaceae	E	530	17.99(a)(1)	NA
<i>Kadua st.-johnii</i> .....	None	U.S.A. (HI)	Rubiaceae	E	441	17.99(a)(1)	NA
<i>Korthalsella degeneri</i>	Hulumoa	U.S.A. (HI)	Santalaceae	E	806	17.99(i)	NA
<i>Limnanthes pumila</i> ssp. <i>Grandiflora</i> .	Large-flowered woolly meadowfoam.	U.S.A. (OR)	Limnanthaceae	E	733	17.96(a)	NA
<i>Lobelia koolauensis</i>	None	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Lysimachia daphnoides</i> .	Lehua makanoe	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Lysimachia iniki</i> .....	None	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Lysimachia pendens</i>	None	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Lysimachia scopulensis</i> .	None	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Lysimachia venosa</i> ..	None	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Myrsine juddii</i> .....	Kolea	U.S.A. (HI)	Primulaceae	E	591	17.99(i)	NA
<i>Myrsine knudsenii</i> ....	Kolea	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Myrsine linearifolia</i> ...	Kolea	U.S.A. (HI)	Primulaceae	T	590	17.99(a)(1)	NA
<i>Myrsine mezii</i> .....	Kolea	U.S.A. (HI)	Primulaceae	E	765	17.99(a)	NA
<i>Myrsine vaccinioides</i>	Kolea	U.S.A. (HI)	Primulaceae	E	815	NA	NA
<i>Pleomele hawaiiensis</i> .	Hala pepe	U.S.A. (HI)	Asparagaceae	E	595	17.99(k)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
*	*	*	*	*	*	*	*
<i>Polyscias bisattenuata.</i>	None .....	U.S.A. (HI) .....	Araliaceae .....	E	765	17.99(a)	NA
<i>Polyscias flynnii</i> .....	None .....	U.S.A. (HI) .....	Araliaceae .....	E	765	17.99(a)	NA
<i>Polyscias gymnocarpa.</i>	'Ohe'ohe .....	U.S.A. (HI) .....	Araliaceae .....	E	536	17.99(i)	NA
<i>Polyscias lydgatei</i> ....	None .....	U.S.A. (HI) .....	Araliaceae .....	E	806	17.99(i)	NA
<i>Polyscias racemosa</i>	None .....	U.S.A. (HI) .....	Araliaceae .....	E	530	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Pritchardia maideniana.</i>	Lo'ulu .....	U.S.A. (HI) .....	Arecaceae .....	E	532	NA	NA
*	*	*	*	*	*	*	*
<i>Schiedea lychnoides</i>	Kuawawaenuhu .....	U.S.A. (HI) .....	Caryophyllaceae .....	E	590	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Schiedea viscosa</i> .....	None .....	U.S.A. (HI) .....	Caryophyllaceae .....	E	590	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Sicyos albus</i> .....	'Anunu .....	U.S.A. (HI) .....	Cucurbitaceae .....	E	595	17.99(k)	NA
*	*	*	*	*	*	*	*
<i>Xylosma crenatum</i> ...	None .....	U.S.A. (HI) .....	Salicaceae .....	E	464	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
FERNS AND ALLIES							
<i>Adenophorus periens</i>	Pendent kihi fern ....	U.S.A. (HI) .....	Polypodiaceae .....	E	559	17.99(a)(1), (c), (i), and (k)	NA
*	*	*	*	*	*	*	*
<i>Asplenium dielfalcatum.</i>	None .....	U.S.A. (HI) .....	Aspleniaceae .....	E	448	17.99(i)	NA
<i>Asplenium dielmannii</i>	None .....	U.S.A. (HI) .....	Aspleniaceae .....	E	765	17.99(a)	NA
<i>Asplenium dielpallidum.</i>	None .....	U.S.A. (HI) .....	Aspleniaceae .....	E	530	17.99(a)(1)	NA
<i>Asplenium unisorum</i>	None .....	U.S.A. (HI) .....	Aspleniaceae .....	E	541	17.99(i)	NA
*	*	*	*	*	*	*	*
<i>Diplazium molokaiense.</i>	None .....	U.S.A. (HI) .....	Woodsiaceae .....	E	553	17.99(a)(1), (c), (e)(1), and (i)	NA
*	*	*	*	*	*	*	*

Dated: June 9, 2015.

**Stephen Guertin,**

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 2015-15212 Filed 6-22-15; 8:45 am]

BILLING CODE 4310-55-P



# Proposed Rules

Federal Register

Vol. 80, No. 120

Tuesday, June 23, 2015

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.

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 20

[Docket Nos. PRM–20–28, PRM–20–29, and PRM–20–30; NRC–2015–0057]

#### Linear No-Threshold Model and Standards for Protection Against Radiation

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Petition for rulemaking; notice of docketing and request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) has received three petitions for rulemaking (PRM) requesting that the NRC amend its “Standards for Protection Against Radiation” regulations and change the basis of those regulations from the Linear No-Threshold (LNT) model of radiation protection to the radiation hormesis model. The radiation hormesis model provides that exposure of the human body to low levels of ionizing radiation is beneficial and protects the human body against deleterious effects of high levels of radiation. Whereas, the LNT model provides that radiation is always considered harmful, there is no safety threshold, and biological damage caused by ionizing radiation (essentially the cancer risk) is directly proportional to the amount of radiation exposure to the human body (response linearity). The petitions were submitted by Carol S. Marcus, Mark L. Miller, and Mohan Doss (the petitioners), dated February 9, 2015, February 13, 2015, and February 24, 2015, respectively. These petitions were docketed by the NRC on February 20, 2015, February 27, 2015, and March 16, 2015, and have been assigned Docket Numbers. PRM–20–28, PRM–20–29, and PRM–20–30, respectively. The NRC is examining the issues raised in these petitions to determine whether they should be considered in rulemaking. The NRC is requesting public comments on these petitions for rulemaking.

**DATES:** Submit comments by September 8, 2015. Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

**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–2015–0057. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Email comments to:* [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive an automatic email reply confirming receipt, then contact us at 301–415–1677.

- *Fax comments to:* Secretary, U.S. Nuclear Regulatory Commission at 301–415–1101.

- *Mail comments to:* Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Rulemakings and Adjudications Staff.

- *Hand deliver comments to:* 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: 301–415–1677.

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:** Solomon Sahle, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington DC 20555–0001; telephone: 301–415–3781, email: [Solomon.Sahle@nrc.gov](mailto:Solomon.Sahle@nrc.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Obtaining Information and Submitting Comments

###### A. Obtaining Information

Please refer to Docket ID NRC–2015–0057 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:

- *Federal rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2015–0057.

- *NRC’s Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in the **SUPPLEMENTARY INFORMATION** section.

- *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–2015–0057 in the subject line of 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 will post all comment submissions at <http://www.regulations.gov> as well as enter 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 into ADAMS.

##### II. The Petitioners

On February 9, 2015, Dr. Carol S. Marcus, a Professor of Radiation Oncology, of Molecular and Medical Pharmacology (Nuclear Medicine), and of Radiological Sciences at the David

Geffen School of Medicine at the University of California-Los Angeles, filed a petition for rulemaking with the Commission, PRM-20-28 (ADAMS Accession No. ML15051A503). Dr. Marcus was a member of the NRC's Advisory Committee on the Medical Uses of Isotopes from 1990 to 1994. The petitioner indicated that "[t]here has never been scientifically valid support for this LNT hypothesis since its use was recommended by the U.S. National Academy of Sciences Committee on Biological Effects of Atomic Radiation (BEAR I)/Genetics Panel in 1956" and that "[t]he costs of complying with these LNT based regulations are enormous."

On February 13, 2015, Mr. Mark L. Miller, a Certified Health Physicist, filed a petition for rulemaking with the Commission, PRM-20-29 (ADAMS Accession No. ML15057A349). The petitioner indicated that "[t]here has never been scientifically valid support for this LNT hypothesis" and that "[t]he costs of complying with these LNT-based regulations are incalculable." In addition, the petitioner suggests that the use of the LNT hypothesis has "led to persistent radiophobia [radiation-phobia]."

On February 24, 2015, Dr. Mohan Doss, filed a petition for rulemaking with the Commission, PRM-20-30 (ADAMS Accession No. ML15075A200). Dr. Doss filed this petition on behalf of Scientist for Accurate Radiation Information, whose mission is to "help prevent unnecessary, radiation-phobia-related deaths, morbidity, and injuries associated with distrust of radio-medical diagnostics/therapies and from nuclear/radiological emergencies through countering phobia-promoting misinformation spread by alarmists via the news and other media including journal publications."

### III. The Petition

The petitioners request that the NRC amend part 20 of title 10 of the *Code of Federal Regulations* (10 CFR), "Standards for Protection Against Radiation," based on new science and evidence that contradicts the LNT hypothesis and request that the NRC greatly simplify and change 10 CFR part 20 to take into account the "vast literature demonstrating no effects or protective effects at relatively low doses of radiation." The NRC has determined that the petitions met the threshold sufficiency requirements for a petition for rulemaking under § 2.802, "Petition for rulemaking," and the petitions have been docketed as PRM-20-28, PRM-20-29, and PRM-20-30.

## IV. Discussion of the Petitions

### A. PRM-20-28

The petitioner, Dr. Carol S. Marcus, requests that the NRC amend its regulations in 10 CFR part 20 that are based on the LNT hypothesis. The petitioner states that "[t]his ultra-simplistic concept assumes that all radiation absorbed doses, no matter how small, have a finite probability of causing a fatal cancer." The petitioner further indicates that the "[u]se of the LNT assumption enables regulators to feel justified in ratcheting down permissible worker and public radiation levels, either through actual dose limits or use of the 'as low as reasonably achievable' (ALARA) principle, giving the illusion that they are making everyone safer (and creating ever increasing workload for themselves and their licensees)." However, the petitioner suggests that "there has never been scientifically valid support for this LNT hypothesis since its use was recommended by the U.S. National Academy of Sciences Committee on Biological Effects of Atomic Radiation (BEAR I)/Genetics Panel in 1956" and that the "costs of complying with these LNT based regulations are enormous."

The petitioner suggests that there is "vast literature" that demonstrates that low doses of radiation have no deleterious effect, and some studies even suggest that low doses of radiation may have protective effects. The petitioner writes, "[t]he literature showing protective effects supports the concept of hormesis, in which low levels of potentially stressful agents, such as toxins, other chemicals, ionizing radiation, etc., protect against the deleterious effects that high levels of these stressors produce and result in beneficial effects (e.g., lower cancer rates)." On May 16, 2015, the petitioner submitted an additional reference to the NRC providing technical information supporting her requests.<sup>1</sup>

The petitioner recommends the following changes to 10 CFR part 20:

(1) Worker doses should remain at present levels, with allowance of up to 100 mSv (10 rem) effective dose per year if the doses are chronic.

(2) ALARA should be removed entirely from the regulations. The petitioner argues that "it makes no sense to decrease radiation doses that are not only harmless but may be hormetic."

<sup>1</sup> Siegel, Jeffrey A., and Welsh, James S.: Does Imaging Technology Cause Cancer? Debunking the Linear No-Threshold Model of Radiation Carcinogenesis. *Technology in Cancer Research & Treatment* 1533034615578011, first published on March 30, 2015 doi:10.1177/1533034615578011.

(3) Public doses should be raised to worker doses. The petitioner notes that "these low doses may be hormetic. The petitioner goes on to ask, "why deprive the public of the benefits of low dose radiation?"

(4) End differential doses to pregnant women, embryos and fetuses, and children under 18 years of age.

### B. PRM-20-29

Similarly, the petitioner, Mr. Mark L. Miller, requests that the NRC amend its regulations in 10 CFR part 20 that are based on the LNT hypothesis. The petitioner used much of the same information used in Dr. Marcus' petition for rulemaking. However, Mr. Miller only requests that the following changes be made to 10 CFR part 20:

(1) Worker doses should remain at present levels, with allowance of up to 100 mSv (10 rem) effective dose per year if the doses are chronic.

(2) ALARA should be removed entirely from the regulations. The petitioner argues that "it makes no sense to decrease radiation doses that are not only harmless but may be hormetic."

(3) Public doses should be raised to worker doses. The petitioner notes that "these low doses may be hormetic. The petitioner states, "[l]ow-dose limits for the public perpetuates radiophobia."

### C. PRM-20-30

The petition for rulemaking was submitted by Dr. Mohan Doss, on behalf of Scientist for Accurate Radiation Information, and "supports and supplements" petition PRM-20-28. This petitioner provides additional information suggesting that "low-dose radiation reduces cancer risk" (i.e., has a hormetic [beneficial] effect) and suggests that the "LNT model is no longer justifiable." The petitioner further states that the use of the LNT hypothesis in the NRC's regulations has "had a major detrimental effect on public health, since they have prevented the study of LDR [low-dose radiation] for controlling aging-related diseases such as cancer, Alzheimer's disease, Parkinson's disease, etc. in spite of studies showing the promise of LDR for the diseases." The petitioner suggests that "urgency of action on this petition" is necessary because "any potential future accident involving release of radioactive materials in the USA would likely result in panic evacuation because of the LNT—model-based cancer fears and concerns, resulting in considerable casualties and economic damage such as have occurred in Fukushima." The petitioner further suggests that the "recognition of a threshold dose by NRC would obviate

the need for such panic evacuations, associated casualties, and economic harm” when radiation is released in the environment.

For additional information, see the filed petitions for rulemaking in ADAMS under Accession Nos. ML15051A503, ML15057A349, and ML15075A200.

## V. Conclusion

The NRC will examine the issues raised in PRM–20–28, PRM–20–29, and PRM–20–30 to determine whether they should be considered in rulemaking. The NRC is requesting public comments on these petitions for rulemaking.

Dated at Rockville, Maryland, this 16th day of June, 2015.

For the Nuclear Regulatory Commission.

**Annette L. Vietti-Cook,**

*Secretary of the Commission.*

[FR Doc. 2015–15441 Filed 6–22–15; 8:45 am]

BILLING CODE 7590–01–P

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 72

[NRC–2015–0067]

RIN 3150–AJ58

#### List of Approved Spent Fuel Storage Casks: Holtec International HI–STORM UMAX Canister Storage System, Certificate of Compliance No. 1040, Amendment No. 1

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its spent fuel storage regulations by revising the Holtec International, Inc. (Holtec), HI–STORM (Holtec International Storage Module) Underground Maximum Capacity (UMAX) Canister Storage System listing within the “List of approved spent fuel storage casks” to add Amendment No. 1 to Certificate of Compliance (CoC) No. 1040. Amendment No. 1 provides a seismically enhanced version of the HI–STORM UMAX Canister Storage System, identified as the “Most Severe Earthquake (MSE)” version that could be used in areas with higher seismic demands than those analyzed previously. Amendment No. 1 also includes minor physical design changes to help ensure structural integrity of the amended system. These are the addition of a hold-down system to the closure lid; replacing the fill material in the interstitial spaces between the cavity

enclosure containers (CECs) surrounding the casks with plain concrete with a minimum comprehensive strength of 3000 psi concrete; strengthening the multi-purpose canister (MPC) guides; and engineering the guides’ nominal gap with the MPC to be tighter than the original HI–STORM UMAX Canister Storage System design.

**DATES:** Submit comments by July 23, 2015. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

**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–2015–0067. Address questions about NRC dockets to Carol Gallagher; telephone: (301) 415–3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Email comments to:* [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive an automatic email reply confirming receipt, then contact us at (301) 415–1677.

- *Fax comments to:* Secretary, U.S. Nuclear Regulatory Commission at (301) 415–1101.

- *Mail comments to:* Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Rulemakings and Adjudications Staff.

- *Hand deliver comments to:* 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: (301) 415–1677.

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:** Solomon Sahle, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: (301) 415–3781; email: [Solomon.Sahle@nrc.gov](mailto:Solomon.Sahle@nrc.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Obtaining Information and Submitting Comments

###### A. Obtaining Information

Please refer to Docket ID NRC–2015–0067 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:

- *Federal Rulemaking Web Site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2015–0067.

- *NRC’s Agencywide Documents Access and Management System (ADAMS):* You may access publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the “Availability of Documents” section.

- *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–2015–0067 in the subject line of 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 will post all comment submissions at <http://www.regulations.gov> as well as enter 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 into ADAMS.

## II. Procedural Background

This proposed rule is limited to the changes contained in Amendment No. 1 to CoC No. 1040 and does not include other aspects of the Holtec HI–STORM UMAX Canister Storage System. Because the NRC considers this action noncontroversial and routine, the NRC is publishing this proposed rule

concurrently with a direct final rule in the Rules and Regulations section of this issue of the **Federal Register**. The direct final rule will become effective on September 8, 2015. However, if the NRC receives significant adverse comments on this proposed rule by July 23, 2015, then the NRC will publish a document that withdraws the direct final rule. If the direct final rule is withdrawn, the NRC will address the comments received in response to these proposed revisions in a subsequent final rule. Absent significant modifications to the proposed revisions requiring republication, the NRC will not initiate a second comment period on this action in the event the direct final rule is withdrawn.

A significant adverse comment is a comment where the commenter explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. A comment is adverse and significant if:

(1) The comment opposes the rule and provides a reason sufficient to require a substantive response in a notice-and-comment process. For example, a substantive response is required when:

(a) The comment causes the NRC staff to reevaluate (or reconsider) its position or conduct additional analysis;

(b) The comment raises an issue serious enough to warrant a substantive response to clarify or complete the record; or

(c) The comment raises a relevant issue that was not previously addressed or considered by the NRC staff.

(2) The comment proposes a change or an addition to the rule, and it is apparent that the rule would be ineffective or unacceptable without incorporation of the change or addition.

(3) The comment causes the NRC staff to make a change (other than editorial) to the rule, CoC, or Technical Specifications (TSs).

For additional procedural information and the regulatory analysis, see the direct final rule published in the Rules and Regulations section of this issue of the **Federal Register**.

**III. Background**

Section 218(a) of the Nuclear Waste Policy Act (NWPA) of 1982, as amended, requires that “the Secretary [of the U.S. Department of Energy] shall establish a demonstration program, in cooperation with the private sector, for the dry storage of spent nuclear fuel at civilian nuclear power reactor sites, with the objective of establishing one or more technologies that the [U.S. Nuclear Regulatory] Commission may, by rule, approve for use at the sites of civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission.” Section 133 of the NWPA states, in part, that “[t]he Commission shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 219(a) [sic: 218(a)] for use at the site of any civilian nuclear power reactor.”

To implement this mandate, the Commission approved dry storage of spent nuclear fuel in NRC-approved casks under a general license by

publishing a final rule which added a new subpart K in part 72 of Title 10 of the *Code of Federal Regulations* (10 CFR) entitled, “General License for Storage of Spent Fuel at Power Reactor Sites” (55 FR 29181; July 18, 1990). This rule also established a new subpart L in 10 CFR part 72 entitled, “Approval of Spent Fuel Storage Casks,” which contains procedures and criteria for obtaining NRC approval of spent fuel storage cask designs. The NRC subsequently issued a final rule on March 6, 2015 (80 FR 12073), as corrected on March 25, 2015 (80 FR 15679), that approved the HI-STORM UMAX Canister Storage System design and added it to the list of NRC-approved cask designs in 10 CFR 72.214 as CoC No. 1040.

**IV. Plain Writing**

The Plain Writing Act of 2010 (Pub. L. 111–274) requires Federal agencies to write documents in a clear, concise, well-organized manner that also follows other best practices appropriate to the subject or field and the intended audience. The NRC has written this document to be consistent with the Plain Writing Act as well as the Presidential Memorandum, “Plain Language in Government Writing,” published June 10, 1998 (63 FR 31883). The NRC requests comment on the proposed rule with respect to clarity and effectiveness of the language used.

**V. Availability of Documents**

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document	Adams accession No./ Web link/ Federal Register citation
Proposed CoC No. 1040, Amendment No. 1 .....	ML15070A151
Appendix A of Proposed TS .....	ML15070A153
Appendix B of Proposed TS .....	ML15070A152
Preliminary SER .....	ML15070A149
Request for Amendment Application dated July 11, 2014 .....	ML14202A029
Supplemental Information for Proposed Action dated October 31, 2014 .....	ML14308A164

The NRC may post materials related to this document, including public comments, on the Federal Rulemaking Web site at <http://www.regulations.gov> under Docket ID NRC–2015–0067. The Federal Rulemaking Web site allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: (1) Navigate to the docket folder (NRC–2015–0067); (2) click the “Sign up for Email Alerts” link; and (3) enter your email address and select how

frequently you would like to receive emails (daily, weekly, or monthly).

**List of Subjects in 10 CFR Part 72**

Administrative practice and procedure, Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, Spent fuel, Whistleblowing.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the Nuclear Waste Policy Act of 1982, as amended; and 5 U.S.C. 552 and 553; the NRC is proposing to adopt the following amendments to 10 CFR part 72.

**PART 72—LICENSING  
REQUIREMENTS FOR THE  
INDEPENDENT STORAGE OF SPENT  
NUCLEAR FUEL, HIGH-LEVEL  
RADIOACTIVE WASTE, AND  
REACTOR-RELATED GREATER THAN  
CLASS C WASTE**

■ 1. The authority citation for part 72 continues to read as follows:

**Authority:** Atomic Energy Act secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 223, 234, 274 (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2239, 2273, 2282, 2021); Energy Reorganization Act secs. 201, 202, 206, 211 (42 U.S.C. 5841, 5842, 5846, 5851); National Environmental Policy Act sec. 102 (42 U.S.C. 4332); Nuclear Waste Policy Act secs. 131, 132, 133, 135, 137, 141, 148 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168); Government Paperwork Elimination Act sec. 1704 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. 109–58, 119 Stat. 788 (2005).

Section 72.44(g) also issued under Nuclear Waste Policy Act secs. 142(b) and 148(c), (d) (42 U.S.C. 10162(b), 10168(c), (d)).

Section 72.46 also issued under Atomic Energy Act sec. 189 (42 U.S.C. 2239); Nuclear Waste Policy Act sec. 134 (42 U.S.C. 10154).

Section 72.96(d) also issued under Nuclear Waste Policy Act sec. 145(g) (42 U.S.C. 10165(g)).

Subpart J also issued under Nuclear Waste Policy Act secs. 117(a), 141(h) (42 U.S.C. 10137(a), 10161(h)).

Subpart K also issued under Nuclear Waste Policy Act sec. 218(a) (42 U.S.C. 10198).

■ 2. In § 72.214, Certificate of Compliance No. 1040 is revised to read as follows:

**§ 72.214 List of approved spent fuel storage casks.**

\* \* \* \* \*

Certificate Number: 1040.

Initial Certificate Effective Date: April 6, 2015.

Amendment No. 1 Effective Date: September 8, 2015.

SAR Submitted by: Holtec International, Inc.

SAR Title: Final Safety Analysis Report for the Holtec International HI-STORM UMAX Canister Storage System.

Docket Number: 72–1040.

Certificate Expiration Date: April 6, 2035.

Model Number: MPC–37, MPC–89.

Dated at Rockville, Maryland, this 11th day of June, 2015.

For the Nuclear Regulatory Commission.

**Mark A. Satorius,**

*Executive Director for Operations.*

[FR Doc. 2015–15474 Filed 6–22–15; 8:45 am]

**BILLING CODE 7590–01–P**

**DEPARTMENT OF ENERGY**

**10 CFR Parts 429 and 431**

[Docket No. EERE–2014–BT–TP–0055]

RIN 1904–AD41

**Energy Conservation Program: Test Procedures for Commercial Prerinse Spray Valves**

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Notice of proposed rulemaking and announcement of public meeting.

**SUMMARY:** The U.S. Department of Energy (DOE) proposes to amend the test procedures for commercial prerinse spray valves to consider the latest version of the industry standard that is incorporated by reference and to consider a procedure for measuring the spray force. DOE also proposes to revise the definition of commercial prerinse spray valve and the current test procedure as they relate to various spray valves currently on the market, including those with multiple spray patterns. DOE does not believe the proposed changes will affect the measured water use. As part of this proposal, DOE is announcing a public meeting to collect comments and data on its proposal.

**DATES:** DOE will hold a public meeting on Tuesday, July 28, 2015 from 9:00 a.m. to 12:00 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See section V, “Public Participation,” for instructions and information concerning meeting attendance and webinar participation.

DOE will accept comments, data, and information regarding this proposed rulemaking before and after the public meeting, but no later than September 8, 2015. See section V, “Public Participation,” for details.

**ADDRESSES:** The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E–089, 1000 Independence Avenue SW., Washington, DC 20585.

Any comments submitted must identify the NOPR for test procedures for commercial prerinse spray valves, and provide docket number EERE–2014–BT–TP–0055 and/or Regulation Identifier Number (RIN) number 1904–AD41. Comments may be submitted using any of the following methods:

1. *Federal eRulemaking Portal:* [www.regulations.gov](http://www.regulations.gov). Follow the instructions for submitting comments.
2. *Email:* [SprayValves2014TP0055@ee.doe.gov](mailto:SprayValves2014TP0055@ee.doe.gov). Include the docket number

and/or RIN in the subject line of the message.

3. *Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies office, Mailstop EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a compact disk (CD), in which case it is not necessary to include printed copies.

4. *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, 950 L’Enfant Plaza SW., Suite 600, Washington, DC 20024. Telephone: (202) 586–2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section V of this document (Public Participation).

**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](http://www.regulations.gov). All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

A link to the docket Web page can be found at: [www1.eere.energy.gov/buildings/appliance\\_standards/product.aspx/productid/54](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/54). This Web page will contain a link to the docket for this notice on the [www.regulations.gov](http://www.regulations.gov) site. The [www.regulations.gov](http://www.regulations.gov) Web page will contain simple instructions on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through [www.regulations.gov](http://www.regulations.gov).

**FOR FURTHER INFORMATION CONTACT:** Mr. James Raba, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–8654. Email: [jim.raba@ee.doe.gov](mailto:jim.raba@ee.doe.gov).

Ms. Johanna Hariharan, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–6307. Email: [Johanna.Hariharan@hq.doe.gov](mailto:Johanna.Hariharan@hq.doe.gov).

For further information about 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](mailto:Brenda.Edwards@ee.doe.gov).

**SUPPLEMENTARY INFORMATION:** DOE intends to incorporate by reference the following industry standards into 10 CFR part 431: ASTM Standard F2324–13, (“ASTM F2324–13”), “Standard Test Method for Prerinse Spray Valves”, approved June 1, 2013.

Copies of ASTM Standard F2324–13 can be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, or by going to <http://www.astm.org/Standard/standards-and-publications.html>.

For further discussion of this standard, see III.B and IV.M of this proposed rule.

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VI. Approval of the Office of the Secretary

## I. Authority and Background

Title III of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6291, *et seq.*; “EPCA” or, “the Act”) sets forth a variety of provisions designed to improve energy efficiency.<sup>1</sup> Part B of title III, which for editorial reasons was redesignated as Part A upon incorporation into the U.S. Code (42 U.S.C. 6291–6309, as codified), establishes the “Energy Conservation Program for Consumer Products Other Than Automobiles.” The Energy Policy Act of 2005, Public Law 109–58 (August 8, 2005) amended EPCA to add “Energy Conservation Standards For Additional Products,” which includes commercial prerinse spray valves (CPSV), and provided the definitions under 42 U.S.C. 6291(33), test procedures under 42 U.S.C. 6293(b)(14), and energy conservation standards for flow rate under 42 U.S.C. 6295(dd).

Under EPCA, this program consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy and water conservation standards, and (4) compliance certification and enforcement procedures. The testing requirements consist of test procedures that manufacturers of covered products must use as the basis for (1) certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA, and (2) making representations about the efficiency of those products. (42 U.S.C. 6293(c), 6295(s)) Similarly, DOE uses these test procedures to determine compliance with relevant standards established under EPCA.<sup>2</sup>

### General Test Procedure Rulemaking Process

Under 42 U.S.C. 6293, EPCA sets forth criteria and procedures that DOE is required to follow when prescribing or amending test procedures for covered products. EPCA provides in relevant

<sup>1</sup> All references to EPCA refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Public Law 112–210 (December 18, 2012).

<sup>2</sup> Because Congress included CPSV in Part A of Title III of EPCA, the consumer product provisions of Part A (not the industrial equipment provisions of Part A–1) apply to commercial prerinse spray valves. However, because commercial prerinse spray valves are more commonly considered to be commercial equipment, as a matter of administrative convenience and to minimize confusion among interested parties, DOE adopted CPSV provisions into subpart O of 10 CFR part 431 [71 FR 71340, 71374 (Dec. 8, 2006)]. Part 431 contains DOE regulations for commercial and industrial equipment. The location of provisions within the CFR does not affect either their substance or applicable procedure, and DOE refers to CPSV as either “products” or “equipment.”

part that any test procedures prescribed or amended under this section shall be reasonably designed to produce test results which measure energy efficiency, energy use, or estimated annual operating cost of a covered product during a representative average use cycle or period of use and shall not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

In addition, if DOE determines that a test procedure amendment is warranted, it must publish proposed test procedures and offer the public an opportunity to present oral and written comments. (42 U.S.C. 6293(b)(2)) Finally, in any rulemaking to amend a test procedure, EPCA requires DOE to determine to what extent, if any, the proposed test procedure would alter the measured energy efficiency of any covered product as determined under the existing test procedure. (42 U.S.C. 6293(e)(1)) If DOE determines that the amended test procedure would alter the measured efficiency of a covered product, DOE must amend the applicable energy conservation standard accordingly. (42 U.S.C. 6293(e)(2))

EPCA, as amended, sets forth the current maximum flow rate of not more than 1.6 gallons per minute for commercial prerinse spray valves. (42 U.S.C. 6295(dd)) EPCA also requires DOE to use the American Society for Testing and Materials (ASTM) Standard F2324 as a basis for the test procedure for measuring flow rate. (42 U.S.C. 6293(b)(14))

In the December 8, 2006 final rule, DOE incorporated by reference ASTM Standard F2324–03 into regulatory text (10 CFR 431.263), and prescribed it as the uniform test method to measure flow rate of commercial prerinse spray valves under 10 CFR 431.264. 71 FR 71340, 71374. Later, on October 23, 2013, DOE incorporated by reference ASTM Standard F2324–03 (2009) for testing commercial prerinse spray valves, which updated the 2003 version. 78 FR 62970, 62980.

## II. Summary of the Notice of Proposed Rulemaking

In this notice of proposed rulemaking (NOPR), DOE proposes to update 10 CFR 431.264, “Uniform test method for the measurement of flow rate for commercial prerinse spray valves,” as follows:

(1) Incorporate by reference certain provisions (sections: 6.1–6.9, 9.1–9.5.3.2, 10.1–10.2.5, 10.3.1–10.3.8, and 11.3.1) of the current revision to the applicable industry standard—ASTM Standard F2324–13, “Standard Test Method for Prerinse Spray Valves”—

pertaining to flow rate and spray force measurement;

(2) Modify the current definition of the term “commercial prerinse spray valve,” and add definitions for the terms “normally-closed valve” and “spray force;”

(3) Modify the current test method for measuring flow rate to reference sections 10.1–10.2.5 and 11.3.1 of ASTM Standard F2324–13;

(4) Add a test method for measuring spray force that references sections 10.3.1–10.3.8 of ASTM Standard F2324–13;

(5) Add a requirement for measuring flow rate and spray force of each spray pattern for commercial prerinse spray valves with multiple spray patterns;

(6) Modify the rounding requirement for flow rate measurement and specify the rounding requirement for spray force measurement; and

(7) Modify the current CPSV sampling requirements to remove the provisions related to determining represented values where consumers would favor higher values.

DOE’s proposed actions are addressed in detail in section III of this NOPR.

### III. Discussion

The following sections focus on DOE’s proposed changes to the test procedure, including definitions, industry standards incorporated by reference, modifications to the test procedure, additional test measurements, rounding requirements, and certification and compliance requirements.

#### A. Definitions

In this document, DOE proposes to amend the existing definition for commercial prerinse spray valve and add definitions for the terms “normally closed valve” and “spray force.” A detailed discussion of these terms follows.

##### 1. Commercial Prerinse Spray Valve

According to EPCA, a commercial prerinse spray valve is a handheld device designed and marketed for use with commercial dishwashing and ware washing equipment that sprays water on dishes, flatware, and other food service items for the purpose of removing food residue before cleaning the items. (42 U.S.C. 6291(33)(A), 10 CFR 431.262) EPCA allows DOE to modify the CPSV definition to include products: (1) That are used extensively in conjunction with commercial dishwashing and ware washing equipment; (2) to which the application of standards would result in significant energy savings; and (3) to which the application of standards

would not be likely to result in the unavailability of any covered product type currently available on the market. 42 U.S.C. 6291(33)(B) EPCA also allows DOE to modify the CPSV definition to exclude products: (1) That are used for special food service applications; (2) that are unlikely to be widely used in conjunction with commercial dishwashing and ware washing equipment; and (3) to which the application of standards would not result in significant energy savings.

As a companion to this test procedure rulemaking, on September 11, 2014, DOE published in the **Federal Register** a notice of public meeting and availability of the Framework document to initiate a rulemaking to consider amending the energy conservation standards for commercial prerinse spray valves. 79 FR 54213 (Sept. 11, 2014).<sup>3</sup> In the Framework document, DOE explained that it was considering modifying the CPSV definition to change the scope of the products subject to regulation. (Framework document, pp. 2–3) DOE received several comments in response to the Framework document about potential modifications to the current CPSV definition.

Alliance for Water Efficiency (AWE) commented that prerinse spray valves are used in non-prerinse activities (*e.g.*, supermarket vegetable displays, pet grooming, etc.), and suggested that non-prerinse applications be considered separately from the current CPSV rulemaking. (Docket No. EERE–2014–BT–STD–0027, AWE, No. 8 at p. 2) Similarly, T&S Brass and Bronze Works, Inc. (T&S Brass) commented that the CPSV definition should remain specific to the commercial applications currently defined, noting that similar equipment used in non-CPSV applications may not satisfy CPSV performance requirements. (Docket No. EERE–2014–BT–STD–0027, T&S Brass, No. 12 at p. 2) As discussed in the following paragraphs, DOE is proposing to modify the CPSV definition to redefine the scope of coverage for equipment used in conjunction with commercial dishwashing and ware washing, as authorized under 42 U.S.C. 6291(33)(B).

EPCA’s definition includes three key elements: “a handheld device,” “sprays water,” and “purpose of removing food residue.” Consider a commercial

dishwasher, which might spray water on items that are placed inside for the purpose of removing food residue. This would not be covered under this definition because it is not a handheld device. Only a handheld device that sprays water for the purpose of removing food residue before cleaning the items would be covered.

DOE has observed the existence of products distributed in U.S. commerce with brochures describing them as “prerinse spray” or “prerinse spray valve,” and that are marketed (often by third parties) to rinse dishes before washing, to make a difference in washing dirty dishes, to pre-rinse items in a dish room in preparation for running them through a commercial dishwasher, or to be used with pre-rinse assemblies and/or as ware washing equipment. DOE has also observed products marketed as “pull-down kitchen faucet” or “commercial style prerinse,” which generally speaking are handheld devices that can be used for commercial dishwashing or ware washing regardless of installation location. DOE proposes to modify the definition such that these categories of products would meet the definition of commercial prerinse spray valve and would be subject to the associated regulations. Installation location is not a factor in determining whether a given model meets the definition of commercial prerinse spray valve. Although DOE understands that manufacturers may market different categories of prerinse spray valves for various uses such as cleaning floors or walls or filling glasses, DOE proposes that any such device that is suitable for use in conjunction with commercial dishwashing and ware washing equipment to spray water for the purpose of removing food residue, falls within the CPSV definition. This also includes commercial prerinse spray valves with multiple spray patterns.

However, spray valves used only for other purposes, such as spray valves designed and marketed for use only in cleaning custodial materials or washing walls and floors would not be covered under the definition of commercial prerinse spray valves, if they are not suitable for using in conjunction with dishwashing or ware washing equipment to remove food residue.

Therefore, after reviewing the current CPSV definition and products currently being distributed in the market as appropriate for dishwashing and ware washing applications, DOE is proposing to replace the phrase “designed and marketed for use” with the phrase “suitable for use.” DOE believes products that are intended for and/or

<sup>3</sup> See Notice of Public Meeting and Availability of Framework document, 79 FR 54213 (Sept. 11, 2014). See also Docket No. EERE–2014–BT–STD–0027, Framework document, No. 1, available at [www.regulations.gov/contentStreamer?objectId=0900006481864b06&disposition=attachment&contentType=pdf](http://www.regulations.gov/contentStreamer?objectId=0900006481864b06&disposition=attachment&contentType=pdf) (hereinafter “Framework document”).



actually are used to remove food residue in dishwashing and ware washing applications should be subject to DOE standards and certification requirements even if they are marketed without the term “commercial dishwashing and ware washing equipment.”

DOE also reviewed the prerinse spray valve definition in ASTM Standard F2324–13, which defines the term “prerinse spray valve” as “a handheld device containing a release to close mechanism [*sic*] that is used to spray water on dishes, flatware, etc.” DOE believes that the “release-to-close” mechanism included in the ASTM definition means a manually actuated, normally closed valve. DOE believes that this is a typical feature of commercial prerinse spray valves. DOE has considered whether to include this feature in the definition or whether this would then create a market-incentive to create commercial prerinse spray valves that do not normally, fully, close. If DOE were to include this feature in the definition, DOE prefers the term “normally closed,” because it refers to a physical characteristic of the internal valve within a CPSV, which is intrinsic to its operation; whereas, “release-to-close” refers to a manual action required to operate a CPSV, which could create ambiguity when considering a CPSV with an atypical design for manually activating the spray valve. Therefore, DOE, in the alternative, proposes to include the term “normally closed” in an amended CPSV definition.

In summary, DOE proposes to define “commercial prerinse spray valve” as “a handheld device suitable for use with commercial dishwashing and ware washing equipment for the purpose of removing food residue before cleaning the items.” In the alternative, DOE would consider defining “commercial prerinse spray valve” as “a handheld device containing a normally closed valve that is suitable for use with commercial dishwashing and ware washing equipment for the purpose of removing food residue before cleaning the items.”

DOE preliminarily concludes that this proposed definition would satisfy the requirements at 42 U.S.C. 6291(33)(B) because (1) the products covered by this definition are used extensively in conjunction with commercial dishwashing and ware washing equipment; (2) the application of standards to such products would result in significant energy savings; and (3) the application of standards to such products would not be likely to result in the unavailability of any covered product type currently available on the

market.<sup>4</sup> To the extent that the definition change would change the scope of products subject to standards, DOE proposes that any products that would be newly within the scope of coverage would be subject to standards concurrent with the compliance date of any standards established or revised in the companion standards rulemaking proceeding currently underway. DOE seeks comment on the potential for an expanded scope of coverage resulting from this proposed definition and, should DOE determine that additional products would be subject to standards, DOE would include regulatory text in a final rule in this proceeding making clear that expanded scope and the future compliance date.

DOE invites comments from interested parties about this proposed definition. See section V.E.1.a of this NOPR.

## 2. Normally-Closed Valve

If DOE were to adopt a definition of commercial prerinse spray valve that included the term “normally-closed valve,” DOE would also add a definition of the term “normally-closed valve.” In the ASTM Standard F2324–13 definition of a commercial prerinse spray valve, the phrase “. . . containing a release to close mechanism. . .” is included. DOE believes that a release to close mechanism is a common feature of commercial prerinse spray valves that is better described by the term “normally-closed valve.” Unlike the term “release-to-close,” the term “normally-closed valve” is more commonly used in hydraulic engineering and characterizes the valve itself, rather than the actuation mechanism.

Therefore, DOE proposes to define “normally-closed valve” as “a valve that opens when an external force is exerted upon it and automatically closes when the external force is removed.”

DOE invites comments about the proposed definition. See section V.E.1.b of this NOPR.

## 3. Spray Force

In this NOPR, DOE also proposes to add a definition for the term “spray force.” Currently, all commercial prerinse spray valves belong to one product class and are subject to a single standard. (10 CFR 431.266) As part of the ongoing CPSV standards rulemaking (Docket No. EERE–2014–BT–STD–0027), DOE is considering whether to

retain the single product class or to establish separate product classes, in view of the statutory criteria in 42 U.S.C. 6295(o)(4) and (q). (Framework document, pp. 17–18)

In particular, DOE is considering using spray force to delineate potential product classes when proposing flow rate standards. As addressed earlier, DOE proposes to incorporate by reference ASTM Standard F2324–13, which prescribes a test method for measuring spray force.

ASTM Standard F2324–13 amends ASTM Standard F2324–03 (2009), in part, by replacing the cleanability test with a spray force test. As previously mentioned, DOE proposes in this NOPR to incorporate by reference ASTM Standard F2324–13 and to add spray force testing to the test procedure both to be consistent with current industry practice and support potential amended CPSV standards. The term “spray force” is defined in ASTM Standard F2324–13 as “the amount of force exerted onto the spray disc.” DOE proposes to adopt this definition. Water measurements for force typically use kilogram-force. However, kilograms are not a common unit of measurement in the United States and are too large for the spray force exerted by a CPSV. In addition, ASTM Standard F2324 uses ounce-force. Thus, DOE proposes to specify this measurement unit.

DOE invites comments about the proposed definition. See section V.E.1.c of this NOPR.

## B. Industry Standards Incorporated by Reference

EPCA prescribes that the test procedure for measuring flow rate for commercial prerinse spray valves be based on ASTM Standard F2324, “Standard Test Method for Pre-Rinse Spray Valves.” (42 U.S.C. 6293(14)) Pursuant to this statutory requirement, DOE incorporated by reference ASTM Standard F2324–03 in a final rule published on December 8, 2006. 71 FR 71340, 71374. DOE last updated its CPSV test procedure to reference the updated ASTM Standard F2324–03 (2009) in a final rule published on October 23, 2013. 78 FR 62970, 62980.

EPCA directs the Secretary of Energy to review test procedures for all covered products at least once every 7 years, and either to (1) amend a test procedure if the Secretary determines that the amended test procedure would more accurately or fully produce test results which measure energy efficiency, energy use, water use, or estimated annual operating cost during a representative average use cycle, and shall not be unduly burdensome to

<sup>4</sup> The analyses of the energy savings potential of standards and the impact of standards on the availability of any covered product type currently on the market are being conducted as part of DOE’s concurrent energy conservation standards rulemaking for commercial prerinse spray valves.



conduct; or (2) publish a notice in the **Federal Register** of any determination not to amend a test procedure. (42 U.S.C. 6293(b)(1)(A))

In 2013, ASTM amended Standard F2324–03 (2009) to replace the cleanability test with a spray force test, based on research conducted by the U.S. Environmental Protection Agency’s (EPA’s) WaterSense® program.<sup>5</sup> Where the cleanability test evaluated cleaning time of a standard dinner plate, the current ASTM Standard F2324–13 prescribes spray force, measured in ounce-force (ozf).<sup>6</sup> In addition, where ASTM Standard F2324–03 (2009) required measuring the prerinse spray valve flow rate at water pressures of both 60 ± 1 pounds per square inch (psi) and 60 ± 2 psi (in sections 4.2 and 10.2.2, respectively), ASTM Standard F2324–13 requires measuring commercial prerinse spray valve flow rate only at 60 ± 2 psi.

In that rulemaking, DOE received a number of comments related to the test procedure in response to the September 2014 Framework document. A joint comment submitted by the Natural Resources Defense Council (NRDC), Appliance Standards Awareness Project (ASAP), and Alliance to Save Energy (ASE) (collectively referred to as “Advocates”) expressed concern that commercial prerinse spray valves designed “to the test” to meet efficiency standards at 60 psi may perform below

user expectations at locations where only 40 or 35 psi is available. (Docket No. EERE–2014–BT–STD–0027, Advocates, No. 11 at p. 2)<sup>7</sup> Similarly, AWE suggested that 50 percent of all DOE testing of commercial prerinse spray valves be conducted on food service installations, to account for various supply pressures. (Docket No. EERE–2014–BT–STD–0027, AWE, No. 8 at p. 4). Nevertheless, AWE also supported use of the ASTM Standard F2324–13 test procedure and testing at a supply pressure of 60 psi. (Docket No. EERE–2014–BT–STD–0027, AWE, No. 8 at p. 2)

DOE understands that supply pressures vary across the country. Some pressures are lower and some are higher than the 60 psi test pressure prescribed in ASTM Standard F2324–13. Limited research by DOE suggests that supply pressures vary at the municipal level across the nation, and at the facility level within a building. Typical range of acceptable water pressure is between 35 psi to 80 psi.<sup>8</sup> DOE also notes that facilities in a field study conducted by WaterSense in support of their specification for commercial prerinse spray valves showed a pressure range between 38 psi and 83 psi.<sup>10</sup>

DOE understands that supply pressures affect the flow rate of a commercial prerinse spray valve once installed. Typically, lower pressures result in lower flow rates of the

commercial prerinse spray valves, and higher pressures result in higher flow rates. Nevertheless, testing at a single specific supply pressure to demonstrate compliance with the maximum allowable flow rate would enable a user to compare different commercial prerinse spray valves at this pressure, thus reducing testing burden. DOE has also reviewed the American Society of Mechanical Engineers (ASME) Standard A112.18.1–2012, “Plumbing Supply Fittings,” which contains testing parameters for other plumbing products, such as faucets and showerheads, and found that it requires testing at lower supply pressures only when determining a minimum flow rate. In contrast, ASTM Standard F2324–13 prescribes the commercial prerinse spray valve flow rate to be measured at a supply pressure of 60 ± 2 psi to determine only the maximum flow rate. DOE proposes to test commercial prerinse spray valves at a flowing supply pressure of 60 ± 2 psi, as required by ASTM Standard F2324–13.

DOE has also identified other differences between ASTM Standard F2324–03 (2009) and ASTM Standard F2324–13, which include: (1) Minimum flow rate of flex tubing, (2) water temperature for testing, and (3) length of water pipe required to be insulated. Table III.1 summarizes changes between ASTM Standard F2324–03 (2009) and 2013 that apply to DOE’s test procedure.

TABLE III.1—CHANGES TO ASTM STANDARD F2324

	ASTM Standard F2324–2003 (2009)	ASTM Standard F2324–2013
Flow rate of flex tubing .....	7 gpm .....	3.5 gpm.
Water temperature for testing	120 ± 4 °F .....	60 ± 10 °F.
Length of water pipe to be insulated.	Any insulation to have a thermal resistance (R) of 4 °F × ft <sup>2</sup> × h/Btu for the entire length of the water pipe, from the mixing valve to the inlet of the flex tubing.	No requirement.

Section 9.1 of ASTM Standard F2324–13 reduced the minimum required flow rate of the flex tubing when no commercial prerinse spray valve is connected from 7 gpm to 3.5 gpm. ASTM Standard F2324–13 includes a note (#3) that a minimum flow rate for the tubing is specified to prevent the flexible tubing from dictating the flow

rate of the prerinse spray valve. The required flow rate for commercial prerinse spray valves under 10 CFR 431.266 is less than the flow rate of the flex tubing specified in the ASTM standards. Therefore, because the test procedure measures the flow rate of the commercial prerinse spray valve, which is connected after the tubing, the flow

rate of the tubing should not affect the measurement of the flow rate of the commercial prerinse spray valve. DOE believes that the flex tubing flow rate change from 7 gpm to 3.5 gpm (ATSM Standard F2324–2003 (2009) and 2013, respectively) will have no effect on the measured water consumption under the DOE test procedure. Accordingly, DOE

<sup>5</sup> EPA WaterSense program, September 19, 2013. WaterSense Specification for Commercial Pre-Rinse Spray Valves Supporting Statement, Version 1.0. (see: [www.epa.gov/watersense/partners/prsv\\_final.html](http://www.epa.gov/watersense/partners/prsv_final.html)).

<sup>6</sup> The cleanability test and its results were not repeatable and reproducible. There also was low user satisfaction with valves that scored well on the cleanability test. Users indicated that spray force may be a better metric for assessing product effectiveness.

<sup>7</sup> A notation in this form provides a reference for information that is in the docket of DOE’s rulemaking to develop energy conservation standards for commercial prerinse spray valves (Docket No. EERE–2014–BT–STD–0027), which is maintained at [www.regulations.gov](http://www.regulations.gov). This notation indicates that the statement preceding the reference is document number 11 in the docket for the CPSV energy conservation standards rulemaking, and appears at page 2 of that document.

<sup>8</sup> Friedman et al. 2010. *Criteria for Optimized Distribution Systems*. Water Research Foundation. Denver, CO.

<sup>9</sup> International Association of Plumbing and Mechanical Officials. *Uniform Plumbing Code*. 2012. Ontario, Canada.

<sup>10</sup> U.S. Environmental Protection Agency’s (EPA’s) WaterSense Program. *Pre-Rinse Spray Valves Field Study Report*. 2011. pp. 16–17. [http://www.epa.gov/watersense/docs/final\\_epa\\_prsv\\_study\\_report\\_033111v2\\_508.pdf](http://www.epa.gov/watersense/docs/final_epa_prsv_study_report_033111v2_508.pdf).

proposes to adopt section 9.1 of ASTM Standard F2324–13 for a 3.5 gpm flow rate for flex tubing when not connected to the CPSV.

ASTM Standard F2324–03 (2009) required the water temperature for testing to be  $120 \pm 4$  °F. ASTM Standard F2324–13 reduces to 60 °F with an increased tolerance of  $\pm 10$  °F. DOE believes that this difference may reflect removal of the cleanability test because water temperature affects cleanability under the old approach/standard but not measuring force under the new approach/standard. DOE's research indicates that measurements of flow rate and spray force will be the same under either water temperature. Because the temperature will not affect these measurements, DOE proposes to incorporate the temperature requirements from ASTM Standard F2324–13 (section 10.2.2) into the DOE test procedure for commercial prerinse spray valves.

Additionally, ASTM Standard F2324–13 removes the ASTM Standard F2324–03 (2009) requirement for any insulation to have a thermal resistance (R) of  $4 \text{ °F} \times \text{ft}^2 \times \text{h/Btu}$  for the entire length of the water pipe, from the mixing valve to the inlet of the flex tubing. ASTM Standard F2324–03 required using 120 °F water; however, ASTM Standard F2324–13 requires using 60 °F water. DOE believes ASTM removed the insulation requirement in 2013 in conjunction with the water temperature reduction because the insulation is unnecessary when the test water temperature is 60 °F. Insulating the water pipe from the mixing valve to the inlet of the flex tubing is not required with 60 °F water because the water is below room temperature. DOE believes that removing the requirement to insulate the water pipe will have no effect on the measurement of either the flow rate or spray force because insulation only affects temperature, not water flow rate. DOE thus proposes to adopt the change not to require insulation.

Finally, Section 4.1 Summary of Test Method, of ASTM Standard F2324–13 states, "If the measured flow rate is not within 5 percent of the rated flow rate, all further testing ceases and the manufacturer is contacted. The manufacturer may make appropriate changes or adjustments to the prerinse spray valve." DOE notes that it is not incorporating this section of ASTM Standard F2324–13 into the DOE test procedure.

In view of all the above, to align with current industry practice and to be consistent with test procedure requirements under EPCA, DOE proposes to incorporate by reference the

following sections of ASTM Standard F2324–13: 6.1–6.9, 9.1–9.5.3.2, 10.1–10.2.5, 10.3.1–10.3.8, and 11.3.1 (replacing the plural "nozzles" with "nozzle"), and excluding references to the "Annex." When ASTM Standard F2324–03 (2009) was updated to the current 2013 version, certain sections for measuring flow rate were renumbered. To reflect this renumbering, DOE is proposing to update the current flow rate test method to reference the appropriate sections of ASTM Standard F2324–13. The referenced sections describe the testing apparatus, test method, and calculations pertaining to flow-rate measurement.

### C. Proposed Additional Test Methods

#### 1. Adding Test Method To Measure Spray Force

As described previously, ASTM Standard F2324–13 includes a test for measuring the spray force of a commercial prerinse spray valve. The test is conducted by mounting a 10-inch rigid disc to a force gauge, located eight inches from the prerinse spray valve, as shown in Figure 4 in section 9.5.2 of ASTM Standard F2324–13. The plate is mounted in a vertical orientation parallel to the face of the commercial prerinse spray valve. After water flow is initiated, the water exits the commercial prerinse spray valve and strikes the disc, creating a force on the disc, which in turn depresses the force gauge. The average force gauge measurement over a 15-second period is recorded.

During the September 30, 2014 Framework public meeting regarding the energy conservation standards for commercial prerinse spray valves, DOE invited comment on using spray force as a potential characteristic by which to separate product classes (Framework document, pp.17–18; Docket No. EERE–2014–BT–STD–0027, Public Meeting Transcript, No. 6 at p.38). DOE also invited comments about an alternative metric for spray force, gallons per minute divided by ounce-force (gpm/ozf). (Framework Document, p. 3)

Comments from interested parties during the Framework public meeting, comments submitted to the EPA WaterSense program, and other research by DOE indicate that spray force is an important characteristic in defining the performance of a commercial prerinse spray valve because it relates to the product's application and user satisfaction. During the Framework public meeting, T&S Brass stated that the maximum technologically feasible model (max-tech model) performance should not be evaluated solely based on flow rate, but should include at least

one other variable. T&S Brass mentioned that, depending on application, spray force is a characteristic that is considered when determining commercial prerinse spray valve performance. (Docket No. EERE–2014–BT–STD–0027, T&S Brass, Public Meeting Transcript, No. 6 at p.52)

DOE also found through research that spray force is related to the utility of commercial prerinse spray valves.<sup>11</sup> For example, a high spray force is required to clean heavy stains, such as baked-on foods, from silverware, dishes, pots, and pans. By contrast, a commercial prerinse spray valve with lower spray force may be sufficient for food service establishments where baked-on foods are less common. T&S Brass stated that applications of commercial prerinse spray valves range from light rinsing to heavy-duty cleaning. Heavy-duty cleaning applications require more spray force than light rinsing. (Docket No. EERE–2014–BT–STD–0027, T&S Brass, Public Meeting Transcript, No. 6 at p. 40–41)

Spray force also is important because a WaterSense field study found that low water pressure, or spray force, is a source of user dissatisfaction. WaterSense evaluated 14 commercial prerinse spray valve models and collected 56 customer satisfaction reviews, of which nine were unsatisfactory. Seven of the nine unsatisfactory scores were attributed, among other factors, to the pressure (here, the subjective, user-perceived force) of the spray.<sup>12</sup> DOE, however, proposes to measure spray force objectively, as in ASTM Standard F2324–13.

In summary, spray force is a characteristic essential to evaluating the performance of commercial prerinse spray valves because there is a relationship between spray force and both the application of a commercial prerinse spray valve and user satisfaction. As a result, DOE proposes to incorporate by reference the spray force test method contained in sections 10.3.1–10.3.8 of ASTM Standard F2324–14 into the DOE commercial prerinse spray valve test procedure. DOE seeks

<sup>11</sup> EPA WaterSense. Response to Public Comments Received on February 2013 *WaterSense Draft Specification for Commercial Pre-Rinse Spray Valves*, 5–7. September 19, 2013. United States Environmental Protection Agency [http://www.epa.gov/watersense/docs/prsv\\_finalspec\\_publiccommentresponse\\_09.19.13\\_final\\_508.pdf](http://www.epa.gov/watersense/docs/prsv_finalspec_publiccommentresponse_09.19.13_final_508.pdf) (accessed May. 20, 2015).

<sup>12</sup> EPA WaterSense. *Pre-Rinse Spray Valves Field Study Report*, pages 24–25. March 31, 2011. United States Environmental Protection Agency [www.epa.gov/watersense/docs/final\\_epa\\_prsv\\_study\\_report\\_033111v2\\_508.pdf](http://www.epa.gov/watersense/docs/final_epa_prsv_study_report_033111v2_508.pdf) (accessed Oct. 31, 2014).

comment on the addition of the spray force test method. See section V.E.2 of this NOPR.

## 2. Multiple Spray Patterns: Adding a Requirement To Measure Flow Rate and Spray Force of Each Spray Pattern

DOE has identified several commercial prerinse spray valves on the market with multiple spray patterns. On average, these prerinse spray valves provide up to three spray patterns. DOE's research showed a maximum number of five spray patterns for commercial prerinse spray valves. Each spray pattern is obtained by turning the adjustable spray head to select one of the available spray patterns at a time.

For these commercial prerinse spray valves, each spray pattern can be used in distinct prerinsing applications. The applications range from washing off baked-on food to light washing, as each spray pattern can provide different flow rates and spray forces.

Because a commercial prerinse spray valve with multiple spray patterns can give different flow rates and spray forces, DOE proposes to test each spray pattern using the flow rate and spray force test methods described in sections III.B and III.C.1, respectively. Additionally, section 10.3.7 from ASTM Standard F2324–13, which is incorporated by reference in this NOPR, also specifies that force shall be tested for each mode (*i.e.* spray pattern). DOE seeks comment about whether manufacturers should be required to test commercial prerinse spray valves with multiple spray patterns in all spray pattern modes. See section V.E.3 of this NOPR.

## D. Rounding Requirements

### 1. Flow Rate

DOE proposes to change the rounding requirements for recording flow rate measurements from one decimal place to two decimal places. Currently, 10 CFR 431.264(b) requires rounding to one decimal place. However, the current WaterSense standard for commercial prerinse spray valves is rounded to two decimal places (1.28 gpm).<sup>13</sup> DOE believes that rounding to one decimal place is insufficiently precise for the low magnitude flow rate measurements that may be needed for the forthcoming energy conservation standard. Therefore, DOE proposes to amend the flow rate measurement rounding requirements to two decimal places.

### 2. Spray Force

Section 11.4.2 of the ASTM Standard F2324–13 specifies that the spray force is rounded to one decimal place. DOE proposes to adopt the same spray force rounding requirements (*i.e.*, one decimal place) in newly created 10 CFR 431.264(b)(2).

DOE seeks comment about the proposed rounding requirements for flow rate and spray force. See section V.E.4 of this NOPR.

## E. Certification, Compliance, and Enforcement

### 1. Selection of Units to Test

DOE proposes to retain the existing CPSV sampling plan at 10 CFR 429.51(a). CPSV testing is subject to DOE's general certification regulations at 10 CFR 429.11. These require a manufacturer to randomly select and test a sample of sufficient size to ensure that the represented value of water consumption adequately represents performance of all of the units within the basic model, but no fewer than two units. 429.11(b). The purposes of these requirements are to achieve a realistic representation of the water consumption of the basic model and to mitigate the risk of noncompliance, without imposing undue test burden.

Section 8.1 of ASTM Standard F2324–13 requires three representative production units to be selected for all performance testing. DOE is not proposing to adopt this requirement. DOE is only proposing to adopt the testing methodology (*i.e.*, applicable to testing of a unit)—not the rating methodology (*i.e.*, applicable to a basic model)—found in ASTM Standard F2324–13. Accordingly, where ASTM Standard F2324–13 references testing of multiple units, DOE proposes to incorporate by reference the standard subject to the limitation that the DOE test procedure applies to testing of one unit in each sample set (*e.g.*, product class).

### 2. Representative Value Formula

DOE proposes to revise the statistical methods for certification, compliance, and enforcement for commercial prerinse spray valves in 10 CFR 429.51(a)(2). Currently, 10 CFR 429.51(a)(2)(i) and (ii) provide that for any represented value of water consumption of a basic model for which consumers would favor lower values, the upper confidence level (UCL) is used and where consumers would favor higher values, the lower confidence limit (LCL) is used. Where the standard for commercial prerinse spray valves is expressed as a maximum rate of water

consumption (gpm) rather than water efficiency, customers would favor a lower value. Therefore, the LCL formula in 10 CFR 429.51(a)(2)(ii) is unnecessary. DOE proposes to remove the LCL formula from the sampling plan for the selection of units for testing and retain only the provision for a UCL under 10 CFR 429.51(a)(2)(i). DOE seeks comment about amending 10 CFR 429.51(a)(2)(ii) by removing the formula for LCL. See section V.E.5 of this NOPR.

## F. Effective and Compliance Date

In view of the above, any amendments to the commercial prerinse spray valve test procedure, under 10 CFR 431.264, would become effective 30 days after the date of the final rule. Representations would be required to be based on the amended test procedure 180 days after the effective date.

## IV. Procedural Issues and Regulatory Review

### A. Review Under Executive Order 12866

The Office of Management and Budget (OMB) has determined that test procedure rulemakings do not constitute “significant regulatory actions” under section 3(f) of Executive Order 12866, Regulatory Planning and Review, 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review by the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget.

### 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 DOE 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>.

The potential burden on manufacturers related to commercial prerinse spray valves has been analyzed in previous rules. The following analysis is informed by previous rules, but also includes additional analysis.

<sup>13</sup> U.S. Environmental Protection Agency's (EPA's) WaterSense program, September 9, 2013. WaterSense Specification for Commercial Pre-Rinse Spray Valves Supporting Statement, Version 1.0.

When the DOE test procedure was initially adopted in 2006, the test procedure was identical to ENERGY STAR's test procedure. DOE stated in the 2006 test procedure final rule that many manufacturers had been redesigning the products covered under that final rule. These products were tested for compliance with existing voluntary performance standards such as ENERGY STAR program requirements, using industry-developed test procedures that were the basis for the test procedures in the Energy Policy Act of 2005 (EPA Act 2005). DOE stated that manufacturers would experience no additional burdens if DOE adopted the test procedure (ASTM Standard F2324–03) referenced in EPA Act 2005. 71 FR 71340, 71363 (Dec. 8, 2006). In the final rule that last updated DOE's test procedure, DOE did not adopt any changes to the referenced test procedure, thus DOE determined that there was no incremental cost burden to manufacturers of commercial prerinse spray valves. 78 FR 62970, 62983 (Oct. 23, 2013). Historically, when DOE has adopted the industry's test procedure, it has not resulted in any incremental cost burden to manufacturers of commercial prerinse spray valves.

For this proposed rule, DOE made inquiry into small business manufacturers of commercial prerinse spray valves. In its market assessment, DOE used public information to identify potential small manufacturers. DOE reviewed the Department of Energy Compliance Database, individual company Web sites, and various marketing research tools (e.g., Dun and Bradstreet reports, Manta) to create a list of companies that import or otherwise manufacture commercial prerinse spray valves covered by this rulemaking.<sup>14</sup> DOE identified 11 distinct manufacturers of commercial prerinse spray valves—the smallest business had two employees and the largest had 237 employees.

In view of the collected data, DOE considered what manufacturers met the Small Business Administration's (SBA's) definition of the term "small business" as it relates to the North American Industry Classification System (NAICS) code 332919 (SBA sets the size standard of 500 or fewer employees),<sup>15</sup> and to screen out (1)

companies that do not offer commercial prerinse spray valves covered by this rulemaking, (2) do not meet the definition of the term "small business," or (3) are foreign owned and operated. As a result of its review, DOE identified eight manufacturers that would be considered small businesses. The number of small businesses and the applicable NAICS code 332919 are consistent with the Certification, Compliance, and Enforcement final rule at 76 FR 12422, 12488 (March 7, 2011). Thus, DOE has determined that amending the test procedures under 10 CFR 431.264 would have minimal, if any, effect on covered small businesses, and that an IRFA was not needed.

Table IV.1 lists the eight small businesses covered by this proposed rulemaking, according to the number of employees. DOE estimated that the average revenue per small business is approximately \$21 million and the combined total annual revenues associated with these small businesses is about \$124 million. Further, DOE analyzed the CPSV industry to determine what manufacturers would be covered under a test procedure rulemaking, and determined that 8 of the 11 CPSV manufacturers, or 72 percent, may qualify as a "small business" under SBA classification guidelines.

TABLE IV.1—SMALL BUSINESS SIZE BY NUMBER OF EMPLOYEES

Number of employees	Number of small businesses	Percentage of small businesses
1–10 .....	1	12.5
21–30 .....	1	12.5
31–40 .....	1	12.5
41–50 .....	2	25
61–70 .....	1	12.5
101–150 .....	2	25

DOE estimated the labor burden associated with testing, in view of the 2012 (most recent) median annual pay for (1) environmental engineering technicians (\$45,350), (2) mechanical engineering technicians (\$51,980), and (3) plumbers, pipefitters, and steamfitters (\$49,140) for an average annual salary of \$48,823.<sup>16 17</sup> DOE

*Standards Table.pdf* (last accessed February 13, 2015).

<sup>16</sup> U.S. Department of Labor Bureau of Labor Statistics. *Occupational Outlook Handbook, Architecture and Engineering*. [www.bls.gov/ooh/Architecture-and-Engineering/home.htm](http://www.bls.gov/ooh/Architecture-and-Engineering/home.htm) (last accessed November 4, 2014).

<sup>17</sup> U.S. Department of Labor Bureau of Labor Statistics. *Occupational Outlook Handbook, Construction and Extraction Occupations*. [www.bls.gov/ooh/construction-and-extraction/home.htm](http://www.bls.gov/ooh/construction-and-extraction/home.htm) (last accessed November 4, 2014).

divided the average by 1,920 hours per year (40 hours per week for 48 weeks per year) to develop an hourly rate of \$25.43. DOE adjusted the hourly rate by 31 percent to account for benefits, resulting in an estimated total hourly rate of \$33.31.<sup>18 19</sup> DOE used this hourly rate to assess the labor costs for testing units according to the proposed amendments to the test procedures.

Currently, 10 CFR 431.264 prescribes measurements for a flow rate, but does not address testing flow rate for commercial prerinse spray valves with multiple spray patterns. Instead, it requires testing to be repeated three times for the same unit. As such, DOE believes that testing could be completed in less than an hour per commercial prerinse spray valve. To assess the potential burden of the proposed amended test procedures, DOE rounds the current duration for testing up to a whole hour, for cases where the testing technician needs to document the results or cannot allot his or her labor hours. In view of the foregoing, DOE believes that the current testing process costs, on average, are \$66.62 for labor for a total of two basic models to meet the testing requirements of 10 CFR 429.11 and 429.51.

The proposed amendments to the test procedures include an additional test for spray force. DOE believes that the additional time required to test spray force is not significant but, understandably, the number of spray patterns could potentially increase any testing time. DOE's review of commercial prerinse spray valves yielded an average of three patterns per commercial prerinse spray valve. DOE estimates that the time to measure both flow rate and spray force for all three spray patterns to be greater than one hour but typically less than two hours. DOE again presumes that testing staff may not easily apportion their testing time between product, and rounds the total testing time to two hours per unit tested. Thus, DOE estimates the total labor time to test for two basic models of commercial prerinse spray valves each with multiple spray patterns to be \$133.24.<sup>20</sup>

<sup>18</sup> Obtained from the Bureau of Labor Statistics. *News Release: Employer Cost For Employee Compensation—December 2012*, December 2012. U.S. Department of Labor. [www.bls.gov/news.release/ecec.nr0.htm](http://www.bls.gov/news.release/ecec.nr0.htm).

<sup>19</sup> Additional benefits include paid leave, supplemental pay, insurance, retirement and savings, Social Security, Medicare, unemployment insurance, and workers compensation.

<sup>20</sup> *Basic model* means all units of a given type of covered product (or class thereof) manufactured by one manufacturer, having the same primary energy source, and which have essentially identical

Continued

<sup>14</sup> The Certification Database is part of DOE's Compliance Certification Management System. See [www.regulations.doe.gov/certification-data/](http://www.regulations.doe.gov/certification-data/) (last accessed November 10, 2014).

<sup>15</sup> U.S. Small Business Administration Table of Small Business Size Standards Matched to North American Industry Classification System Codes. See [www.sba.gov/sites/default/files/files/Size\\_](http://www.sba.gov/sites/default/files/files/Size_)

DOE examined the CPSV industry to identify the manufacturers of commercial prerinse spray valves covered in this NOPR, and determined that 72 percent of all CPSV manufacturers could be classified as small entities according to SBA classification guidelines. Although 72 percent of the market could be considered a significant portion of the overall industry, DOE believes that small manufacturers would not be substantially affected by the proposed amendments to the test procedure, because there would be no significant incremental costs to any entity. The cost of testing for each small business analyzed was less than or equal to 0.01 percent of revenue for a sample size of two commercial prerinse spray valves. The current industry standard used for commercial prerinse spray valves (ASTM Standard F2324–13) requires three representative production models be selected for performance testing. However, the DOE sample size of a minimum of two units remains unchanged with this proposed rule. Therefore, DOE concludes that the cost effects accruing from the proposed rule would not have a “significant economic impact on a substantial number of small entities,” and that the preparation of an IRFA is not warranted. DOE will submit a certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

DOE seeks comments about whether the proposed test procedure amendments would have a significant economic impact on a substantial number of small entities. See section V.E.6 of this NOPR.

#### *C. Review Under the Paperwork Reduction Act of 1995*

Manufacturers of commercial prerinse spray valves 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 commercial prerinse spray valves, 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 commercial prerinse spray valves. (76 FR 12422 (March 7, 2011)).

electrical, physical, and functional (or hydraulic) characteristics that affect energy consumption, energy efficiency, water consumption, or water efficiency. (10 CFR 431.262)

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*

In this proposed rule, DOE proposes test procedure amendments that it expects will be used to develop and implement future energy conservation standards for commercial prerinse spray valves. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE’s implementing regulations at 10 CFR part 1021. Specifically, this proposed rule would amend the existing test procedures without affecting the amount, quality or distribution of energy usage, and, therefore, would not result in any environmental impacts. Thus, this rulemaking is covered by Categorical Exclusion A5 under 10 CFR part 1021, subpart D, which applies to any rulemaking that interprets or amends an existing rule without changing the environmental effect of that rule. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

#### *E. Review Under Executive Order 13132*

Executive Order 13132, “Federalism,” 64 FR 43255 (Aug. 4, 1999) imposes certain requirements on 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 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(d)) No further action is required by Executive Order 13132.

#### *F. Review Under Executive Order 12988*

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” 61 FR 4729 (Feb. 7, 1996), 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. 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 sections 3(a) and 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, the 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 officers 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 small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at <http://energy.gov/gc/office-general-counsel>. DOE examined this proposed rule according to UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of \$100 million or more in any year, so these requirements do not apply.

### 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 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

DOE has determined, under Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights” 53 FR 8859

(March 18, 1988) that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

### J. Review Under 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 agencies to review most disseminations of information to the public under 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 proposed 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

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 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 promulgated 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 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.

This regulatory action to amend the test procedure for measuring the energy efficiency of commercial prerinse spray valves is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

### L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (FTC) concerning the impact of the commercial or industry standards on competition.

The proposed rule incorporates testing methods contained in the following commercial standards: ASTM F2324–13, Standard Test Method for Prerinse Spray Valves, sections 6.1–6.9, 9.1–9.5.3.2, 10.1–10.2.5, 10.3.1–10.3.8, 11.3.1 (replacing “nozzles” with “nozzle”), and disregarding references to the Annex. DOE has evaluated these standards and is unable to conclude whether they fully comply with the requirements of section 32(b) of the FEAA, (*i.e.*, that they were developed in a manner that fully provides for public participation, comment, and review). DOE will consult with the Attorney General and the Chairman of the FTC concerning the impact of these test procedures on competition prior to prescribing a final rule.

### M. Description of Materials Incorporated by Reference

In this NOPR, DOE proposes to incorporate by reference the test standard published by ASTM, titled, “Standard Test Method for Prerinse Spray Valves,” ASTM Standard F2324–2013. ASTM Standard F2324–2013 is an industry-accepted test procedure that measures water flow rate and spray force for prerinse spray valves, and is applicable to product sold in North America. ASTM Standard F2324–2013 specifies testing conducted in accordance with other industry accepted test procedures (already incorporated by reference). The test procedure proposed in this NOPR references various sections of ASTM Standard F2324–2013 that address test setup, instrumentation, test conduct, and calculations. ASTM Standard F2324–2013 is readily available at ASTM’s Web site at [www.astm.org/](http://www.astm.org/)

*Standard/standards-and-publications.html.*

## V. Public Participation

### A. Attendance at Public Meeting

The time, date, and location of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this document. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586–2945 or [Brenda.Edwards@ee.doe.gov](mailto: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. Any foreign national wishing to participate in the public meeting should advise DOE as soon as possible by contacting [foreignvisit@ee.doe.gov](mailto:foreignvisit@ee.doe.gov) to initiate the necessary procedures. Please also note that any person wishing to bring a laptop into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing laptops, or allow an extra 45 minutes. Persons may also attend the public meeting via webinar.

Because of the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding identification (ID) requirements for individuals wishing to enter Federal buildings from specific States and U.S. territories. As a result, driver's licenses from the following States or territory will not be accepted for building entry, and instead, one of the alternate forms of ID listed below will be required.

DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington. Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced Driver's License or Enhanced ID-Card issued by the States of Minnesota, New York or Washington (Enhanced licenses issued by these States are clearly marked Enhanced or Enhanced Driver's License); a military ID or other Federal government-issued Photo-ID card.

In addition, you can attend the public meeting via webinar. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's Web site [www1.eere.energy.gov/buildings/appliance\\_standards/product.aspx/productid/54](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/54). Participants are responsible for ensuring that their

systems are compatible with the webinar software.

### B. Procedure for Submitting Prepared General Statement for Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in portable document format (PDF) (preferred), Microsoft Word or Excel, WordPerfect, or text in American Standard Code for Information Interchange (ASCII) file format, to the appropriate address shown in the **ADDRESSES** section at the beginning of this document. 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 a follow-up contact, if needed.

### C. Conduct of 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 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. 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 not later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments using any of the methods described in the **ADDRESSES** section at the beginning of this proposed rule.

*Submitting comments via regulations.gov.* The [regulations.gov](http://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 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. 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 [regulations.gov](http://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



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.

DOE processes submissions made through regulations.gov before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that regulations.gov provides after you have successfully uploaded your comment.

*Submitting comments via email, hand delivery, or postal mail.* Comments and documents submitted via email, hand delivery, or postal mail also will be posted to regulations.gov. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English and free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

*Campaign form letters.* Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

*Confidential Business Information.* 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 via email, postal mail, or hand delivery two well-marked copies:

one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked non-confidential with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

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 by 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 which 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. Definitions Discussed and Proposed
  - a. Commercial Prerinse Spray Valve DOE seeks comments on its proposal to revise the definition of "commercial prerinse spray valve" in this NOPR; see section III.A.1.
  - b. Normally-Closed Valve DOE seeks comment on its tentative proposal to add a definition for "normally-closed valve" in this NOPR; see section III.A.2.
  - c. Spray Force DOE seeks comments on its proposal add the definition of "spray force" in this NOPR; see section III.A.3.
2. DOE seeks comment on the addition of the spray force test method; see section III.C.1.
3. Spray Patterns DOE seeks comment on whether manufacturers should be required to test commercial prerinse spray valves with multiple spray patterns in all spray pattern modes, see

section III.C.2.

4. DOE seeks comment on changing the flow rate measurement rounding requirements from one decimal place to two decimal places, see section III.D.
5. DOE seeks comment on the removal of 10 CFR 429.51(a)(2)(ii), see section III.E.
6. Small Entities DOE seeks comments on its reasoning that the proposed test procedures will not have a significant economic impact on a substantial number of small entities; see section IV.B.

#### **VI. Approval of the Office of the Secretary**

The Secretary of Energy has approved publication of this proposed rule.

#### **List of Subjects**

##### *10 CFR part 429*

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Reporting and recordkeeping requirements.

##### *10 CFR part 431*

Administrative practice and procedure, Confidential business information, Energy conservation test procedures, Incorporation by reference, and Reporting and recordkeeping requirements.

Issued in Washington, DC, on June 5, 2015.

**Kathleen B. Hogan,**

*Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.*

For the reasons stated in the preamble, DOE is proposing to amend parts 429 and 431 of Chapter II of Title 10, 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:

**Authority:** 42 U.S.C. 6291–6317.

- 2. In § 429.51, paragraph (a) is revised to read as follows:

##### **§ 429.51 Commercial prerinse spray valves.**

(a) *Sampling plan for selection of units for testing.* (1) The requirements of § 429.11 apply to commercial prerinse spray valves; and

(2) For each basic model of commercial prerinse spray valves, a sample of sufficient size must be



randomly selected and tested to ensure that any represented value of water consumption or other measure of water consumption of a basic model for which consumers would favor lower values must be greater than or equal to the higher of:

(i) The mean of the sample, where:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

and,  $\bar{x}$  is the sample mean;  $n$  is the number of samples; and  $x_i$  is the  $i$ th sample; Or,

(ii) The upper 95 percent confidence limit (UCL) of the true mean divided by 1.10, where:

$$UCL = \bar{x} + t_{.95} \left( \frac{s}{\sqrt{n}} \right)$$

and,  $\bar{x}$  is the sample mean;  $s$  is the sample standard deviation;  $n$  is the number of samples; and  $t_{.95}$  is the  $t$  statistic for a 95 percent two-tailed confidence interval with  $n-1$  degrees of freedom (from Appendix A of this subpart).

**PART 431—ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT**

■ 3. The authority citation for part 431 continues to read as follows:

**Authority:** 42 U.S.C. 6291–6317.

■ 4. Section 431.262 is revised to read as follows:

**§ 431.262 Definitions.**

*Basic model* means all units of a given type of covered product (or class thereof) manufactured by one manufacturer, having the same primary energy source, and which have essentially identical electrical, physical, and functional (or hydraulic) characteristics that affect energy consumption, energy efficiency, water consumption, or water efficiency.

*Commercial prerinse spray valve* means a handheld device, containing a normally-closed valve, suitable for use with commercial dishwashing and ware washing equipment for the purpose of removing food residue before cleaning the items.

*Normally-closed valve* means a valve that opens when an external force is exerted upon it and automatically closes when the external force is removed.

*Spray force* means the amount of force exerted onto the spray disc, measured in ounce-force (ozf).

■ 5. Section 431.263 is amended by revising paragraph (b)(1) to read as follows:

**§ 431.263 Materials incorporated by reference.**

\* \* \* \* \*

(b) \* \* \*

(1) ASTM Standard F2324–13, (“ASTM F2324–13”), Standard Test Method for Prerinse Spray Valves, approved June 1, 2013; IBR approved as follows, sections: 6.1–6.9, 9.1–9.5.3.2, 10.1–10.2.5, 10.3.1–10.3.8, and 11.3.1 (replacing “nozzles” with “nozzle”), excluding reference to the Annex, IBR approved for § 431.264.

\* \* \* \* \*

■ 6. Section 431.264 is revised to read as follows:

**§ 431.264 Uniform test method to measure flow rate and spray force of commercial prerinse spray valves.**

(a) *Scope.* This section provides the test procedure to measure the water consumption flow rate and spray force of a commercial prerinse spray valve.

(b) *Testing and Calculations.*—(1) *Flow rate.* Test a sample unit in accordance with the requirements of sections 6.1 through 6.9 (Apparatus) except 6.4 and 6.7, 9.1 through 9.4 (Preparation of Apparatus), and 10.1 through 10.2.5 (Procedure), and perform calculations in accordance with section 11.3.1 (Calculation and Report) of ASTM F2324–13, (incorporated by reference, see § 431.263). Disregard any references to the Annex. Record flow rate measurements at the resolutions of the test instrumentation. For the sample unit, calculate the mean of the flow rate measurements. Round the final value for flow rate to two decimal places.

(2) *Spray force.* Test each sample unit in accordance with the test requirements specified in sections 6.2 and 6.4 through 6.9 (Apparatus), 9.1 through 9.5.3.2 (Preparation of Apparatus), and 10.3.1 through 10.3.8 (Procedure) of ASTM F2324–13. Disregard any references to the Annex. Record spray force measurements at the resolution of the test instrumentation. For each sample unit, calculate the mean of the spray force measurements. Round the spray force to one decimal place.

(3) *Multiple spray patterns.* If a sample unit has multiple spray patterns, for each possible spray pattern:

(i) Measure both the flow rate and spray force according to paragraphs (b)(1) and (b)(2) of this section (including calculating the mean flow rate and spray force for each spray pattern); and

(ii) Record the mean flow rate for each spray pattern, rounded to two decimal places. Record the mean spray force for

each spray pattern, rounded to one decimal place.

[FR Doc. 2015–15376 Filed 6–22–15; 8:45 am]

**BILLING CODE 6450–01–P**

**DEPARTMENT OF ENERGY**

**10 CFR Part 430**

[Docket No. EERE–2015–BT–STD–0006]

RIN 1904–AD51

**Energy Efficiency Program for Consumer Products: Energy Conservation Standards for Fluorescent Lamp Ballasts**

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Notice of public meeting and availability of the Framework Document.

**SUMMARY:** The U.S. Department of Energy (DOE) is initiating this rulemaking and data collection process to consider amending energy conservation standards for fluorescent lamp ballasts. To inform interested parties and to facilitate this process, DOE has prepared a Framework Document that details the analytical approach and scope of coverage for the rulemaking, and identifies several issues on which DOE is particularly interested in receiving comments. DOE will hold a public meeting to discuss and receive comments on its planned analytical approach and issues it will address in this rulemaking proceeding. DOE welcomes written comments and relevant data from the public on any subject within the scope of this rulemaking. A copy of the Framework Document is available at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx?ruleid=110](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=110).

**DATES:** *Comments:* DOE will accept written comments, data, and information regarding the Framework Document before and after the public meeting, but no later than August 7, 2015.

*Meeting:* DOE will hold a public meeting on Friday, July 17, 2015, from 9:00 a.m. to 4:00 p.m. in Washington, DC. Additionally, DOE plans to conduct the public meeting via webinar. You may attend the public meeting via webinar, and registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE’s Web site at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/](http://www1.eere.energy.gov/buildings/appliance_standards/)

*rulemaking.aspx?ruleid=110.*

Participants are responsible for ensuring their systems are compatible with the webinar software.

DOE must receive requests to speak at the public meeting before 4:00 p.m., July 6, 2015. DOE must receive an electronic copy of the statement with the name and, if appropriate, the organization of the presenter to be given at the public meeting before 4:00 p.m., July 10, 2015.

**ADDRESSES:** The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue SW., Washington, DC 20585-0121. 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 as soon as possible by contacting Ms. Regina Washington at (202) 586-1214 or by email: *Regina.Washington@ee.doe.gov* so that the necessary procedures can be completed. Please note that any person wishing to bring a laptop computer into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing laptops, or allow an extra 45 minutes. As noted above, persons may also attend the public meeting via webinar.

Interested parties are encouraged to submit comments electronically. However, comments may be submitted by any of the following methods:

- **Federal eRulemaking Portal:** *www.regulations.gov*. Follow the instructions for submitting comments.

- **Email:** *FluorLampBallast2015STD0006@ee.doe.gov*. Include docket number EERE-2015-BT-STD-0006 and/or regulatory identification number (RIN) 1904-AD51 in the subject line of the message. All comments should clearly identify the name, address, and, if appropriate, organization of the commenter. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.

- **Postal Mail:** Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-5B, Framework Document for Fluorescent Lamp Ballasts, Docket No. EERE-2015-BT-STD-0006 and/or RIN 1904-AD51, 1000 Independence Avenue SW., Washington, DC 20585-0121. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.

[Please note that comments sent by mail are often delayed and may be damaged by mail screening processes.]

- **Hand Delivery/Courier:** Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza SW., Washington, DC 20024. Telephone: (202) 586-2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

**Instructions:** All submissions received must include the agency name and docket number and/or RIN for this rulemaking. No telefacsimilies (faxes) will be accepted.

**Docket:** The docket is available for review at *http://www.regulations.gov*, and will include **Federal Register** notices, framework document, notice of proposed rulemaking, public meeting attendee lists and transcripts, comments, and other supporting documents/materials throughout the rulemaking process. The *regulations.gov* Web page contains simple instructions on how to access all documents, including public comments, in the docket. The docket can be accessed by searching for docket number EERE-2015-BT-STD-0006 on the *regulations.gov* Web site. All documents in the docket are listed in the *www.regulations.gov* index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

**FOR FURTHER INFORMATION CONTACT:** Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202) 287-1604. Email: *fluorescent\_lamp\_ballasts@ee.doe.gov*.

Ms. Sarah Butler, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202) 586-1777. Email: *Sarah.Butler@hq.doe.gov*.

For information on how to submit or review public comments and on how to participate in the public meeting, contact Ms. Brenda Edwards, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone (202) 586-2945. Email: *Brenda.Edwards@ee.doe.gov*.

**SUPPLEMENTARY INFORMATION:**

Title III, Part B<sup>a</sup> 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) sets forth a variety of provisions designed to improve energy efficiency and established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program covering major household appliances (collectively referred to as "covered products").<sup>b</sup> Part C of title III (42 U.S.C. 6311-6317) establishes an energy conservation program for certain industrial and commercial equipment. EPCA authorizes DOE to establish technologically feasible, economically justified energy conservation standards for covered products or equipment that would be likely to result in significant national energy savings. (42 U.S.C. 6295(o)(2)(B)(i)(I)-(VII))

Additional amendments to EPCA have given DOE the authority to regulate the energy efficiency of several products, including certain fluorescent lamp ballasts—the products that are the subject of this document. Amendments to EPCA in the National Appliance Energy Conservation Amendments of 1988 (NAECA 1988), Public Law 100-357, established energy conservation standards for fluorescent lamp ballasts. (42 U.S.C. 6295(g)(5)) These same amendments also required that DOE: (1) Conduct two rulemaking cycles to determine whether these standards should be amended; and (2) for each rulemaking cycle, determine whether the standards in effect for fluorescent lamp ballasts should be amended so that they would be applicable to additional fluorescent lamp ballasts. (42 U.S.C. 6295(g)(7)(A)-(B)) DOE completed these two rulemaking cycles in 2000 and 2011. 65 FR 56740 (Sept. 19, 2000) and 76 FR 70548 (Nov. 14, 2011).

EPCA mandates that within six years of the publication of the previous final rule, DOE is required to publish either a notice of determination that standards do not need to be amended or a notice of proposed rulemaking including new proposed standards. (42 U.S.C. 6295(m)) This notice and the associated public meeting represent the first step in the process to consider whether to amend energy conservation standards for fluorescent ballasts in that six year review process.

DOE has prepared the Framework Document to explain the relevant issues, analyses, and processes it anticipates

<sup>a</sup> For editorial reasons, upon codification in the U.S. Code, Part B was redesignated Part A.

<sup>b</sup> All references to EPCA in this document refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Public Law 112-210 (Dec. 18, 2012).

using when considering new or amended energy conservation standards for fluorescent lamp ballasts. The focus of the public meeting noted above will be to discuss the information presented and issues identified in the Framework Document. At the public meeting, DOE will make presentations and invite discussion on the rulemaking process as it applies to fluorescent lamp ballasts. DOE will also solicit comments, data, and information from participants and other interested parties.

DOE is planning to conduct in-depth technical analyses in the following areas: (1) Engineering; (2) energy use; (3) product price; (4) life-cycle cost and payback period; (5) national impacts; (6) manufacturer impacts; (7) emission impacts; (8) utility impacts; (9) employment impacts; and (10) regulatory impacts. DOE will also conduct several other analyses that support those previously listed, including the market and technology assessment, the screening analysis (which contributes to the engineering analysis), and the shipments analysis (which contributes to the national impact analysis).

DOE encourages those who wish to participate in the public meeting to obtain the Framework Document and to be prepared to discuss its contents. A copy of the Framework Document is available at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx?ruleid=110](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=110).

Public meeting participants need not limit their comments to the issues identified in the Framework Document. DOE is also interested in comments on other relevant issues that participants believe would affect energy conservation standards for these products, applicable test procedures, or the preliminary determination on the scope of coverage. DOE invites all interested parties, whether or not they participate in the public meeting, to submit in writing by August 7, 2015, comments and information on matters addressed in the Framework Document and on other matters relevant to DOE's consideration of coverage of and standards for fluorescent lamp ballasts.

The public meeting will be conducted in an informal, facilitated, conference style. There shall be no discussion of proprietary information, costs or prices, market shares, or other commercial matters regulated by U.S. antitrust laws. A court reporter will record the proceedings of the public meeting, after which a transcript will be available for purchase from the court reporter and placed on the DOE Web site at: <http://www1.eere.energy.gov/buildings/>

[appliance\\_standards/rulemaking.aspx?ruleid=110](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=110).

After the public meeting and the close of the comment period on the Framework Document, DOE will collect data, conduct the analyses as discussed in the Framework Document and at the public meeting, and review the public comments it receives.

DOE considers public participation to be a very important part of the process for determining whether to establish or amend energy conservation standards and, if so, in setting those new or amended standards. DOE actively encourages the participation and interaction of the public during the comment period at each stage of the rulemaking process. Beginning with the Framework Document, and during each subsequent public meeting and comment period, interactions with and among members of the public provide a balanced discussion of the issues to assist DOE in the standards rulemaking process. Accordingly, anyone who wishes to participate in the public meeting, receive meeting materials, or be added to the DOE mailing list to receive future notices and information about this rulemaking should contact Ms. Brenda Edwards at (202) 586-2945, or via email at [Brenda.Edwards@ee.doe.gov](mailto:Brenda.Edwards@ee.doe.gov).

Issued in Washington, DC, on June 17, 2015.

**Kathleen B. Hogan,**

*Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.*

[FR Doc. 2015-15383 Filed 6-22-15; 8:45 am]

**BILLING CODE 6450-01-P**

## FARM CREDIT ADMINISTRATION

### 12 CFR Parts 607, 614, 615, 620 and 628

**RIN 3052-AC81**

#### Regulatory Capital Rules: Regulatory Capital, Implementation of Tier 1/Tier 2 Framework

**AGENCY:** Farm Credit Administration.

**ACTION:** Proposed rule; reopening of comment period.

**SUMMARY:** The Farm Credit Administration (FCA or we) is reopening the comment period on the proposed rule that would revise our regulatory capital requirements for Farm Credit System (System) institutions to include tier 1 and tier 2 risk-based capital ratio requirements, a tier 1 leverage requirement, a capital conservation buffer, revised risk

weightings, and additional public disclosure requirements.

**DATES:** You may send us comments from June 26, 2015, through July 10, 2015.

**ADDRESSES:** For accuracy and efficiency reasons, please submit comments by email or through the FCA's Web site. We do not accept comments submitted by facsimile (fax), as faxes are difficult for us to process in compliance with section 508 of the Rehabilitation Act. Please do not submit your comment multiple times via different methods. You may submit comments by any of the following methods:

- **Email:** Send us an email at [reg-comm@fca.gov](mailto:reg-comm@fca.gov).
- **FCA Web site:** <http://www.fca.gov>. Select "Public Commenters," then "Public Comments," and follow the directions for "Submitting a Comment."
- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Mail:** Barry F. Mardock, Deputy Director, Office of Regulatory Policy, Farm Credit Administration, 1501 Farm Credit Drive, McLean, VA 22102-5090.

You may review copies of all comments we receive at our office in McLean, Virginia, or from our Web site at <http://www.fca.gov>. Once you are in the Web site, select "Public Commenters," then "Public Comments," and follow the directions for "Reading Submitted Public Comments." We will show your comments as submitted, but for technical reasons we may omit items such as logos and special characters. Identifying information you provide, such as phone numbers and addresses, will be publicly available. However, we will attempt to remove email addresses to help reduce Internet spam.

#### FOR FURTHER INFORMATION CONTACT:

J.C. Floyd, Associate Director, Finance and Capital Markets Team, Office of Regulatory Policy, Farm Credit Administration, McLean, VA 22102-5090, (720) 213-0924, TTY (703) 883-4056;

or

Rebecca S. Orlich, Senior Counsel, or Jennifer A. Cohn, Senior Counsel, Office of General Counsel, Farm Credit Administration, McLean, VA 22102-5090, (703) 883-4020, TTY (703) 883-4056.

**SUPPLEMENTARY INFORMATION:** On September 4, 2014, FCA published a proposed rule to revise our regulatory capital requirements for Farm Credit System (System) institutions to establish tier 1/tier 2 risk-based capital ratio requirements (replacing core surplus and total surplus ratios), a tier 1

leverage ratio requirement (replacing a net collateral requirement for System banks), a capital conservation buffer, revised risk weightings, and additional publish disclosure requirements.<sup>1</sup> The revisions to the risk weightings would include replacing references to credit ratings with alternative risk measurements, as required by the Dodd-Frank Wall Street Reform and Consumer Protection Act. The comment period on the proposed rule, after an extension, closed February 16, 2015.<sup>2</sup>

FCA received a letter dated March 30, 2015, from the Farm Credit Council, a trade association representing System institutions, requesting FCA to reopen the comment period. The Farm Credit Council stated that the reason for its request was to give System institutions the opportunity to meet with FCA Board members that joined the FCA Board on March 13 and 17, 2015, in order to discuss the proposed rule.

In response to this request, we are reopening the comment period on June 26 through July 10, 2015. Because the proposed rule contains significant revisions to the regulatory capital framework in existing FCA regulations, we believe it is important to give interested parties additional time to provide comments to the FCA Board. Reopening the comment period will ensure transparency in the process.

Dated: June 17, 2015.

**Dale L. Aultman,**

*Secretary, Farm Credit Administration Board.*

[FR Doc. 2015-15348 Filed 6-22-15; 8:45 am]

**BILLING CODE 6705-01-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 71

[Docket No. FAA-2015-1089; Airspace Docket No. 15-ANM-11]

#### Proposed Amendment of Class E Airspace; Douglas, WY

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This action proposes to modify Class E airspace at Converse County Airport, Douglas, WY. After a review of the airspace, the FAA found it necessary to modify the airspace to enhance the safety and management of

Instrument Flight Rules (IFR) operations for Standard Instrument Approach Procedures (SIAPs) at the airport and to address inaccuracy identified by FAA Airspace Policy and Support that V-19, which is no longer located in the area, is used in the legal description of the airspace.

**DATES:** Comments must be received on or before August 7, 2015.

**ADDRESSES:** Send comments on this proposal to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590; telephone (202) 366-9826. You must identify FAA Docket No. FAA-2015-1089; Airspace Docket No. 15-ANM-11, at the beginning of your comments. You may also submit comments through the Internet at <http://www.regulations.gov>. You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone 1-800-647-5527), is on the ground floor of the building at the above address.

FAA Order 7400.9Y, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at [http://www.faa.gov/air\\_traffic/publications/](http://www.faa.gov/air_traffic/publications/). The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal-regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal-regulations/ibr_locations.html).

FAA Order 7400.9, Airspace Designations and Reporting Points, is published yearly and effective on September 15. For further information, you can contact the Airspace Policy and Regulations Group, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC, 20591; telephone: 202-267-8783.

**FOR FURTHER INFORMATION CONTACT:**

Steve Haga, Federal Aviation Administration, Operations Support Group, Western Service Center, 1601 Lind Avenue SW., Renton, WA 98057; telephone (425) 203-4563.

**SUPPLEMENTARY INFORMATION:**

**Authority for This Rulemaking**

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the U.S. Code. Subtitle 1, Section 106, describes the authority for 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 would amend controlled airspace at Converse County Airport, Douglas, WY.

**Comments Invited**

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments, as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy-related aspects of the proposal.

Communications should identify both docket numbers and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. FAA-2015-1089; Airspace Docket No. 15-ANM-11." The postcard will be date/time stamped and returned to the commenter.

**Availability of NPRMs**

An electronic copy of this document may be downloaded through the Internet at <http://www.regulations.gov>. Recently published rulemaking documents can also be accessed through the FAA's Web page at [http://www.faa.gov/airports\\_airtraffic/air\\_traffic/publications/airspace\\_amendments/](http://www.faa.gov/airports_airtraffic/air_traffic/publications/airspace_amendments/).

You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office (see the **ADDRESSES** section for the address and phone number) between 9:00 a.m. and 5:00 p.m., Monday through Friday, except federal holidays. An informal docket may also be examined during normal business hours at the Northwest Mountain Regional Office of the Federal Aviation Administration, Air Traffic Organization, Western Service Center, Operations Support Group, 1601 Lind Avenue SW., Renton, WA 98057.

Persons interested in being placed on a mailing list for future NPRMs should

<sup>1</sup> 79 FR 52814 (September 4, 2014).

<sup>2</sup> The original comment period of 120 days was extended an additional 45 days. See 79 FR 76927 (December 23, 2014).

contact the FAA's Office of Rulemaking, (202) 267-9677, for a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

#### Availability and Summary of Documents Proposed for Incorporation by Reference

This document proposes to amend FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014. FAA Order 7400.9Y is publicly available as listed in the **ADDRESSES** section of this proposed rule. FAA Order 7400.9Y lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

#### The Proposal

The FAA is proposing an amendment to Title 14 Code of Federal Regulations (14 CFR) Part 71 by modifying Class E airspace extending upward from 700 feet above the surface at Converse County Airport, Douglas, WY. The airspace would be modified to within a 4-mile radius of Converse County Airport, with a segment extending from the 4-mile radius to the 7-mile radius east to southwest of the airport, and a segment extending from the 4-mile radius to 7 miles northwest of the airport. The geographic coordinates of the airport would be updated to coincide with the FAA's aeronautical database. The lateral boundary for that airspace extending from 1,200 feet above the surface would be defined utilizing latitudinal and longitudinal reference points instead of Federal airway V-19, and would not change the lateral boundaries or operating requirements of the 1,200 foot airspace. This action is necessary for the safety and management of IFR operations for SIAPs at the airport.

Class E airspace designations are published in paragraph 6005 of FAA Order 7400.9Y, dated August 6, 2014, and effective September 15, 2014, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

#### Regulatory Notices and Analyses

The FAA has determined this proposed regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. Therefore, this proposed regulation: (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 will only affect air traffic procedures and air navigation, it is certified this proposed rule, when promulgated, would not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### Environmental Review

This proposal will be subject to an environmental analysis in accordance with FAA

Order 1050.1E, "Environmental Impacts: Policies and Procedures" prior to any FAA final regulatory action.

#### List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

#### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend 14 CFR part 71 as follows:

#### PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

- 1. The authority citation for 14 CFR part 71 continues to read as follows:

**Authority:** 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389.

##### § 71.1 [Amended]

- 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014, is amended as follows:

*Paragraph 6005 Class E Airspace areas extending upward from 700 feet or more above the surface of the earth.*

\* \* \* \* \*

#### ANM WY E5 Douglas, WY [Modified]

Converse County Airport, WY  
(Lat. 42°47'50" N., long. 105°23'09" W.)

That airspace extending upward from 700 feet above the surface within a 4-mile radius of Converse County Airport beginning at lat. 42°50'30" N., long. 105°27'11" W., clockwise along the 4-mile radius of the airport to the 065° bearing from the airport, and that airspace within a 7-mile radius of the airport from the 065° bearing from the airport clockwise to the 226° bearing, thence northeast to lat. 42°48'41" N., long. 105°28'28" W., and that airspace 1 mile either side of the 297° bearing from airport extending from the 4-mile radius to 7 miles

northwest of the airport, thence to the point of beginning That airspace extending upward from 1,200 feet above the surface bounded by a line beginning at lat. 43°05'27" N., long. 106°16'37" W.; to lat. 43°35'23" N., long. 104°30'02" W.; to lat. 43°00'00" N., long. 104°30'02" W.; to lat. 43°00'00" N., long. 104°03'16" W.; to lat. 41°53'15" N., long. 104°03'15" W.; to lat. 41°51'54" N., long. 105°17'18" W.; thence to the point of beginning.

Issued in Seattle, Washington, on June 11, 2015.

**Christopher Ramirez,**

*Acting Manager, Operations Support Group, Western Service Center.*

[FR Doc. 2015-15287 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 71

[Docket No. FAA-2015-1623; Airspace Docket No. 15-AWP-10]

#### Proposed Amendment of Class E Airspace; Tracy, CA

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This action proposes to modify Class E airspace extending upward from 700 feet above the surface, at Tracy Municipal Airport, Tracy, CA. After a review, and the decommissioning of the Manteca VHF omnidirectional radio range and distance measuring equipment (VOR/DME), the FAA found it necessary to amend the airspace areas for the safety and management of Instrument Flight Rules (IFR) operations for Standard Instrument Approach Procedures at the airport.

**DATES:** Comments must be received on or before August 7, 2015.

**ADDRESSES:** Send comments on this proposal to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590; telephone (202) 366-9826. You must identify FAA Docket No. FAA-2015-1623; Airspace Docket No. 15-AWP-10, at the beginning of your comments. You may also submit comments through the Internet at <http://www.regulations.gov>. You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office between 9:00 a.m. and 5:00 p.m., Monday

through Friday, except Federal holidays. The Docket Office (telephone 1-800-647-5527), is on the ground floor of the building at the above address.

FAA Order 7400.9Y, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at [http://www.faa.gov/air\\_traffic/publications/](http://www.faa.gov/air_traffic/publications/). The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

FAA Order 7400.9, Airspace Designations and Reporting Points, is published yearly and effective on September 15. For further information, you can contact the Airspace Policy and Regulations Group, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-8783.

**FOR FURTHER INFORMATION CONTACT:** Rob Riedl, Federal Aviation Administration, Operations Support Group, Western Service Center, 1601 Lind Avenue SW., Renton, WA 98057; telephone (425) 203-4534.

#### **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 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 would amend Class E airspace at Tracy Municipal Airport, Tracy, CA.

##### **Comments Invited**

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments, as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy-related

aspects of the proposal. Communications should identify both docket numbers and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. FAA-2015-1623/Airspace Docket No. 15-AWP-10." The postcard will be date/time stamped and returned to the commenter.

##### **Availability of NPRMs**

An electronic copy of this document may be downloaded through the Internet at <http://www.regulations.gov>. Recently published rulemaking documents can also be accessed through the FAA's Web page at [http://www.faa.gov/airports\\_airtraffic/air\\_traffic/publications/airspace\\_amendments/](http://www.faa.gov/airports_airtraffic/air_traffic/publications/airspace_amendments/).

You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office (see the **ADDRESSES** section for the address and phone number) between 9:00 a.m. and 5:00 p.m., Monday through Friday, except federal holidays. An informal docket may also be examined during normal business hours at the Northwest Mountain Regional Office of the Federal Aviation Administration, Air Traffic Organization, Western Service Center, Operations Support Group, 1601 Lind Avenue SW., Renton, WA 98057.

Persons interested in being placed on a mailing list for future NPRMs should contact the FAA's Office of Rulemaking, (202) 267-9677, for a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

##### **Availability and Summary of Documents Proposed for Incorporation by Reference**

This document proposes to amend FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014. FAA Order 7400.9Y is publicly available as listed in the **ADDRESSES** section of this proposed rule. FAA Order 7400.9Y lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

##### **The Proposal**

The FAA is proposing an amendment to Title 14 Code of Federal Regulations (14 CFR) Part 71 by modifying Class E airspace extending upward from 700 feet above the surface at Tracy Municipal Airport, Tracy, CA.

Decommissioning of the Manteca VOR/DME and subsequent review of the airspace revealed that airspace redesign is necessary for the safety and management of IFR operations for standard instrument approach procedures at the airport. Class E airspace extending upward from 700 feet above the surface would be modified to within a 3.9-mile radius of Tracy Municipal Airport with segments extending from the 3.9-mile radius to 11 miles northwest, 6.4 miles east, and 9 miles southeast, of the airport.

Class E airspace designations are published in paragraph 6005, respectively, of FAA Order 7400.9Y, dated August 6, 2014, and effective September 15, 2014, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

##### **Regulatory Notices and Analyses**

The FAA has determined this proposed regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. Therefore, this proposed regulation; (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 will only affect air traffic procedures and air navigation, it is certified this proposed rule, when promulgated, would not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

##### **Environmental Review**

This proposal will be subject to an environmental analysis in accordance with FAA Order 1050.1E, "Environmental Impacts: Policies and Procedures" prior to any FAA final regulatory action.

##### **List of Subjects in 14 CFR Part 71**

Airspace, Incorporation by reference, Navigation (air).

##### **The Proposed Amendment**

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend 14 CFR part 71 as follows:

**PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS**

■ 1. The authority citation for 14 CFR part 71 continues to read as follows:

**Authority:** 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

**§ 71.1 [Amended]**

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.9Y, Airspace Designations and Reporting Points, dated August 6, 2014, and effective September 15, 2014, is amended as follows:

*Paragraph 6005 Class E Airspace areas extending upward from 700 feet or more above the surface of the earth.*

\* \* \* \* \*

**AWP CA E5 Tracy, CA (Modified)**

Tracy Municipal Airport, CA

(lat. 37°41'21" N., long. 121°26'31" W.)

That airspace extending upward from 700 feet above the surface within a 3.9-mile radius of Tracy Municipal Airport, and within 2 miles each side of the 326° bearing from the airport extending from the 3.9-mile radius to 11 miles northwest of the airport, and that airspace 1.8 miles either side of the airport 132° bearing from the 3.9-mile radius to 9 miles southeast of the airport, and that airspace 2.2 miles either side of the airport 097° bearing from the 3.9-mile radius to 6 miles east of the airport.

Issued in Seattle, Washington, on June 11, 2015.

**Christopher Ramirez,**

*Acting Manager, Operations Support Group, Western Service Center.*

[FR Doc. 2015–15316 Filed 6–22–15; 8:45 am]

**BILLING CODE 4910–13–P**

**DEPARTMENT OF HOMELAND SECURITY**

**Coast Guard**

**33 CFR Parts 100**

[Docket Number USCG–2015–0100]

RIN 1625–AA08

**Special Local Regulations, Recurring Marine Events in Captain of the Port Long Island Sound Zone**

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes to add, delete, and modify special local regulations for annual marine events in the Sector Long Island Sound Captain of the Port (COTP) Zone. When enforced, these regulated areas would restrict

vessels from portions of water areas during certain annually recurring events. The proposed special local regulations are intended to expedite public notification and ensure the protection of the maritime public and event participants from the hazards associated with certain maritime events.

Comments and related material must be received by the Coast Guard on or before July 23, 2015.

Requests for public meetings must be received by the Coast Guard on or before July 14, 2015.

You may submit comments identified by docket number USCG–2015–0100 using any one of the following methods:

(1) *Federal eRulemaking Portal:*

*http://www.regulations.gov.*

(2) *Fax:* 202–493–2251.

(3) *Mail or Delivery:* Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001. Deliveries accepted between 9 a.m. and 5 p.m., Monday through Friday, except federal holidays. The telephone number is 202–366–9329.

See the “Public Participation and Request for Comments” portion of the **SUPPLEMENTARY INFORMATION** section below for instructions on submitting comments. To avoid duplication, please use only one of these four methods.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this rule, contact Petty Officer Ian M. Fallon, U.S. Coast Guard Waterways Management Division Sector Long Island Sound; telephone (203) 468–4565, or email *Ian.M.Fallon@uscg.mil*. If you have questions on viewing or submitting material to the docket, call Cheryl Collins, Program Manager, Docket Operations, telephone (202) 366–9826.

**SUPPLEMENTARY INFORMATION:**

**Table of Acronyms**

COTP Captain of the Port  
FR Federal Register  
NPRM Notice of Proposed Rulemaking

**A. Public Participation and Request for Comments**

We encourage you to participate in this rulemaking by submitting comments and related materials. All comments received will be posted without change to *http://www.regulations.gov* and will include any personal information you have provided.

**1. Submitting Comments**

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. You may submit your comments and material online at *http://www.regulations.gov*, or by fax, mail, or hand delivery, but please use only one of these means. If you submit a comment online, it will be considered received by the Coast Guard when you successfully transmit the comment. If you fax, hand deliver, or mail your comment, it will be considered as having been received by the Coast Guard when it is received at the Docket Management Facility. We recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission.

To submit your comment online, go to *http://www.regulations.gov*, type the docket number [USCG–2015–0100] in the “SEARCH” box and click “SEARCH.” Click on “Submit a Comment” on the line associated with this rulemaking.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period and may change the rule based on your comments.

**2. Viewing Comments and Documents**

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to *http://www.regulations.gov*, type the docket number [USCG–2015–0100] in the “SEARCH” box and click “SEARCH.” Click on Open Docket Folder on the line associated with this rulemaking. You may also visit the Docket Management Facility in Room W12–140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**3. Privacy Act**

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor



union, etc). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the **Federal Register** (73 FR 3316).

#### 4. Public meeting

We do not plan to hold a public meeting. But you may submit a request for one, using one of the methods specified under **ADDRESSES**. Please explain why you believe a public meeting would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the **Federal Register**.

### B. Regulatory History and Information

Previously, the Coast Guard promulgated either safety zones or special local regulations for most of the events associated with this proposed rule and received no public comments. The most recent promulgated rulemaking was on May 24, 2013 when the Coast Guard published a Final Rule, entitled, "Safety Zones and Special Local Regulations; Recurring Marine Events in Captain of the Port Sector Long Island Sound Zone" in the **Federal Register** (78 FR 31402).

### C. Basis and Purpose

The legal basis for this rulemaking is 33 U.S.C. 1233, which authorizes the Coast Guard to establish special local regulations.

This proposed regulation carries out two related actions: (1) Establishing necessary special local regulations; and (2) updating and reorganizing existing regulations for ease of use and reduction of administrative overhead.

### D. Discussion of Proposed Rule

The Coast Guard proposes to amend 33 CFR 100.100 "Special Local Regulations; Regattas and Boat Races in the Coast Guard Sector Long Island Sound Captain of the Port Zone" by establishing 16 permanent marine events regulated areas, removing five, and modifying three marine event special local regulations. By proposing these permanent regulation updates, we are providing the public with an opportunity to comment on these changes. This rulemaking limits the unnecessary burden of establishing temporary rules for events that occur on an annual basis.

#### (1) Establishing New Marine Event Regulated Areas

This rulemaking proposes to establish 16 permanent marine event special local regulations under 33 CFR 100.100. These events include fireworks displays, swimming events, and regattas

that take place throughout the Long Island Sound COTP Zone. Event locations and details are listed below in the text of the regulation. Because large numbers of spectator vessels are expected to congregate around the location of these events, these regulated areas are needed to protect both spectators and participants from the safety hazards associated with marine events, including large numbers of swimmers, hard to see and unstable small boats, unexpected pyrotechnics detonation, and burning debris. This rule would permanently establish regulated areas that restrict vessel movement around the location of each marine event to reduce the associated safety.

During the enforcement period of the regulated areas, persons and vessels would be prohibited from entering, transiting through, remaining, anchoring, or mooring within the regulated area unless specifically authorized by the COTP or the designated representative. Persons and vessels would be able to request authorization to enter, transit through, remain, anchor, or moor within the regulated areas by contacting the COTP Sector Long Island Sound, or designated representative, by telephone at (203) 468-4401 or via VHF radio on channel 16. If authorization to enter, transit through, remain, anchor, or moor within any of the regulated areas is granted, all persons and vessels receiving authorization would be required to comply with the instructions of the COTP or designated representative.

The Coast Guard COTP Sector Long Island Sound or designated representative would enforce the regulated areas. These designated representatives are comprised of commissioned, warrant, and petty officers of the Coast Guard. The Coast Guard may be assisted by other federal, state and local agencies in the enforcement of these regulated areas.

Certain special local regulations are listed without known dates or times. Coast Guard Sector Long Island Sound will cause notice of the enforcement of these regulated areas to be made by all appropriate means to affect the widest publicity among the effected segments of the public, including publication in the **Federal Register** as a Notice of Enforcement, Local Notice to Mariners, and Broadcast Notice to Mariners.

#### (2) Remove old Special Local Regulations That Are no Longer Needed

This rulemaking proposes to remove five special local regulations from the TABLE to § 100.100: (1) 1.3 Head of the Connecticut Regatta, Connecticut River,

CT as the event has not been held since 2012 and the sponsoring organization, the City of Middletown, has confirmed that they do not intend to hold the event again in the foreseeable future; (2) 1.4 Riverfront Regatta, Hartford, CT as the event's details have significantly changed and is no longer the same event; (3) 1.5 Patchogue Grand Prix, Patchogue, NY as the event has not been held since 2010 and the sponsoring organization, Offshore Powerboat Association, has confirmed that they do not intend to hold the event again in the foreseeable future; (4) 1.6 Riverfront U.S. Title series Powerboat Race, Hartford, CT as the event has not been held since 2011 and the sponsoring organization, Riverfront Recaptured, has confirmed that they do not intend to hold the event again in the foreseeable future; and (5) 1.8 Kayak for a Cause Regatta as the event has not been held since 2012 and the sponsoring organization, Kayak for a Cause, has disbanded.

#### (3) Modify and Update Existing Regulated Areas

This rule proposes to amend the following special local regulations from the TABLE to § 100.100: (1) 1.1 Harvard-Yale Regatta, Thames River, New London, CT is to be moved to 5.1 on the TABLE to § 100.100; (2) 1.2 Great Connecticut River Raft Race, Middletown is to be moved to 7.1 on the TABLE to § 100.100 and the name changed to Connecticut River Raft Race, Middletown, CT; and (3) 1.7 Hartford Dragon Boat Regatta is to be renamed the Riverfront Dragon Boat and Asian Festival and to be moved to 8.1 on the TABLE to § 100.100.

### E. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes or executive orders.

#### 1. Regulatory Planning and Review

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by Executive Order 13563, Improving Regulation and Regulatory Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of Executive Order 12866 or under section 1 of Executive Order 13563. The Office of Management and Budget has not reviewed it under those Orders.

The Coast Guard determined that this proposed rulemaking is not a significant



regulatory action for the following reasons: The regulated areas are of limited duration and vessels may transit the navigable waterways outside of the regulated areas. Persons or vessels requiring entry into the regulated areas may be authorized to do so by the COTP Sector Long Island Sound or designated representative.

Advanced public notifications will also be made to local mariners through appropriate means, which may include but is not limited to Local Notice to Mariners and Broadcast Notice to Mariners.

## 2. Impact on Small Entities

The Regulatory Flexibility Act of 1980 (RFA), 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 will not have a significant economic impact on a substantial number of small entities.

This proposed rule would affect the following entities, some of which may be small entities: The owners or operators of vessels intending to enter, transit, anchor or moor within the regulated areas during the enforcement periods.

The special local regulations will not have a significant economic impact on a substantial number of small entities for the following reasons: The regulated areas are of short duration, vessels that can safely do so may navigate in all other portions of the waterways except for the areas designated as regulated areas, and vessels requiring entry into the regulated areas may be authorized to do so by the COTP Sector Long Island Sound or designated representative. Additionally, before the enforcement periods, public notifications will be made to local mariners through appropriate means, which may include but is not limited to Local Notice to Mariners and Broadcast Notice to Mariners.

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 rulemaking would economically affect it.

## 3. Assistance for Small Entities

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**, above. 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.

## 4. Collection of Information

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

## 5. Federalism

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 proposed rule under that Order and determined that this rule does not have implications for federalism.

## 6. 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.

## 7. 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.

## 8. Taking of Private Property

This proposed rule would not cause a taking of private property or otherwise have taking implications under

Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

## 9. Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

## 10. Protection of Children from Environmental Health Risks

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

## 11. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 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.

## 12. Energy Effects

This proposed rule is not a “significant energy action” under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use.

## 13. Technical Standards

This proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

## 14. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.ID, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA)(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 special local regulations. This rule may be categorically excluded from further

review under paragraph 34(h) of Figure 2–1 of the Commandant Instruction. A preliminary 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 proposed rule.

**List of Subjects in 33 CFR Part 100**

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

For the reasons discussed in the preamble, the Coast Guard proposes to amend 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:

**Authority:** 33 U.S.C. 1233.

**§ 100.100 Special Local Regulations; Regattas and Boat Races in the Coast Guard Sector Long Island Sound Captain of the Port Zone.**

■ 2. Revise the Table to § 100.100 to read as follows:

TABLE TO § 100.100

5	May
5.1 Harvard-Yale Regatta, Thames River, New London, CT.	<ul style="list-style-type: none"> <li>• Event type: Boat Race.</li> <li>• Date: A single day between the last Saturday in May through second Saturday of June. Rain Date: A single day between the last Saturday in May through second Saturday of June.</li> <li>• Time (Approximate): 8:00 a.m. to 5:00 p.m.</li> <li>• Location: All waters of the Thames River at New London, Connecticut, between the Penn Central Draw Bridge at position 41°21'46.94" N. 072°5'14.46" W. to Bartlett Cove at position 41°25'35.9" N. 072°5'42.89" W. (NAD 83). All positions are approximate.</li> </ul>
5.2 Jones Beach Air Show .....	<ul style="list-style-type: none"> <li>• Event type: Boat Race.</li> <li>• Date: The Thursday through Sunday before Memorial Day each May.</li> <li>• Time:                         <ol style="list-style-type: none"> <li>(1) The "No Entry Area" will be enforced each day from the start of the air show until 30 minutes after it concludes. Exact time will be determined annually.</li> <li>(2) The "Slow/No Wake Area" and the "No Southbound Traffic Area" will be enforced each day for six hours after the air show concludes. Exact time will be determined annually.</li> </ol> </li> <li>• Location:                         <ol style="list-style-type: none"> <li>(1) "No Entry Area": Waters of the Atlantic Ocean off Jones Beach State Park, Wantagh, NY contained within the following described area; beginning at a point on land at position 40°34'54" N., 073°33'21" W.; then east along the shoreline of Jones Beach State Park to a point on land at position 40°35'53" N., 073°28'48" W.; then south to a point in the Atlantic Ocean off of Jones Beach at position 40°35'05" N., 073°28'34" W.; then west to position 40°33'15" N., 073°33'09" W.; then north to the point of origin (NAD 83). All positions are approximate.</li> <li>(2) "Slow/No Wake Area": All navigable waters between Meadowbrook State Parkway and Wantagh State Parkway and contained within the following area. Beginning in position 40°35'49.01" N., 73°32'33.63" W.; then north along the Meadowbrook State Parkway to its intersection with Merrick Road in position 40°39'14" N., 73°34'0.76" W.; then east along Merrick Road to its intersection with Wantagh State Parkway in position 40°39'51.32" N. 73°30'43.36" W.; then south along the Wantagh State Parkway to its intersection with Ocean Parkway in position 40°35'47.30" N. 073°30'29.17" W.; then west along Ocean Parkway to its intersection with Meadowbrook State Parkway at the point of origin (NAD 83). All positions are approximate.</li> <li>(3) "No Southbound Traffic Area": All navigable waters of Zach's Bay south of the line connecting a point near the western entrance to Zach's Bay at position 40°36'29.20" N., 073°29'22.88" W. and a point near the eastern entrance of Zach's Bay at position 40°36'16.53" N. 073°28'57.26" W. (NAD 83). All positions are approximate.</li> </ol> </li> </ul>
6	June
6.1 Swim Across America Greenwich.	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day in June to be determined annually.</li> <li>• Time (Approximate): 5:30 a.m. until 12:00 p.m.</li> <li>• Location: All navigable waters of Stamford Harbor within an area starting at a point in position 41°01'32.03" N., 073°33'8.93" W., then southeast to a point in position 41°01'15.01" N., 073°32'55.58" W.; then southwest to a point in position 41°0'49.25" N., 073°33'20.36" W.; then northwest to a point in position 41°0'58" N., 073°33'27" W., then northeast to a point in position 41°1'15.8" N., 073°33'9.85" W., then heading north and ending at point of origin (NAD 83). All positions are approximate.</li> </ul>
7	July
7.1 Connecticut River Raft Race, Middletown, CT.	<ul style="list-style-type: none"> <li>• Event type: Boat Race.</li> <li>• Date: A day between the last Saturday in July through first Saturday of August.</li> <li>• Time (Approximate): 10:00 a.m. to 2:00 p.m.</li> <li>• Location: All waters of the Connecticut River near Middletown, CT between Gildersleeve Island (Marker no. 99) at position 41°36'02.13" N., 072°37'22.71" W. and Portland Riverside Marina (Marker no. 88) at position 41°33'38.3" N., 072°37'36.53" W. (NAD 83). All positions are approximate.</li> <li>• Additional Stipulations: Spectators or other vessels shall not anchor, block, loiter, or impede the transit of event participants or official patrol vessels in the regulated areas unless authorized by COTP or designated representative.</li> </ul>

## TABLE TO § 100.100—Continued

7.2 Dolan Family Fourth Fireworks.	<ul style="list-style-type: none"> <li>• Event type: Fireworks Display.</li> <li>• Date: July 4.</li> <li>• Rain date: July 5.</li> <li>• Time (Approximate):               <ol style="list-style-type: none"> <li>(1) The “No Entry Area” will be enforced from 8:30 p.m. to 10:30 p.m.</li> <li>(2) The “Slow/No Wake Area” will be enforced from 7:00 p.m. to 12:00 a.m.</li> </ol> </li> <li>• Locations:               <ol style="list-style-type: none"> <li>(1) “No Entry Area”: All waters of Oyster Bay Harbor in Long Island Sound off Oyster Bay, NY within a 1000 foot radius of the launch platform in approximate position 40°53'42.50" N., 073°30'4.30" W. (NAD 83).</li> <li>(2) “Slow/No Wake Area”: All waters of Oyster Bay Harbor in Long Island Sound off Oyster Bay, NY contained within the following area; beginning at a point on land in position at 40°53'12.43" N., 073°31'13.05" W. near Moses Point; then east across Oyster Bay Harbor to a point on land in position at 40°53'15.12" N., 073°30'38.45" W. then north along the shoreline to a point on land in position at 40°53'34.43" N., 073°30'33.42" W. near Cove Point; then east along the shoreline to a point on land in position at 40°53'41.67" N., 073°29'40.74" W. near Cooper Bluff; then south along the shoreline to a point on land in position 40°53'5.09" N., 073°29'23.32" W. near Eel Creek; then east across Cold Spring Harbor to a point on land in position 40°53'6.69"N, 073°28'19.9"W; then north along the shoreline to a point on land in position 40°55'24.09" N., 073°29'49.09" W. near Whitewood Point, then west across Oyster Bay to a point on land in position 40°55'5.29" N., 073°31'19.47" W. near Rocky Point, then south along the shoreline to a point on land in position 40°54'4.11" N., 073°30'29.18" W. near Plum Point, then northwest along the shoreline to a point on land in position 40°54'9.06" N., 073°30'45.71" W., then southwest along the shoreline to a point on land in position 40°54'3.2" N., 073°31'1.29" W., and then south along the shoreline back to point of origin (NAD 83). All positions are approximate.</li> </ol> </li> </ul>
7.3 Clam Shell Foundation Fireworks.	<ul style="list-style-type: none"> <li>• Event type: Fireworks Display.</li> <li>• Date: One day in July to be determined annually.</li> <li>• Time (Approximate):               <ol style="list-style-type: none"> <li>(1) The “No Entry Area” will be enforced from 9:00 p.m. to 10:30 p.m.</li> <li>(2) The “Northbound Traffic Only Area” will be enforced from 10:30 p.m. to 12:00 a.m.</li> </ol> </li> <li>• Locations:               <ol style="list-style-type: none"> <li>(1) “No Entry Area”: All waters of Three Mile Harbor, East Hampton, NY within a 1000 foot radius of the launch platform in approximate position 41°1'15.49" N., 072°11'27.5" W. (NAD 83).</li> <li>(2) “Northbound Traffic Only Area”: All waters of Three Mile Harbor, East Hampton, NY contained within the following area; beginning at a point in position at 41°2'5.05" N., 072°11'19.52" W.; then southeast to a point on land in position at 41°2'2.67" N., 072°11'17.97" W.; then south along shoreline to a point on land in position at 41°1'35.26" N., 072°11'9.56" W.; then southeast across channel to a point on land in position at 41°1'30.28" N., 072°10'52.77" W.; then north along the shoreline to a point on land in position at 41°1'41.35" N., 072°10'52.57" W.; then north across channel to a point on land in position at 41°1'44.41" N., 072°10'52.23" W. near the southern end of Sedge Island; then north along shoreline of Sedge Island to a point on land in position at 41°1'56.3" N., 072°10'59.37" W., near the northern end of Sedge Island; then northwest across the channel to a point on land in position 41°1'56.76" N., 072°11'0.66" W.; then northwest along shoreline to a point on land in position 41°1'41.35" N., 072°10'52.57" W.; then northwest to position at 41°2'5.92" N., 072°11'16.73" W.; and then southwest to point of origin (NAD 83). All positions are approximate.</li> </ol> </li> </ul>
7.4 Jones Beach State Park Fireworks.	<ul style="list-style-type: none"> <li>• Event type: Fireworks Display.</li> <li>• Date: July 4.</li> <li>• Rain date: July 5.</li> <li>• Time: 8:30 p.m. to 10:30 p.m.</li> <li>• Time (Approximate):               <ol style="list-style-type: none"> <li>(1) The “No Entry Area” will be enforced from 8:30 p.m. to 10:30 p.m.</li> <li>(2) The “Slow/No Wake Area” and the “No Southbound Traffic Area” will be enforced from 9:30 p.m. to 12:00 a.m.</li> </ol> </li> <li>• Locations:               <ol style="list-style-type: none"> <li>(1) “No Entry Area”: All waters off of Jones Beach State Park, Wantagh, NY within a 1000 foot radius of the launch platform in approximate position 40°34'56.68" N., 073°30'31.19" W. (NAD 83).</li> <li>(2) “Slow/No Wake Area”: All navigable waters between Meadowbrook State Parkway and Wantagh State Parkway and contained within the following area. Beginning in position at 40°35'49.01" N., 073°32'33.63" W.; then north along the Meadowbrook State Parkway to its intersection with Merrick Road in position at 40°39'14" N., 073°34'0.76" W.; then east along Merrick Road to its intersection with Wantagh State Parkway in position at 40°39'51.32" N., 073°30'43.36" W.; then south along the Wantagh State Parkway to its intersection with Ocean Parkway in position at 40°35'47.30" N., 073°30'29.17" W.; then west along Ocean Parkway to its intersection with Meadowbrook State Parkway at the point of origin (NAD 83). All positions are approximate.</li> <li>(3) “No Southbound Traffic Area”: All navigable waters of Zach's Bay south of the line connecting a point near the western entrance to Zach's Bay in position at 40°36'29.20" N., 073°29'22.88" W. and a point near the eastern entrance of Zach's Bay in position at 40°36'16.53" N., 073°28'57.26" W. (NAD 83). All positions are approximate.</li> </ol> </li> </ul>
7.5 Maggie Fischer Memorial Great South Bay Cross Bay Swim.	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day in July to be determined annually.</li> <li>• Time (Approximate): 6:30 a.m. to 12:30 p.m.</li> </ul>

TABLE TO § 100.100—Continued

7.6 Aquapalooza, Zach's Bay .....	<ul style="list-style-type: none"> <li>• Location: Waters of the Great South Bay, NY within 100 yards of the race course. Starting Point at the Fire Island Lighthouse Dock in position at 40°38'01" N., 073°13'07" W.; then north-by-northwest to a point in position at 40°38'52" N., 073°13'09" W.; then north-by-northwest to a point in position at 40°39'40" N., 073°13'30" W.; then north-by-northwest to a point in position at 40°40'30" N., 073°14'00" W.; and then north-by-northwest, finishing at Gilbert Park, Brightwaters, NY at position 40°42'25" N., 073°14'52" W. (NAD 83). All positions are approximate.</li> <li>• Event type: Regatta.</li> <li>• Date: One day in July to be determined annually.</li> <li>• Time (Approximate): 11:30 a.m. to 8:00 p.m.</li> <li>• Location: All navigable waters of Zach's Bay, Wantagh, NY south of the line connecting a point near the western entrance to Zach's Bay in approximate position 40°36'29.20" N., 073°29'22.88" W. and a point near the eastern entrance of Zach's Bay in approximate position 40°36'16.53" N., 073°28'57.26" W.</li> <li>• Additional stipulations: During the enforcement period vessel speed in the regulated area is restricted to no wake speed or 6 knots, whichever is slower. On the day of the event from 3 p.m. to 5:30 p.m. vessels may only transit the regulated area in the northbound direction or outbound direction.</li> </ul>
7.7 Fran Schnarr Open Water Championship Swim.	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day in July to be determined annually.</li> <li>• Time (Approximate): 7:15 a.m. to 1:30 p.m.</li> <li>• Location: Waters of Huntington Bay, NY within 100 yards of the race course. Starting in position at 40°54'25.3" N., 073°24'27.9" W.; then northeast to a position at 40°54'32" N., 73°23'57.7" W.; then northwest to a position at 40°54'37.9" N., 073°23'57.2" W.; then southwest to a position at 40°54'33.2" N., 073°25'28.1" W.; then southeast to a position at 40°54'25.5" N., 073°25'25.7" W.; and then southeast to point of origin (NAD 83). All positions are approximate.</li> </ul>
8	August
8.1 Riverfront Dragon Boat and Asian Festival.	<ul style="list-style-type: none"> <li>• Event type: Boat Race.</li> <li>• Dates: Saturday and Sunday during the third weekend of August.</li> <li>• Time (Approximate): 8:00 a.m. until 4:30 p.m. each day.</li> <li>• Regulated area: All waters of the Connecticut River in Hartford, CT between the Bulkeley Bridge at 41°46'10.10" N., 072°39'56.13" W. and the Wilbur Cross Bridge at 41°45'11.67" N., 072°39'13.64" W. (NAD 83). All positions are approximate.</li> </ul>
8.2 Swim Across the Sound .....	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day in August determined annually.</li> <li>• Time (Approximate): 8:30 a.m. to 7:30 p.m.</li> <li>• Location: Waters of Long Island Sound from Port Jefferson, NY in approximate position 40°58'11.71" N., 073°05'51.12" W., then northwest to Captain's Cove Seaport, Bridgeport, CT in approximate position 41°09'25.07" N., 073°12'47.82" W. (NAD 83).</li> </ul>
8.3 Stonewall Swim .....	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day during a weekend in August determined annually.</li> <li>• Time (Approximate): 8:30 a.m. until 12:30 p.m.</li> <li>• Location: All navigable waters of the Great South Bay within a three miles long and half mile wide box connecting Snedecor Avenue in Bayport, NY to Porgie Walk in Fire Island, NY. Formed by connecting the following points. Beginning at 40°43'40.24" N., 073°03'41.50" W.; then to 40°43'40.00" N., 073°03'13.40" W.; then to 40°40'04.13 N., 073°03'43.81" W.; then to 40°40'08.30" N., 073°03'17.70" W.; and ending at the beginning point 40°43'40.24" N., 073°03'41.5" W. (NAD 83).</li> </ul>
8.4 Island Beach Two Mile Swim	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day in August to be determined annually.</li> <li>• Time (Approximate): 7:30 a.m. to 11:30 a.m.</li> <li>• Location: All waters of Captain Harbor between Little Captain's Island and Bower's Island that are located within the box formed by connecting four points in the following positions. Beginning at 40°59'23.35" N. 073°36'42.05" W., then northwest to 40°59'51.04" N. 073°37'57.32" W., then southwest to 40°59'45.17" N. 073°38'01.18" W., then southeast to 40°59'17.38" N. 073°36'45.9" W., then north-east to the point of origin (NAD 83). All positions are approximate.</li> </ul>
8.5 Waves of Hope Swim .....	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: One day in August to be determined annually.</li> <li>• Time (Approximate): 9:30 a.m. to 12:30 p.m.</li> <li>• Location: All waters of the Great South Bay off Amityville, NY shoreward of a line created by connecting the following points. Beginning at a point at 40°39'22.38" N., 073°25'31.63" W., then south to a point at 40°39'2.18" N., 073°25'31.63" W., then east to a point at 40°39'2.18" N., 073°24'3.81" W., then north to a point at 40°39'18.27" N., 073°24'3.81" W., and then west back to point of origin (NAD 83). All positions are approximate.</li> </ul>
8.6 Smith Point Triathlon .....	<ul style="list-style-type: none"> <li>• Event type: Swimming.</li> <li>• Date: A day during a weekend in August to be determined annually.</li> <li>• Time (Approximate): 6:20 a.m. to 9:30 a.m.</li> <li>• Location: All waters of Narrow Bay near Smith Point Park in Mastic Beach, NY within the area bounded by land along its southern edge and points in position at 40°44'14.28"N 072° 51'40.68"W, then north to a point at position 40°44'20.83"N 072°51'40.68"W, then east to a point at position 40°44'20.83"N 072°51'19.73"W, then south to a point at position 40°44'14.85"N 072°51'19.73"W, and then southwest along the shoreline back to the point of origin (NAD 83). All positions are approximate.</li> </ul>
9	September
9.1 Head of the Tomahawk .....	<ul style="list-style-type: none"> <li>• Event type: Regatta.</li> </ul>

TABLE TO § 100.100—Continued

	<ul style="list-style-type: none"> <li>• Date: A one day event either on a Saturday or Sunday between September 15 and October 15.</li> <li>• Time (Approximate): 7:30 a.m. to 2:30 p.m.</li> <li>• Location: All navigable waters of the Connecticut River off South Glastonbury, CT Beginning at position 41°41'18.88"N; 072°37'16.26" W., then downriver along the west bank to a point at position 41°38'49.12" N.; 072°37'32.73" W., then across the Connecticut River to a point at position 41°38'49.5" N.; 072°37'19.55" W., then upriver along the east bank to a point at position 41°41'25.82" N.; 072°37'9.08" W., then across the Connecticut River to the point of origin (NAD 83).</li> <li>• Additional Stipulations: Non-event vessels transiting through the area during the enforcement period are to travel at no wake speeds or 6 knots, whichever is slower and that non-event vessels shall not block or impede the transit of event participants, event safety vessels or official patrol vessels in the regulated area unless authorized by COTP or designated representatives.</li> </ul>
10	October
10.1 Head of the Riverfront Rowing Regatta, Hartford, CT.	<ul style="list-style-type: none"> <li>• Event type: Regatta.</li> <li>• Date: The first Sunday of October, from 8:30 a.m. until 4:30 p.m.</li> <li>• Location: All water of the Connecticut River, Hartford, CT, between at point North of Wethersfield Cove at 41°43'52.17" N.; 072°38'40.38" W. and the Riverside Boat House 41°46'30.98" N.; 072° 39'54.35" W. (NAD 83).</li> </ul>

Dated: June 8, 2015.

**E. J. Cubanski, III,**

*Captain, U. S. Coast Guard, Captain of the Port Sector Long Island Sound.*

[FR Doc. 2015-15406 Filed 6-22-15; 8:45 am]

**BILLING CODE 9110-04-P**

## POSTAL REGULATORY COMMISSION

### 39 CFR Part 3050

[Docket No. RM2015-9; Order No. 2545]

#### Periodic Reporting

**AGENCY:** Postal Regulatory Commission.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Commission is noticing a recent Postal Service filing requesting that the Commission initiate an informal rulemaking proceeding to consider changes to analytical principles relating to periodic reports (Proposal One). This notice informs the public of the filing, invites public comment, and takes other administrative steps.

**DATES:** *Comments are due:* July 23, 2015. *Reply comments are due:* August 3, 2015.

**ADDRESSES:** Submit comments electronically via the Commission's Filing Online system at <http://www.prc.gov>. Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

**FOR FURTHER INFORMATION CONTACT:** David A. Trissell, General Counsel, at 202-789-6820.

#### SUPPLEMENTARY INFORMATION:

#### Table of Contents

##### I. Introduction

##### II. Summary of Proposal III. Initial Commission Action IV. Ordering Paragraphs

#### I. Introduction

On June 12, 2015, the Postal Service filed a petition pursuant to 39 CFR 3050.11 requesting that the Commission initiate an informal rulemaking proceeding to consider changes to analytical principles relating to periodic reports.<sup>1</sup> Text attached to the Petition identifies the proposed analytical method changes filed in this docket as Proposal One, Proposed Change in RPW Methodology for Forever Stamp Usage, Stamp Breakage, and PIHOP. *Id.* Attachment at 1. The Postal Service concurrently filed a non-public library reference, along with an application for nonpublic treatment.<sup>2</sup>

#### II. Summary of Proposal

The Petition requests a change in methodology for the treatment of revenue, pieces, and weight (RPW) associated with forever stamp usage, breakage, and Postage-in-the-Hands-of-the-Public (PIHOP). Stamp breakage refers to the forever stamps that have been sold by the Postal Service but will never be used due to factors such as lost or damaged stamps and collectables. *Id.* at 3. PIHOP refers to forever stamps that

<sup>1</sup> Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider a Proposed Change in Analytical Principles (Proposal One), June 12, 2015 (Petition).

<sup>2</sup> Notice of Filing of USPS-RM2015-9/NP1 and Application for Nonpublic Treatment, June 12, 2015 (Notice). The library reference is USPS-RM2015-9/NP1, Non-Public Material Relating to Proposal One. The Notice incorporates by reference the Application for Non-Public Treatment of Materials contained in Attachment Two to the December 29, 2014, United States Postal Service Fiscal Year 2014 Annual Compliance Report. Notice at 1. See 39 CFR part 3007 for information on access to non-public material.

are being held by purchasers for future use. *Id.*

The Postal Service currently estimates forever stamp breakage by assigning stamps a category and an issue year, known as a layer. *Id.* at 3-4. When a layer of stamps is no longer available for sale and is determined to be at the end of its life cycle, as measured by the Origin Destination Information System (ODIS)-RPW system, the difference between cumulative sales and cumulative usage (calculated as a percentage) is deemed to be breakage and recognized as revenue for the Postal Service. *Id.* at 4. This breakage percentage is applied to forever stamp sales for that layer and all remaining open forever stamp layers, until the remaining layers expire and become the new basis for estimating the breakage percentage. *Id.*

Forever stamp usage is collected by ODIS-RPW data collectors and expanded to national totals. *Id.* A separate process calculates the value of the layer used, based on the different prices at which it was originally sold. *Id.* at 5. The estimated forever stamp usage is included in the current Book Revenue Adjustment Factor (BRAFF) calculation. *Id.* at 7. The Postal Service currently estimates PIHOP liability at the end of each accounting period. *Id.* at 5. PIHOP liability is calculated by subtracting the stamp breakage and stamp usage from stamp sales. *Id.*

The proposed changes include using the ODIS-RPW estimates for forever stamps usage directly in the RPW Report. *Id.* at 9. Under the proposal, two changes would occur in the BRAFF formulation: Forever stamp usage would be removed from the ODIS-RPW Single-Piece Sampling Revenue and forever stamp usage and forever stamp and non-forever stamp breakage would be

removed from the residual total balance. *Id.* at 10. In addition, breakage from both forever and non-forever stamps would be assigned to Market Dominant Other Revenue in the RPW Report and PIHOP revenues, including meter PIHOP, will no longer be allocated directly to products. *Id.* at 11.

*RPW reporting impacts.* The Postal Service provides three tables that assess the impact of its proposal. *Id.* Table 1 shows the BRAF calculations for FY 2014 for current and proposed methodologies; Table 2 shows the FY 2014 RPW report for the current proposed methodologies; and Table 3 shows the same information for Quarter 2 Year-to-Date FY 2015. *Id.* at 11–12. Library Reference USPS–FY2015–9/NP1 contains non-public versions of Tables 2 and 3. *Id.* at 12.

### III. Initial Commission Action

The Commission establishes Docket No. RM2015–9 for consideration of matters raised by the Petition. Additional information concerning the Petition may be accessed via the Commission's Web site at <http://www.prc.gov>. Interested persons may submit comments on the Petition and Proposal One no later than July 23, 2015. Reply comments are due no later than August 3, 2015. Pursuant to 39 U.S.C. 505, Anne C. O'Connor is designated as officer of the Commission (Public Representative) to represent the interests of the general public in this proceeding.

### IV. Ordering Paragraphs

*It is ordered:*

1. The Commission establishes Docket No. RM2015–9 for consideration of the matters raised by the Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider a Proposed Change in Analytical Principles (Proposal One), filed June 12, 2015.

2. Comments are due no later than July 23, 2015. Reply comments are due no later than August 3, 2015.

3. Pursuant to 39 U.S.C. 505, the Commission appoints Anne C. O'Connor to serve as an officer of the Commission (Public Representative) to represent the interests of the general public in this docket.

4. The Secretary shall arrange for publication of this order in the **Federal Register**.

By the Commission.

**Shoshana M. Grove,**  
Secretary.

[FR Doc. 2015–15361 Filed 6–22–15; 8:45 am]

BILLING CODE 7710–FW–P

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### 42 CFR Part 34

[Docket No. CDC–2015–0045]

RIN 0920–AA28

### Medical Examination of Aliens— Revisions to Medical Screening Process

**AGENCY:** Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services (HHS).

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Centers for Disease Control and Prevention (CDC), within the U.S. Department of Health and Human Services (HHS), is issuing this Notice of Proposed Rulemaking (NPRM) to amend its regulations governing medical examinations that aliens must undergo before they may be admitted to the United States. Specifically, HHS/CDC proposes to: revise the definition of *communicable disease of public health significance* by removing chancroid, granuloma inguinale, and lymphogranuloma venereum as inadmissible health-related conditions for aliens seeking admission to the United States; update the notification of the health-related grounds of inadmissibility to include proof of vaccinations to align with existing requirements established by the Immigration and Nationality Act (INA); revise the definitions and evaluation criteria for mental disorders, drug abuse and drug addiction; clarify and revise the evaluation requirements for tuberculosis; clarify and revise the process for the HHS/CDC-appointed medical review board that convenes to reexamine the determination of a Class A medical condition based on an appeal; and update the titles and designations of federal agencies within the text of the regulation.

**DATES:** Written comments must be received on or before August 24, 2015.

**ADDRESSES:** You may submit comments, identified by the Regulatory Information Number (RIN) 0920–AA28 or the Docket Number CDC–2015–0045 in the heading of this document by any of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: Division of Global Migration and Quarantine, Centers for Disease Control and Prevention, 1600 Clifton Road, NE., MS E–03, Atlanta, GA 30333, ATTN: Part 34.
- Hand Delivery/Courier: Division of Global Migration and Quarantine,

Centers for Disease Control and Prevention, 1600 Clifton Road, NE., MS E–03, Atlanta, GA 30333, ATTN: Part 34.

• Viewing Comments: Comments may be viewed at [www.regulations.gov](http://www.regulations.gov), Docket Number CDC–2015–0045.

*Instructions:* All submissions received must include the agency name and docket number or RIN for this rulemaking. All relevant comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided.

*Docket:* For access to the docket to read background documents or comments received or to download an electronic version of the NPRM, go to <http://www.regulations.gov> and refer to Docket Number CDC–2015–0045. Comments will be available for public inspection from Monday through Friday, except for legal holidays, from 9 a.m. until 5 p.m., Eastern Time, at 1600 Clifton Road NE., Atlanta, Georgia 30333. Please call ahead to 1–866–694–4867, and ask for a representative in the Division of Global Migration and Quarantine to schedule your visit.

**FOR FURTHER INFORMATION CONTACT:** Ashley A. Marrone, J.D., Division of Global Migration and Quarantine, Centers for Disease Control and Prevention, 1600 Clifton Road, NE., MS E–03, Atlanta, Georgia 30333; telephone 1–404–498–1600.

**SUPPLEMENTARY INFORMATION:** The Preamble to this NPRM is organized as follows:

- I. Public Participation
- II. Legal Authority
- III. Background
  - A. Inadmissibility and the Medical Examination
  - B. Applicability of part 34
  - C. Legislative and Regulatory History
- IV. Rationale for Proposed Regulatory Action
  - A. Section 34.2 Definitions
  - B. Section 34.3 Scope of Examinations
  - C. Section 34.4 Medical Notifications
  - D. Section 34.7 Medical and Other Care; Death
  - E. Section 34.8 Reexamination; Convening of Review Boards; Expert Witnesses, Reports
- V. Alternatives Considered
- VI. Required Regulatory Analyses
  - A. Executive Orders 12866 and 13563
  - B. The Regulatory Flexibility Act
  - C. The Paperwork Reduction Act
  - D. National Environmental Policy Act (NEPA)
  - E. Executive Order 12988: Civil Justice Reform
  - F. Executive Order 13132: Federalism
  - G. The Plain Language Act of 2010
- VII. References

### I. Public Participation

Interested persons are invited to participate in this rulemaking by

submitting written views, opinions, recommendations, and data. Comments received, including attachments and other supporting materials, are part of the public record and subject to public disclosure.

Specifically, HHS/CDC seeks comment on:

(1) Whether infectious Hansen's disease (previously referred to in regulation as infectious leprosy), infectious syphilis and/or gonorrhea should be removed from the definition of communicable disease of public health significance.

(2) Whether the definition of communicable disease of public health significance and the scope of the medical examination should be revised as proposed in this regulation;

(3) Whether the statutory requirement that aliens demonstrate proof of vaccinations should be incorporated into the regulations as a notifiable medical condition. Please note when considering this question that HHS/CDC is not requesting comment on the statutory language itself as HHS/CDC does not have the authority to alter statutory language. Rather, we are interested in comment on the advisability of incorporating statutory language into regulations.

(4) Whether the requirement that immigrants demonstrate proof of vaccination against vaccine-preventable diseases recommended by the Advisory Committee on Immunization Practices (ACIP) should be limited to only those vaccines for which a public health need exists at the time of immigration or adjustment of status. CDC has previously published criteria for determining whether a public health need exists at the time of immigration or adjustment of status. CDC is not seeking comment on the criteria, but rather on the incorporation of this standard into the regulations.

(5) Whether the definitions and evaluation criteria for mental disorders, drug abuse and drug addiction should be revised as proposed in this regulation

(6) Whether the requirements for evaluating the presence of tuberculosis in alien applicants should be clarified and revised as proposed in this regulation and;

(7) Whether the process for the convening of a medical review board and reexamination of an alien by a medical review board should be revised as proposed in this regulation.

Do not include any information in your comment or supporting materials that you do not wish to be disclosed publicly.

## II. Legal Authority

HHS/CDC is proposing these revisions under the authority of 42 U.S.C. 252 and 8 U.S.C. 1182 and 1222.

## III. Background

### A. Inadmissibility and the Medical Examination

Under section 212(a)(1) of the Immigration and Nationality Act (INA) (8 U.S.C. 1182(a)(1)), any alien who is determined to have a *communicable disease of public health significance* is inadmissible to the United States. As a result of this statute, aliens outside of the United States who have a *communicable disease of public health significance* are ineligible to receive a visa for admission into the United States, absent the grant of a waiver. Aliens within the United States who have a communicable disease of public health significance are also ineligible to adjust their status to that of a lawful permanent resident, absent the grant of a waiver.

In addition to other potential grounds of inadmissibility, an alien is inadmissible if he/she is determined: (1) To have a communicable disease of public health significance (as currently defined by regulations); (2) to pose, or has posed, a threat to the property, safety, or welfare of the alien or others; (3) to have had a history of behavior, which has posed a threat to the property, safety, or welfare of the alien or others and which is likely to recur or lead to other harmful behavior; or (4) to be a drug abuser or addict.

At present, except for certain adopted children 10 years of age or younger, HHS/CDC requires any alien seeking admission as an immigrant or seeking adjustment of status to that of a lawful permanent resident, to present documentation of vaccination against all vaccine-preventable diseases explicitly listed in section 212(a)(1)(A)(ii) of the INA (mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, Haemophilus influenzae type B, hepatitis B), and for all other vaccinations recommended by the Advisory Committee for Immunization Practices (ACIP) for which a public health need exists at the time of immigration or adjustment of status.

To allow HHS/CDC to adapt vaccination requirements for U.S. immigrants based on public health needs, on April 8, 2009, HHS/CDC published a notice in the **Federal Register** (74 FR 15986) seeking public comment on proposed criteria that HHS/CDC intended to use to determine which vaccines recommended by the ACIP for the general U.S. population

should be required for immigrants seeking admission into the United States or seeking adjustment of status to that of an alien lawfully admitted for permanent residence based on public health needs. The proposed criteria are as follows: The vaccine must be an age-appropriate vaccine as recommended by the ACIP for the general U.S. population, and at least one of the following: (i) The vaccine must protect against a disease that has the potential to cause an outbreak; or (ii) the vaccine must protect against a disease that has been eliminated in the United States or is in the process for elimination in the United States. HHS/CDC received public comment on these criteria and after review and consideration, published a final notice on November 13, 2009, adopting the proposed criteria (74 FR 58634). These criteria became effective on December 14, 2009. Since then, HHS/CDC has relied on such criteria to determine which vaccines aliens must receive as part of the immigration medical screening process. The list of the ACIP vaccine recommendations for the U.S. general public can be found at <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>, and the list of HHS/CDC required vaccines for immigration purposes can be found at <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/vaccination-panel-technical-instructions.html#tbl1>. As more vaccines become available, HHS/CDC will continue to apply these criteria to respond to the ACIP vaccination recommendations.

Any changes to the list of required vaccines, which result from an application of these criteria, will be reflected in HHS/CDC's Technical Instructions, available to the public at <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/index.html>. While HHS/CDC is not seeking additional comment on these previously published vaccination criteria at this time, we are requesting comment on incorporating the reference to these criteria in this regulation. We note that if there is a future need for HHS/CDC to reconsider these established criteria, HHS/CDC will solicit comments through publication in the **Federal Register**.

The Secretary of Health and Human Services (HHS) is authorized to promulgate regulations establishing the requirements for the medical examination of aliens by sections 212(a)(1) and 232 of the INA and section 325 of the Public Health Service Act (42 U.S.C. 252). The regulations, administered by HHS/CDC, are promulgated at 42 CFR part 34. Under

current 42 CFR part 34, an alien seeking permanent residence prior to arrival into the U.S. or through an adjustment of status while in the U.S., must undergo a medical examination to determine whether the alien is inadmissible on medical grounds.

HHS/CDC issues Technical Instructions that provide the technical consultation and guidance to panel physicians and civil surgeons who conduct the medical examinations of aliens. Panel physicians, designated by the U.S. Department of State (DOS), perform medical examinations on those aliens living outside the United States who are seeking to immigrate to the United States. Civil surgeons, designated by the U.S. Citizenship and Immigration Services (USCIS) within the U.S. Department of Homeland Security (DHS), perform medical examinations for aliens who are already present in the United States and are seeking adjustment of status. The *CDC Technical Instructions for Medical Examination of Aliens*, including the most current updates that panel physicians and civil surgeons must follow in accordance with these regulations, are available to the public on the CDC Web site, located at the following Internet address: <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/index.html>.

#### B. Applicability of Part 34

The provisions in 42 CFR part 34 apply to the medical examination of (1) aliens outside the United States who are applying for a visa at an embassy or consulate of the United States; (2) aliens arriving in the United States; (3) aliens required by DHS to have a medical examination in connection with determination of their admissibility into the United States; and (4) aliens who apply for adjustment of their immigration status to that of lawful permanent resident. While 42 CFR part 34 can apply to individuals who wish to come to the United States to visit, such as leisure or business travelers, a medical examination is not routinely required as a condition for issuance of non-immigrant visas or entry into the United States.

Annually, DHS admits more than 1 million aliens to reside permanently in this country (24). Foreign citizens who wish to live permanently in the United States must comply with U.S. immigration law and specific procedures for applying for an immigrant visa or adjustment of status. These applicants are also subject to the medical grounds of inadmissibility. The four main immigrant visa classifications are: (1) Immediate Relatives, that is, the

spouse, child (unmarried and under 21 years of age) or parent of a U.S. citizen (a citizen must be at least 21 years old to file a petition for a parent); (2) Family-Based immigrants (adult sons or daughters of citizens, the siblings of citizens who are at least 21 years old, and the spouse, child, or adult sons or daughters of lawful permanent residents); (3) Employment-Based immigrants; and (4) Diversity immigrants who obtain by lottery the ability to seek an immigrant visa.

Refugees and asylees may also apply to adjust to permanent resident status from inside the United States. INA section 209; 8 U.S.C. 1159. Section 101(a)(42)(A) of the INA generally defines refugees and asylees as persons who cannot return to their country because of persecution or the well-founded fear of persecution based on race, religion, nationality, membership in a particular social group, or political opinion. A refugee applicant is preliminarily approved for refugee status overseas, but is admitted as a refugee upon admission to the United States at a port of entry. An asylee applicant is approved for asylum from within the United States and is not required to undergo a medical examination as part of the application process until he/she seeks adjustment of status. *See* INA 208 and 8 CFR part 208. A refugee is subject to the medical grounds of inadmissibility and the medical examination requirements. A refugee is not subject to the vaccination requirements until he/she seeks adjustment of status. *See* INA section 207; 8 U.S.C. 1157; 8 CFR part 207.

An additional immigration category under the INA is Temporary Protected Status (TPS). This applies to persons who are in the United States lawfully, though temporarily, as a result of ongoing armed conflict, natural disasters, or certain other extraordinary and temporary conditions, and whose countries have been designated as TPS countries under INA section 244; 8 U.S.C. 1255a; 8 CFR part 244. TPS applicants are also subject to the medical grounds of inadmissibility.

#### C. Legislative and Regulatory History of Part 34

Beginning in 1952, the language of the INA mandated that, among other grounds for inadmissibility, aliens “who are afflicted with any dangerous contagious disease” are ineligible to receive a visa and therefore are excluded from admission into the United States. In 1990, Congress amended the INA by revising the classes of excludable aliens to provide that an alien who is determined (in accordance

with regulation prescribed by the Secretary of Health and Human Services) to have a *communicable disease of public health significance* shall be excludable from the United States. Immigration Act of 1990, Public Law 101–649, section 601, 104 Stat. 4978 January 23, 1990; INA section 212(a)(1)(A)(i), 8 U.S.C. 1182(a)(1)(A)(i) (effective June 1, 1991). At the time of the 1990 INA amendments, the following specific communicable illnesses rendered an alien inadmissible: active tuberculosis, infectious syphilis, gonorrhea, infectious leprosy, chancroid, lymphogranuloma venereum, granuloma inguinale, and human immunodeficiency virus (HIV) infection. HHS/CDC subsequently published a proposed rule that would have removed from the list all diseases except for active tuberculosis. 56 FR 2484 (January 23, 1991). Based on the review and consideration of public comments received on this proposal, HHS published an interim final rule retaining all communicable diseases on the list and committed its initial proposal for further study. 56 FR 25000 (May 31, 1991). On October 6, 2008, HHS/CDC published an Interim Final Rule (IFR) announcing a revised definition of *communicable disease of public health significance* and revised scope of the medical examination in 42 CFR part 34. This IFR addressed concerns regarding emerging and reemerging diseases in alien populations who are bound for the United States. *See* 73 FR 58047 and 73 FR 62210.

With the 2008 revision to 42 CFR part 34, the definition of *communicable disease of public health significance* was modified to include two disease categories: (1) Quarantinable diseases designated by Presidential Executive Order; and (2) a communicable disease that may pose a public health emergency of international concern in accordance with the International Health Regulations (IHR) of 2005, provided the disease meets specified criteria in addition to the list of specific illnesses. Specific illnesses remaining as a *communicable disease of public health significance* were active tuberculosis, infectious syphilis, gonorrhea, infectious Hansen’s disease (previously referred to in regulation as infectious leprosy), chancroid, lymphogranuloma venereum, granuloma inguinale, and HIV infection.

In response to a 2008 amendment to the INA, on July 2, 2009, HHS/CDC published a Notice of Proposed Rulemaking (NPRM), which proposed two regulatory changes: 1) The removal



of HIV infection from the definition of *communicable disease of public health significance*; and 2) removal of references to serologic testing for HIV from the scope of examinations. On November 2, 2009, HHS/CDC published a final rule, effective on January 4, 2010, that removed HIV infection and testing for HIV infection from part 34 regulations. 74 FR 31798 and 73 FR 56547.

Through today’s NPRM, HHS/CDC is soliciting public comment on the definition of *communicable disease of public health significance* and the *revised scope of medical examination which were initially promulgated as an interim final rule in 2008*. Specifically, in addition to the previously updated language, HHS/CDC proposes to further revise the definition of *communicable disease of public health significance* by removing these three uncommon health conditions: chancroid; granuloma inguinale; and lymphogranuloma venereum. This definition is now proposed to include (1) quarantinable diseases designated by Presidential Executive Order; (2) a communicable disease that may pose a public health emergency of international concern in accordance with the IHR of 2005; and (3) gonorrhea, infectious Hansen’s disease, infectious syphilis, and active tuberculosis.

HHS/CDC is not proposing to remove active tuberculosis from the definition of a communicable disease of public health significance. At this time, HHS/CDC is not proposing to remove infectious leprosy, gonorrhea, or syphilis from the definition but is proposing to replace the term “infectious leprosy” with “infectious Hansen’s disease” and to modify “syphilis, infectious stage” to simply “syphilis, infectious” to reflect modern terminology. HHS/CDC will accept public comment on whether these three

diseases should remain or be removed from the definition of *communicable disease of public health significance*. HHS/CDC’s rationale for maintaining these three diseases is that continuing to screen for and treat these diseases, when identified in aliens, provides a public health benefit to the United States as well as a personal health benefit to the individual. Further, while infection with these three diseases initially renders an alien inadmissible to the United States, treatment is available upon identification, and once appropriately treated, aliens are no longer inadmissible. Continued screening for these three diseases during the medical examination provides an opportunity to identify and treat disease in alien populations and thus provide a measure of public health protection to the general U.S. population.

**IV. Rationale for Proposed Regulatory Action**

HHS/CDC identified the need for this rulemaking through an annual retrospective review of its regulations. Executive Order 13563 “Improving Regulation and Regulatory Review” requires Federal agencies to periodically review existing regulations to eliminate those regulations that are obsolete, unnecessary, burdensome, or counterproductive or revise regulations to increase their effectiveness, efficiency, and flexibility.

Through this NPRM, HHS/CDC proposes to update part 34 to reflect modern terminology and plain language commonly used in medicine and science by public health partners in the medical examination of aliens. Likewise, we are proposing to update part 34 so that the text accurately reflects the statutory and administrative changes that have occurred within the Federal Government regarding agencies and/or departments responsible for this

process. These updates will ensure regulations that govern the medical examination of aliens are based upon accepted contemporary scientific principles as well as current medical practices.

The following is a section-by-section analysis of the proposed changes for which HHS/CDC is seeking public comment:

*A. 34.1 Applicability*

HHS/CDC is proposing to replace the acronym “INS” within 34.1(c) with “DHS” to best reflect the administrative changes that have occurred within the Federal Government regarding agencies and/or departments responsible for the medical examination of aliens.

*B. Section 34.2 Definitions*

Current section 34.2 entitled “Definitions” provides information regarding the intent of HHS/CDC regarding certain terms that are used in the regulation. While HHS/CDC is not proposing to revise all of the current terms and definitions, such as medical examiner, we welcome comment on the use of these terms and its definitions. HHS/CDC is proposing to revise the definitions section as specifically described below.

HHS/CDC proposes to revise the definitions of: *CDC, Communicable disease of public health significance, Civil Surgeon, Class A medical notification, Class B medical notification, Director, Drug abuse, Drug addiction, Medical notification, Medical hold document, Medical officer, Mental disorder* and *Physical disorder*.

Additionally, HHS/CDC is adding definitions for *DHS* and *HHS* and removing the definition of *INS*. To help guide the reader, we have provided a chart to indicate which text is proposed to change and is therefore subject to comments from the public.

CURRENT DEFINITIONS AND CORRESPONDING PROPOSED CHANGES IN DEFINITIONS WITHIN THE NPRM

Definitions in 42 CFR part 34	Corresponding, new, or updated definition within NPRM
CDC. Centers for Disease Control, Public Health Services, U.S. Department of Health and Human Services.	CDC. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

## CURRENT DEFINITIONS AND CORRESPONDING PROPOSED CHANGES IN DEFINITIONS WITHIN THE NPRM—Continued

Definitions in 42 CFR part 34	Corresponding, new, or updated definition within NPRM
<p><i>Communicable disease of public health significance.</i> Any of the following diseases:</p> <ol style="list-style-type: none"> <li>(1) Chancroid.</li> <li>(2) Communicable diseases as listed in a presidential Executive Order, as provided under Section 361(b) of the Public Health Service Act. The current revised list of quarantinable communicable diseases is available at <a href="http://www.cdc.gov">http://www.cdc.gov</a> and <a href="http://www.archives.gov/federal-register">http://www.archives.gov/federal-register</a>.</li> <li>(3) Communicable diseases that may pose a public health emergency of international concern if it meets one or more of the factors listed in in § 34.3(d) and for which the CDC Director has determined (A) a threat exists for importation into the United States, and (B) such disease may potentially affect the health of the American public. The determination will be made consistent with criteria established in Annex 2 of the revised International Health Regulations (<a href="http://www.who.int/csr/ihr/en/">http://www.who.int/csr/ihr/en/</a>), as adopted by the Fifty-Eighth World Health Assembly in 2005, and as entered into effect in the United States in July, 2007. Subject to the U.S. Government's reservation and understandings: <ol style="list-style-type: none"> <li>(i) Any of the communicable diseases for which a single case requires notification to the World Health Organization (WHO) as an event that may constitute a public health emergency of international concern, or,</li> <li>(ii) Any other communicable disease the occurrence of which requires notification to the WHO as an event that may constitute a public health emergency of international concern. HHS/CDC's determinations will be announced by notice in the <b>Federal Register</b>.</li> </ol> </li> <li>(4) Gonorrhea.</li> <li>(5) Granuloma inguinale.</li> <li>(6) Leprosy, infectious.</li> <li>(7) Lymphogranuloma venereum.</li> <li>(8) Syphilis, infectious stage.</li> <li>(9) Tuberculosis, active.</li> </ol> <p><i>Civil surgeon.</i> A physician, with not less than 4 years' professional experience, selected by the District Director of INS to conduct medical examinations of aliens in the United States who are applying for adjustment of status to permanent residence or who are required by the INS to have a medical examination.</p> <p><i>Class A medical notification</i> .....</p> <ol style="list-style-type: none"> <li>(1) A communicable disease of public health significance;</li> <li>(2)(i) A physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;</li> <li>(ii) A history of a physical or mental disorder and behavior associated with the disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior; or</li> <li>(3) Drug abuse or addiction.</li> </ol> <p><i>Class B medical notification.</i> Medical notification of a physical or mental health condition, disease, or disability serious in degree or permanent in nature amounting to a substantial departure from normal well-being.</p>	<p><i>Communicable disease of public health significance.</i> Any of the following diseases:</p> <ol style="list-style-type: none"> <li>(1) Communicable diseases as listed in a Presidential Executive Order, as provided under Section 361(b) of the Public Health Service Act. The current revised list of quarantinable communicable diseases is available at <a href="http://www.cdc.gov">http://www.cdc.gov</a> and <a href="http://www.archives.gov/federal-register">http://www.archives.gov/federal-register</a>.</li> <li>(2) Communicable diseases that may pose a public health emergency of international concern if it meets one or more of the factors listed in in § 34.3(d) and for which the CDC Director has determined (A) a threat exists for importation into the United States, and (B) such disease may potentially affect the health of the American public. The determination will be made consistent with criteria established in Annex 2 of the revised International Health Regulations (<a href="http://www.who.int/csr/ihr/en/">http://www.who.int/csr/ihr/en/</a>), as adopted by the Fifty-Eighth World Health Assembly in 2005, and as entered into effect in the United States in July, 2007. Subject to the U.S. Government's reservation and understandings: <ol style="list-style-type: none"> <li>(i) Any of the communicable diseases for which a single case requires notification to the World Health Organization (WHO) as an event that may constitute a public health emergency of international concern, or,</li> <li>(ii) Any other communicable disease the occurrence of which requires notification to the WHO as an event that may constitute a public health emergency of international concern. HHS/CDC's determinations will be announced by notice in the <b>Federal Register</b>.</li> </ol> </li> <li>(3) Gonorrhea.</li> <li>(4) Hansen's disease, infectious.</li> <li>(5) Syphilis, infectious.</li> <li>(6) Tuberculosis, active.</li> </ol> <p><i>Civil surgeon.</i> A physician selected by DHS to conduct medical examinations of aliens in the United States who are applying for adjustment of status to permanent residence or who are required by DHS to have a medical examination.</p> <p><i>Class A medical notification.</i></p> <ol style="list-style-type: none"> <li>(1) A communicable disease of public health significance;</li> <li>(2) A failure to present documentation of having received vaccination against "vaccine-preventable diseases" for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, which shall include at least the following diseases: mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, <i>Haemophilus influenzae</i> type B, and hepatitis B, and any other vaccinations against vaccine-preventable diseases recommended by the Advisory Committee on Immunization Practices (ACIP) for which HHS/CDC determines there is a public health need at the time of immigration or adjustment of status.</li> </ol> <p>Provided, however, that in no case shall a Class A medical notification be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive parent or prospective adoptive parent of the child, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that, within 30 days of the child's admission, or at the earliest time that is medically appropriate, the child will receive the vaccinations identified in the requirement.</p> <ol style="list-style-type: none"> <li>(3)(i) A current disorder and behavior that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;</li> <li>(ii) A history of behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior; or</li> <li>(4) Drug abuse or addiction.</li> </ol> <p><i>Class B medical notification.</i> Medical notification of a physical or mental health condition, disease, or disability serious in degree or permanent in nature.</p>

CURRENT DEFINITIONS AND CORRESPONDING PROPOSED CHANGES IN DEFINITIONS WITHIN THE NPRM—Continued

Definitions in 42 CFR part 34	Corresponding, new, or updated definition within NPRM
<p><i>Director.</i> The Director of the Centers for Disease Control .....</p>	<p><i>Director.</i> The Director, Centers for Disease Control and Prevention, Department of Health and Human Services, or another authorized representative as approved by the CDC Director or the Secretary.</p>
<p><i>Drug abuse.</i> The non-medical use of a substance listed in section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802) which has not necessarily resulted in physical or psychological dependence.</p>	<p><i>Drug abuse.</i> Current substance use disorder or substance-induced disorder, mild, as defined in the current edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM) published by the American Psychiatric Association, or in another authoritative source as approved by the Director, of a substance listed in Section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802).</p>
<p><i>Drug addiction.</i> The non-medical use of a substance listed in section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802) which has resulted in physical or psychological dependence.</p>	<p><i>Drug addiction.</i> Current substance use disorder or substance-induced disorder, moderate or severe as defined in the current edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM) published by the American Psychiatric Association, or in another authoritative source as approved by the Director, of a substance listed in Section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802).</p>
<p><i>INS.</i> Immigration and Naturalization Service, U.S. Department of Justice.</p>	<p><i>HHS.</i> U.S. Department of Health and Human Services Definition Removed.</p>
<p><i>Medical examiner.</i> A panel physician, civil surgeon, or other physician designated by the Director to perform medical examination of aliens.</p>	<p><i>No change.</i></p>
<p><i>Medical hold document.</i> A document issued to the INS by a quarantine inspector of the Public Health Service at a port of entry, which defers the inspection for admission until the cause of the medical hold is resolved.</p>	<p><i>Medical hold document.</i> A document issued to DHS by a quarantine officer of HHS/CDC at a port of entry, which defers the inspection for admission until the cause of the medical hold is resolved.</p>
<p><i>Medical notification.</i> A document issued to a consular authority or the INS by a medical examiner, certifying the presence or absence of:</p> <ul style="list-style-type: none"> <li>(1) A communicable disease of public health significance;</li> <li>(2)(i) A physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;</li> <li>(ii) A history of a physical or mental disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior;</li> <li>(3) Drug abuse or addiction; or</li> <li>(4) Any other physical abnormality, disease, or disability serious in degree or permanent in nature amounting to a substantial departure from normal well-being.</li> </ul>	<p><i>Medical notification.</i> A document issued to a consular authority or DHS by a medical examiner, certifying the presence or absence of:</p> <ul style="list-style-type: none"> <li>(1) A communicable disease of public health significance;</li> <li>(2) Documentation of having received vaccination against “vaccine-preventable diseases” for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, which shall include at least the following diseases: mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, <i>Haemophilus influenzae</i> type B, and hepatitis B, and any other vaccinations against vaccine-preventable diseases recommended by the Advisory Committee on Immunization Practices (ACIP) for which HHS/CDC determines there is a public health need at the time of immigration or adjustment of status.</li> </ul> <p>Provided, however, that in no case shall a Class A medical notification be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive parent or prospective adoptive parent of the child, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that, within 30 days of the child’s admission, or at the earliest time that is medically appropriate, the child will receive the vaccinations identified in the requirement.</p> <ul style="list-style-type: none"> <li>(3)(i) A behavior that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;</li> <li>(ii) A history of a behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior;</li> <li>(4) Drug abuse or addiction;</li> <li>(5) Any other physical or mental condition, disease or disability serious in degree or permanent in nature.</li> </ul>
<p><i>Medical officer.</i> A physician of the Public Health Service Commissioned Corps assigned by the Director to conduct physical and mental examinations of aliens.</p>	<p><i>Medical officer.</i> A physician assigned by the Director to conduct physical and mental examinations of aliens on behalf of HHS/CDC.</p>
<p><i>Mental disorder.</i> A currently accepted psychiatric diagnosis, as defined by the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association, or by other authoritative sources.</p>	<p><i>Mental disorder.</i> A currently accepted psychiatric diagnosis, as defined by the most recent version of the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association, or by other authoritative sources as approved by the Director.</p>
<p><i>Panel physician.</i> A physician selected by a United States embassy or consulate to conduct medical examinations of aliens applying for visas.</p>	<p><i>No change.</i></p>
<p><i>Physical disorder.</i> A currently accepted medical diagnosis, as defined by the Manual of the International Classification of Diseases, Injuries, and Causes of Death published by the World Health Organization, or by other authoritative sources.</p>	<p><i>Physical disorder.</i> A currently accepted medical diagnosis, as defined by the most recent version of the Manual of the International Classification of Diseases (ICD), Injuries, and Causes of Death published by the World Health Organization, or by other authoritative sources as approved by the Director.</p>

## Section 34.2(a) CDC

We are proposing to update the definition of *CDC* to reflect the current official title of the Agency: Centers for Disease Control and Prevention, Department of Health and Human Services. In doing so, we are removing “Public Health Services” from the definition.

## Section 34.2(b) Communicable Disease of Public Health Significance

This provision defines *communicable disease of public health significance* as both a specific list of diseases and categories of diseases for which all aliens are inadmissible to the United States. HHS/CDC is proposing to remove three uncommon bacterial infections associated with genital ulcer disease: chancroid, granuloma inguinale, and lymphogranuloma venereum, from the specific list of *communicable disease of public health significance* as provided for in 42 CFR 34.2(b).

HHS/CDC uses epidemiological principles and current medical practice to assess and revise the list of diseases defined as a *communicable disease of public health significance*. Guided by such principles and practice, HHS/CDC believes that these three sexually transmitted infections no longer pose such a significant threat to the general U.S. population, that aliens with these infections should not be denied admission to the United States. The three bacterial infections (chancroid, granuloma inguinale and lymphogranuloma venereum), all primarily transmitted through sexual contact, have never been common in the United States and over the past two decades have been observed to be increasingly rare throughout the world (6, 8). Of the three bacterial infections, only laboratory-diagnosed cases of chancroid are reportable conditions in the United States, and since 2005 fewer than 30 chancroid cases annually were reported to CDC from the U.S. states and territories (6–22).

While some U.S. cities (7) keep records of cases of granuloma inguinale and lymphogranuloma venereum, neither condition is included on the list of diseases reported to HHS/CDC by clinicians and public health departments. Online searches and a few available publications indicate that both conditions most typically occur in tropical and impoverished settings (*i.e.*, with limited access to water, hygiene); and both conditions are increasingly uncommon over time. A review of the literature published during the past five years identified only a handful of case reports on granuloma inguinale, and the

vast majority of these cases were cases outside the United States (12–17). Additionally, cases of lymphogranuloma venereum are increasingly rare among women. Although sporadic small outbreaks of lymphogranuloma venereum have occurred over the past 10 years, these have been almost exclusively among men who have sex with men, with disease generally manifested as severe proctitis (inflammation of the anus or rectum) (18–20).

Internationally, most countries do not track any of the three infections; however, the few publications and records available suggest case rates have declined worldwide over the past 50 years. Declining rates of these conditions are likely due to a variety of factors. Improved living conditions, better sanitation (*e.g.*, availability of soap and water), condom use, and educational efforts are all believed to be important factors (6, 21–23) contributing to the decline in the incidence of these infections. Improved recognition by physicians and treatment based on clinical presentation of sexually transmitted infections, coupled with treatment of sexual partners, also appears to be important in their decline. Increased antibiotic usage for treatment of other unrelated conditions may have contributed to the declining incidence of these infections. Additionally, HIV prevention strategies such as male circumcision may be playing a role, although definitive studies of this effect are still pending.

Given the low burden of these three infections globally, the potential introduction of additional cases into the United States by aliens is likely to have a negligible impact on the U.S. population for several reasons. As mentioned, these primarily tropical infections can be prevented through improved personal hygiene (11); protected sex (use of a condom); and treatment of sexual partners. Such infections can be effectively treated and cured with relatively uncomplicated courses of antibiotic therapy. None of the three infections is associated with excess mortality (premature death); and most cases do not lead to serious long term consequences, disability or excessive medical costs.

After careful consideration of epidemiological principles and current medical practice, scientific evidence indicates that chancroid, granuloma inguinale, and lymphogranuloma venereum do not represent a significant risk for introduction, transmission, and spread from foreign countries to the United States population. Therefore, HHS/CDC proposes to remove these

three diseases from the specific list of *communicable disease of public health significance* and is seeking public comment on this proposal.

## Section 34.2(c) Civil Surgeon

*Civil Surgeon* is currently defined as a “physician, with not less than 4 years professional experience, selected by the District Director of INS to conduct medical examinations of aliens in the United States who are applying for adjustment of status to permanent residence or who are required by the INS to have a medical examination.” HHS/CDC is proposing to remove the specific language of “District Director” and “INS” from the definition of *civil surgeon* to align with the specific language of the definition of *civil surgeon* as provided for in DHS regulations in 8 CFR part 232. HHS/CDC also proposes to remove “with not less than 4 years’ professional experience” from the definition of *civil surgeon*. Through complimentary regulations promulgated by DHS at 8 CFR 232, the requirement of 4 years’ professional experience for civil surgeons will remain in effect. We are proposing this change because DHS is responsible for designating civil surgeons and should therefore have the discretion to determine the necessary prerequisites for that position. Thus, CDC is simply proposing to remove a redundancy found in its regulations and is not affecting a substantive change in policy. HHS/CDC will continue to consult with DHS/USCIS as needed, regarding recommendations for civil surgeon requirements. Therefore, HHS/CDC is proposing *civil surgeon* to mean a physician designated by DHS to conduct medical examinations of aliens in the United States who are applying for adjustment of status to permanent residence or who are required by DHS to have a medical examination.

## Section 34.2(d) Class A Medical Notification

HHS/CDC is proposing to amend the definition of Class A medical notification by incorporating statutory language requiring documentary proof of vaccination. This requirement is provided by section 341 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) which amended Section 212 of the INA. HHS/CDC is proposing to update part 34 to explicitly include the requirement for proof of vaccination as previously specified in the IIRIRA. See Public Law 104–208, Div. C, 110 Stat. 3009–546. Lack of proof of vaccination will result in the issuance of a Class A medical notification. This additional language

will not change current practices, but is a reflection of updated statutory language. As noted above, HHS/CDC is not authorized to change statutory requirements; thus, CDC is not requesting comment on the statutory language, but on the advisability of incorporating statutory language into regulations. Additionally, CDC seeks to incorporate and is requesting comment on its understanding that the statutory requirement for proof of vaccination in regard to ACIP-recommended vaccines only applies to those vaccines that are appropriate in an immigration context and for which a public health need exists at the time of immigration or adjustment of status.

The proposed definition also includes the vaccination exemption specifically provided in Section 212 of the INA for an adopted child who is 10 years of age or younger. This exemption is applicable if, prior to the admission of the child, an adoptive or prospective adoptive parent, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that the child will be vaccinated within 30 days of the child's admission, or at the earliest time that is medically appropriate. Execution of this affidavit will prevent a Class A medical notification from being generated for lack of proof of vaccination. This additional language will not change current practices, but is a reflection of updated statutory language. Again, because HHS/CDC is not authorized to change statutory requirements, HHS/CDC is not requesting comment on the statutory language, but will accept comment on the advisability of incorporating statutory language into regulations. HHS/CDC believes that the inclusion of statutory language promotes greater transparency and a better understanding of immigration requirements. For further information, please visit: <http://www.uscis.gov/ilink/docView/SLB/HTML/SLB/0-0-0-1/0-0-0-29/0-0-0-2006.html>.

#### Section 34.2(f) Director

We are proposing to update the definition of *Director* to reflect the current official title of the CDC Director, as well as his/her delegation authorities. Therefore, the definition of *Director* is proposed as: the Director, Centers for Disease Control and Prevention, Department of Health and Human Services, or another authorized representative as approved by the CDC Director or the Secretary.

#### Section 34.2(g) DHS

We are proposing to add *DHS* to the definitions in order to best reflect the administrative changes that have occurred within the Federal Government regarding agencies and/or departments responsible for the medical examination of aliens. The definition of *DHS* is proposed as: U.S. Department of Homeland Security.

#### Section 34.2(h) Drug Abuse and Section 34.2(i) Drug Addiction

HHS/CDC is proposing to revise the definitions of *drug abuse* and *drug addiction* by aligning with the definitions of "substance use disorders" and "substance-induced disorders," with the definitions provided by the Diagnostic and Statistical Manual for Mental Disorders (DSM) published by the American Psychiatric Association (25). HHS/CDC is taking this approach because the DSM is the medical standard for the diagnosis of mental disorders and substance-related disorders. The DSM provides current diagnostic criteria based on the latest available evidence. As such, HHS/CDC is proposing *drug abuse* and *drug addiction* to mean "current substance use disorders or substance-induced disorders" as defined in the current edition of the DSM, or in another authoritative source as approved by the Director, of a substance listed in Section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802). These proposed updated definitions are not a substantive change, as it is the current practice of HHS/CDC to use the definitions found in the DSM. In the unlikely event that another authoritative source becomes more appropriate than the DSM, HHS/CDC would issue a notice in the **Federal Register**, update our Web site, and list the source in our technical instructions. We would not pursue notice and comment rulemaking unless the reliance on a new source resulted in a substantive change in CDC operations or policy.

#### Section 34.2(k) Medical Hold Document

HHS/CDC is proposing to update the definition of *Medical hold document* by replacing "INS" with "DHS", replacing "Public Health Service" with "HHS/CDC" and replacing "quarantine inspector" with "quarantine officer." HHS/CDC is proposing these changes to reflect the current Federal agency and position names and respective responsibilities and is not seeking public comment on these non-substantive changes.

#### Section 34.2(l) Medical Notification

The *medical notification* is a medical examination document issued to a consular authority or to DHS by a medical examiner following examination of an applicant for immigration for inadmissible conditions. HHS/CDC is proposing to amend the definition of *medical notification* by adding proof of vaccination requirements as already provided by section 341 of the IIRIRA which amended Section 212 of the INA. HHS/CDC is proposing this addition to update part 34 to include the requirement for proof of vaccination that is currently specified in statute in the IIRIRA and for those ACIP-recommended vaccinations for which a public health need exists at the time of immigration or adjustment of status. This is not a substantive change to the regulation, as it will not affect current practice.

Based on this update, *medical notification*, according to the INA, is proposed to mean a medical examination document issued to a consular authority or the DHS by a medical examiner that will include the following additional language: "(2) Documentation of having received vaccination against "vaccine-preventable diseases" for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, which shall include at least the following diseases: mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, *Haemophilus influenzae* type B and hepatitis B, and any other vaccinations against vaccine-preventable diseases recommended by the ACIP for which there is a public health need at the time of immigration or adjustment of status."

#### Section 34.2(m) Medical Officer

HHS/CDC is proposing to remove "of the Public Health Service Commissioned Corps" from the definition of *medical officer* to reflect that a medical officer for these purposes is not required to be a member of the U.S. Public Health Service Commissioned Corps. Removing this requirement will best protect public health by broadening the pool of medical professionals qualified and available to provide alien examination services since there are a limited number of physicians within the Public Health Service Commissioned Corps.

Section 34.2(n) Mental Disorder and  
34.2(p) Physical Disorder

HHS/CDC is proposing to clarify *mental disorder* as a currently accepted psychiatric diagnosis, as defined by the most recent edition of the DSM published by the American Psychiatric Association (17) or in another authoritative source as approved by the Director. HHS/CDC is proposing to add “most recent” to qualify the version of the DSM referenced in this definition and clarify the intent of CDC that such diagnoses align with current science and medical practice. HHS/CDC is also allowing for the possibility of other authoritative sources in order to rely on the most recent medical science.

HHS/CDC is proposing *physical disorder* to mean a currently accepted medical diagnosis, as defined by the most recent edition of the Manual of the International Classification of Diseases, Injuries, and Causes of Death (ICD) published by the World Health Organization (26) or in another authoritative source as approved by the Director. HHS/CDC is proposing to add “most recent version” to qualify the version of the ICD referenced in this definition and to be consistent with the current Section 212 of the INA. HHS/CDC is also allowing for the possibility of other authoritative sources in order to rely on the most recent medical science. In the event that another authoritative source is determined to be more appropriate for immigration medical examination purposes, HHS/CDC will issue updated technical instructions. Again, these are not substantive changes to the regulation as they follow current HHS/CDC practice and protocol.

*ii. Section 34.3 Scope of Examinations*

Current section 34.3 entitled “Scope of Examinations” applies to those aliens who are required to undergo a medical examination for U.S. immigration purposes. The scope of the examination outlines those matters that relate to inadmissible health-related conditions and was revised in 2008 through an interim final rule. The 2008 interim final rule provided specific screening and testing requirements for those diseases that meet the current definition of *communicable disease of public health significance* in Section 34.2(b) of 42 CFR part 34. HHS/CDC is proposing to further update this section to incorporate statutory language requiring documentation for vaccine-preventable disease and HHS/CDC’s understanding that ACIP vaccine recommendations should only be applied in an immigration context when a public health need exists. In subsection

(a)(2)(i), we are also proposing to insert the word “current” in front of “physical or mental disorder” as stated in section 212 of INA.

*Specific Proposed Revisions to Section 34.3(a)*

HHS/CDC is proposing to revise 34.3(a)(2) to include proof of vaccination requirements as provided by section 341 of IIRIRA of 1996 which amended Section 212 of the INA. HHS/CDC is proposing this change as previously described in proposed changes to 34.2 Definitions.

*Specific Proposed Revisions to Section 34.3(e)*

HHS/CDC is proposing to amend § 34.3(e)(1) to clarify the scope of examination requirements that apply to anyone who is required by DHS to have a medical examination for the purpose of determining their admissibility. HHS/CDC has added § 34.3(e)(1)(v) “Applicants required by the DHS to have a medical examination in connection with the determination of their admissibility into the United States.”

HHS/CDC is proposing the following changes to provide consistency in the required evaluation for tuberculosis: replace all references to “chest x-ray” in § 34.3(e) with “chest radiograph”; clarify that § 34.3(e)(3)(ii) applies to aliens in the United States; and to remove the specific size of chest radiograph provided in § 34.3(e)(5). These changes reflect current medical terminology and technical practice.

HHS/CDC is proposing to amend § 34.3(e)(2)(iii) by removing “and HIV” to correct the typographical error in the current rule language and reflect that testing for HIV is no longer required. The requirement for serologic testing for syphilis will remain and HHS/CDC has included language to allow the Director to test for other communicable diseases of public health significance (as defined) through technical instructions.

HHS/CDC is proposing to amend § 34.3(e)(3)(i) and (ii) to reflect the scope of currently available medical tests. HHS/CDC proposes to replace “positive tuberculin reaction” with “positive test of immune response to *Mycobacterium tuberculosis* antigens” in § 34.3(e)(3)(i) and (ii).

To allow HHS/CDC discretion to apply appropriate medical screening procedures, HHS/CDC is proposing to amend § 34.3(e)(3)(iii) and (iv) regarding application of tests of immune response by adding “as determined by the Director.”

To allow for additional testing in medically appropriate circumstances,

HHS/CDC is proposing to revise § 34.3(e)(4) by removing “subject to the chest radiograph requirement, and for whom the radiograph shows an abnormality suggestive of tuberculosis disease,” replacing “shall” with “may,” and adding “based on medical evaluation.” HHS/CDC is proposing this revision to read: “All applicants may be required to undergo additional testing for tuberculosis based on the results of the medical evaluation.”

To reflect current practice and INA statutory language, HHS/CDC is also proposing to amend § 34.3(b)(2) by adding “or other relevant records” to ensure that all appropriate available medical documentation may be considered. HHS/CDC is proposing this revision to read: “For the examining physician to reach a determination or conclusion about the presence or absence of a physical or mental abnormality, disease, or disability, the scope of the examination shall include any laboratory or additional studies that are deemed necessary, either as a result of the physical examination or pertinent information elicited from the alien’s medical history or other relevant records.”

HHS/CDC has included language under § 34.3(f), transmission of records, to ensure that electronic submissions may be acceptable as provided by the Director. Finally, HHS/CDC is proposing to amend § 34.3(g)(4) by replacing “excludable” with “inadmissible” in § 34.3(g)(4) to reflect modern terminology.

*iii. Section 34.4 Medical Notifications*

HHS/CDC proposes to revise § 34.4(b)(1)(ii) to include proof of vaccination requirements as provided by section 341 of the IIRIRA of 1996 which amended section 212 of the INA and to reference criteria established by CDC and published in **Federal Register** Notices to determine which vaccines recommended by the ACIP will be required for U.S. immigration. In addition, HHS/CDC is proposing to add specific language regarding the exemption of vaccination requirements for an adopted child as provided in section 212 of the INA. Again, these changes are not substantive, but reflect current practice and statutory language.

*iv. Section 38.7 Medical and Other Care; Death*

Under this section, HHS/CDC proposes to replace “INS” with “DHS” and replace “Public Health Services” with “HHS” to reflect modern agency titles and appropriate authorities relating to this provision. Although HHS/CDC is not proposing to make any

substantive changes to § 38.7, we will accept public comment on updating this section to reflect modern terminology.

*v. Section 34.8 Reexamination; Convening of Review Boards; Expert Witnesses, Reports*

Review boards are convened by the Director to reexamine aliens at the request of DHS and upon appeal to DHS by an alien certified as having a Class A condition. HHS/CDC is proposing changes to this section to clarify the reexamination and review board's process and improve the expediency of the process. The proposed changes include removing the requirement that one medical officer must be a board-certified psychiatrist in cases where the alien's mental health is a basis for inadmissibility. The requirement for a board-certified psychiatrist will be replaced with a requirement that the review board consist of at least one medical officer who is experienced in the diagnosis and treatment of the physical or mental disorder, or substance-related disorder for which the medical notification was made. Additionally, HHS/CDC is proposing to add failure to present documented proof of having been vaccinated against vaccine preventable diseases as a basis for reexamination by the review board and add clarifying language that the reexamination may be conducted, at the board's discretion, based on the written record.

By removing the requirement that one medical officer must be a board-certified psychiatrist, HHS/CDC will be able to more easily and efficiently comprise the board of case-specific specialists. Removing the requirement for a board-certified psychiatrist also allows the agency to expedite the review board's convening in circumstances where a medical officer who is a board certified psychiatrist is unavailable. By tailoring the board to meet the needs of the alien, HHS/CDC will ensure that the alien has the attention of medical officers who are experienced in the diagnosis and treatment of their specific medical condition.

## V. Alternatives Considered

This rulemaking is the result of HHS/CDC's annual retrospective regulatory review. Most of the proposed changes are administrative and will result in minor changes to current guidelines for overseas medical examinations required of persons seeking permanent entry to the United States. Therefore, alternatives to these administrative updates were not considered. However, when considering updates to the definition of *communicable disease of*

*public health significance*, HHS/CDC looked at all of the specific diseases listed in the definition. As stated previously in the Preamble, in this rulemaking, HHS/CDC proposes to revise the definition of *communicable disease of public health significance* by removing these three uncommon health conditions: chancroid; granuloma inguinale; and lymphogranuloma venereum. We decided not to remove infectious Hansen's disease (leprosy), gonorrhea, and/or infectious syphilis from the definition at this time. Our decision is based on epidemiological principles and current medical practice to assess these three diseases (infectious Hansen's disease, gonorrhea, and infectious syphilis). We believe that the medical examination provides the opportunity to screen for and treat these diseases, and, when identified in immigrants, provides a public health benefit to the United States as well as a health benefit to the individual. Further, while infection with these three diseases initially renders an alien inadmissible to the United States, treatment is available upon identification, and once appropriately treated, aliens are no longer inadmissible. Continued screening for these three diseases during the medical examination provides an opportunity to identify and treat disease in alien populations and thus provide a measure of public health protection to the general U.S. population. HHS/CDC will continue to assess each of these remaining diseases as a communicable disease of public health significance through further scientific review.

## VI. Required Regulatory Analyses

### A. Executive Orders 12866 and 13563

HHS/CDC has examined the impacts of the proposed rule under Executive Order 12866, Regulatory Planning and Review (58 FR 51735, October 4, 1993) and Executive Order 13563, Improving Regulation and Regulatory Review, (76 FR 3821, January 21, 2011)(1,2). Both Executive Orders direct agencies to evaluate any rule prior to promulgation to determine the regulatory impact in terms of costs and benefits to United States populations and businesses. Further, together, the two Executive Orders set the following requirements: quantify costs and benefits where the new regulation creates a change in current practice; define qualitative costs and benefits; choose approaches that maximize benefits; support regulations that protect public health and safety; and minimize the impact of regulation. HHS/CDC has analyzed the rule as required by these Executive Orders and

has determined that it is consistent with the principles set forth in the Executive Orders and the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) and that the rule will create minimal impact (3,4).

This proposed rule is not being treated as a significant regulatory action as defined by Executive Order 12866. As such, it has not been reviewed by the Office of Management and Budget (OMB).

There are two main impacts of this proposed rule. First, we are proposing updates to the current regulation that reflect modern terminology, plain language, and current practice. Because there is no change in the baseline from these updates, no costs can be associated with these administrative updates to align the regulation with current practice.

Second, we are proposing to remove three sexually transmitted bacterial infections, chancroid, granuloma inguinale and lymphogranuloma venereum, from the definition of communicable disease of public health significance (5). In doing this, aliens seeking permanent entry to the United States (immigrants, refugees and asylees) will no longer be examined for these diseases during the mandatory medical examinations that are part of the process of admission to the United States. The impact of dropping this portion of the examination is likely to be minimal. On the positive side, the physicians administering the exam will be able to focus on other areas of patient health. On the negative side, there is the potential for a negligible increase in the numbers of disease cases entering the United States. However, as we explain subsequently, this impact is likely to be extremely small. Further, the costs associated with the current disease burden in the United States are also very limited. Therefore, the potential introduction of a very small number of cases will not change the current cost structure associated with the current disease burden.

The three bacterial infections (chancroid, granuloma inguinale and lymphogranuloma venereum), are transmitted through sexual contact, have never been common in the United States and over the past two decades are observed to be increasingly rare throughout the world. Of the three conditions, only laboratory-diagnosed cases of chancroid are reportable in the United States, and since 2005 fewer than 30 chancroid cases annually were reported to CDC from the U.S. states and territories (6–23). While some U.S. cities (7) keep records of cases of granuloma

inguinale and lymphogranuloma venereum, neither condition is included on the list of diseases reported to the CDC by clinicians and public health departments (6). Online searches and a few available publications indicate that both conditions most typically occur in tropical and impoverished settings (*i.e.*, with limited access to water, hygiene); and both conditions have become increasingly uncommon over time. A review of the literature published during the past five years identified only a handful of case reports on granuloma inguinale, and the vast majority of these cases were cases outside the United States (12–17). Sporadic small outbreaks of lymphogranuloma venereum have occurred over the past 10 years in Europe and the United States (18–20). The numbers of lymphogranuloma venereum cases are small, have been almost exclusively among men who have sex with men, and numbers are not systematically collected for country populations (18–20).

When HHS/CDC originally attempted to estimate the disease impact to calculate the cost associated with removing these three diseases, we tried to examine the disease rates in the regions or countries of origin of aliens seeking entry to the United States. In the most recent report from the DHS, the Annual Yearbook of Immigration Statistics, DHS reports on the regions and countries of origin of aliens (24). Unfortunately, we have been unable to find disease data that correlates with the DHS population data for region of origination of aliens (24). Data on

chancroid, granuloma inguinale and lymphogranuloma venereum are not systematically collected by any country outside of the United States either by specific countries or regions listed by DHS for aliens, or from the World Health Organization (WHO) (8, 22, 23). Ultimately, we were unable to correlate the originating regions of aliens entering the United States permanently (immigrants, refugees, and asylees) with the rates of the three diseases in the countries of origin.

Potential for onward transmission of these infections to the U.S. population is deemed to be extremely low. While we do not have country or region-specific rates for these diseases, our review of the literature supports the supposition that the potential introduction of additional cases into the United States by aliens is likely to have a negligible impact on the U.S. population. These primarily tropical infections can be prevented through improved personal hygiene (11) and protected sex (use of a condom) (12). New infections can be effectively treated and cured with a short, uncomplicated course of antibiotic therapy.

*Economic analysis and cost results.* HHS/CDC has determined that the costs associated with chancroid, granuloma inguinale and lymphogranuloma venereum are currently very low. Given the pattern of diminishing caseloads reported in the literature and available data (6–21), HHS/CDC projects that future costs will remain low. A more detailed analysis as required by EO 12866 and 13563 can be found in the docket for this NPRM. A summary follows below.

*Summary.* There is no international disease incidence data available for chancroid, granuloma inguinale and lymphogranuloma venereum. There is some data available for numbers of cases of chancroid observed in the United States over a number of years (6) and DHS also provides data regarding the numbers of legal foreign residents in the United States (24). In the full analysis we used the chancroid data to estimate a range of costs to treat chancroid in the United States (6) at the highest and lowest caseloads observed. An estimated component for granuloma inguinale and lymphogranuloma venereum was added by assumption because of lack of either domestic or international data. The costs were then prorated to reflect the foreign population residing in the United States using DHS data (24).

Cost estimates were derived for three alternatives titled Low, High, and Extreme. The Low and High alternatives were based on the lowest (most recent) and highest reported caseloads of chancroid (6). The Extreme alternative is six times the highest rate of chancroid ever reported in the United States. Finally, often chancroid, Granuloma Inguinale, and Lymphogranuloma Venereum are co-morbid with other STIs, *e.g.*, HIV, syphilis, or gonorrhea (6, 8, 21). Therefore costs are estimated to both treat cases with or without co-morbidity.

The results of the analysis are reported in Table 1. None of the results are economically significant, *e.g.*, none of the results are more than \$100 million a year in costs.

TABLE 1—ANNUAL COSTS OF CHANCROID, GRANULOMA INGUINALE, AND LYMPHOGRANULOMA VENEREUM IN LAWFUL PERMANENT RESIDENTS: LOW, HIGH, AND EXTREMELY HIGH CASELOAD ALTERNATIVES, IN 2013 DOLLARS

Notes: (1) Per-case cost \$263.51. (2) Assumes LPRs are 0.4% of total population.	Alternatives		
	LOW (less than 1 case a year)	HIGH	EXTREMELY HIGH
<i>LPR</i> Total Annual Costs 50% comorbidity .....	\$18	\$2,122	\$12,731
<i>LPR</i> Total Annual Costs NO comorbidity .....	33	3,858	23,147

*Estimated benefits of this rule.* The benefits to this rule are also qualitative. Aliens as well as the panel physicians and civil surgeons inherently benefit from having current, up-to-date regulations with modern terminology that reflects modern practice and plain

language. The physicians administering the exam will be able to devote more time and training to other, more common and/or more serious health issues. The proposed changes do not impose any additional costs on aliens, panel physicians, or civil surgeons.

*Comparison of costs and benefits.* Given the potential impact of the rulemaking, we conclude that the benefits of the rule justify any costs. See Tables 2 and 3 below.



TABLE 2—SUMMARY OF THE QUANTIFIED AND NON-QUANTIFIED BENEFITS AND COSTS FOR UPDATES TO THE CURRENT REGULATION THAT REFLECT MODERN TERMINOLOGY, PLAIN LANGUAGE, AND CURRENT PRACTICE

Category	Primary estimate	Minimum estimate	Maximum estimate	Source citation (RIA, preamble, etc.)
<b>BENEFITS:</b>				
Monetized benefits .....	NA (7%) ..... NA (3%) ..... \$0 (0%) .....	NA (7%) ..... NA (3%) ..... \$0 (0%) .....	NA (7%) ..... NA (3%) ..... \$0 (0%) .....	RIA.
Annualized quantified, but unmonetized, benefits .....	None .....	N/A .....	N/A .....	RIA.
Qualitative (unquantified benefits) .....	Aliens as well as the panel physicians and civil surgeons inherently benefit from having current, up-to-date regulations with modern terminology that reflects modern practice and plain language.			RIA.
<b>COSTS:</b>				
Annualized monetized costs (discount rate in parenthesis) <sup>a</sup> .....	NA (7%) ..... NA (3%) ..... \$0 (0%) .....	NA (7%) ..... NA (3%) ..... \$0 (0%) .....	NA (7%) ..... NA (3%) ..... \$0 (0%) .....	RIA.
Annualized quantified, but unmonetized, costs .....	None .....	N/A .....	N/A .....	RIA.
Qualitative (unquantified) costs .....	None			RIA.

TABLE 3—SUMMARY OF THE QUANTIFIED AND NON-QUANTIFIED BENEFITS AND COSTS REMOVING CHANCROID, GRANULOMA INGUINALE, AND LYMPHOGRANULOMA VENEREUM FROM THE DEFINITION OF COMMUNICABLE DISEASE OF PUBLIC HEALTH SIGNIFICANCE

Category	Primary estimate	Minimum estimate	Maximum estimate	Source citation (RIA, preamble, etc.)
<b>BENEFITS:</b>				
Monetized benefits .....	NA (7%) ..... NA (3%) ..... NA (0%) .....	NA (7%) ..... NA (3%) ..... NA (0%) .....	NA (7%) ..... NA (3%) ..... NA (0%) .....	RIA.
Annualized quantified, but unmonetized, benefits .....	None .....	N/A .....	N/A .....	RIA.
Qualitative (unquantified benefits) .....	The physicians administering the exam will be able to devote more time and training to other, more common and/or more serious health issues.			RIA.
<b>COSTS:</b>				
Annualized monetized costs (discount rate in parenthesis) <sup>a</sup> .....	NA (7%) ..... NA (3%) ..... \$3,858 (0%) .....	NA (7%) ..... NA (3%) ..... 18 (0%) .....	NA (7%) ..... NA (3%) ..... \$23,147 (0%) .....	RIA.
Annualized quantified, but unmonetized, costs .....	None .....	N/A .....	N/A .....	RIA.
Qualitative (unquantified) costs .....	None			RIA.

<sup>a</sup> All costs of the rule are annual.

*B. The Regulatory Flexibility Act*

Under the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), agencies are required to analyze regulatory options to minimize significant economic impact of a proposed rule on small businesses, small governmental units, and small not-for-profit organizations. We have analyzed the costs and benefits of this proposed rule, as required by Executive Order 12866, and a preliminary regulatory flexibility analysis that

examines the potential economic effects of this rule on small entities, as required by the Regulatory Flexibility Act. Based on the cost benefit analysis, we do expect this proposed rule to have little or no economic impact on small entities.

*C. The Paperwork Reduction Act*

The Paperwork Reduction Act applies to the data collection requirements found in 42 CFR part 34. The U.S. Department of State is responsible for providing forms to panel physicians, and the Department of Homeland

Security is responsible for providing forms to civil surgeons to document the medical examination and screening information for aliens. The Office of Management and Budget (OMB) approved this data collection under OMB Control No. 1405-0113, which will expire on September 30, 2017.

*D. National Environmental Policy Act (NEPA)*

HHS/CDC has determined that the proposed amendments to 42 CFR part 34 will not have a significant impact on the human environment.

### E. Executive Order 12988: Civil Justice Reform

HHS/CDC has reviewed this rule under Executive Order 12988 on Civil Justice Reform and determines that this proposed rule meets the standard in the Executive Order.

### F. Executive Order 13132: Federalism

Under Executive Order 13132, if the proposed rule would limit or preempt State authorities, then a federalism analysis is required. The agency must consult with State and local officials to determine whether the rule would have a substantial direct effect on State or local Governments, as well as whether it would either preempt State law or impose a substantial direct cost of compliance on them.

HHS/CDC has determined that this proposed rule will not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement.

### G. The Plain Language Act of 2010

Under 63 FR 31883 (June 10, 1998), Executive Departments and Agencies are required to use plain language in all proposed and final rules. HHS/CDC has attempted to use plain language in proposing this rule to make our intentions and rationale clear and welcomes feedback from the public on our attempt to use plain language in this rule.

## VIII. References

- The President. Presidential documents. Executive Order 12866 of September 30, 1993: Regulatory Planning and Review. **Federal Register**. Monday, October 4, 1993;58(190). <http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf>. Accessed February 2014.
- The President. Presidential documents. Executive Order 13563 of January 18, 2011: Improving Regulation and Regulatory Review. **Federal Register**. Friday, January 21, 2011; 76(14). <http://www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf>. Accessed February 2014.
- U. S. Small Business Administration. Regulatory Flexibility Act. <http://www.sba.gov/advocacy/823>. Accessed February 2014.
- Summary of the Unfunded Mandates Reform Act. 2 U.S.C. 1501 *et seq* (1995). <http://www2.epa.gov/laws-regulations/summary-unfunded-mandates-reform-act>. Accessed February 2014.
- Tom Lantos and Henry Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008, Public Law 110–293, section 305, 122 Stat. 2963 (July 30, 2008).
- CDC. CDC WONDER: Sexually Transmitted Disease Morbidity, 1984–2008. Available from: <http://wonder.cdc.gov/std-v2008.html>. Accessed February 2014.
- New York State Department of Health. Bureau of Sexually Transmitted Disease Prevention and Epidemiology. STD Statistical Abstract 2008. <http://www.health.state.ny.us/statistics/diseases/communicable/std/abstracts/docs/2008.pdf> Accessed February 2014.
- Steen, R. (2001). Eradicating chancroid. *Bulletin of the World Health Organization* 2001. 79: 818–826.
- Plummer, FA *et al.* (1983). Epidemiology of chancroid and *Haemophilus ducreyi* in Nairobi, Kenya. *The Lancet*. 2(8362): 1293–1295.
- Hawkes S *et al.* (1995) Asymptomatic carriage of *Haemophilus ducreyi* confirmed by the polymerase chain reaction. *Genitourinary Medicine*. 71 (4): 224–227.
- O'Farrell, N. (1993) Soap and water prophylaxis for limiting genital ulcer disease and HIV–1 infection in men in sub-Saharan Africa. *Genitourinary Medicine*. 69 (4): 297–303.
- O'Farrell, N, & Moi, H. (2010) European guideline for the management of donovanosis, 2010. *International Journal of STD & AIDS*. 21:609–610.
- Richens, J. (2006) Donovanosis (Granuloma Inguinale). *Sexually Transmitted Infections*. 82(Suppl IV):iv21–iv22.
- Miller, P. Donovanosis: control or eradication? (2001) Office for Aboriginal and Torres Strait Islander Health.
- Vorvick, LJ., & Storck, S. (2009). Granuloma inguinale (Donovanosis). *Medline Plus*. <http://www.nlm.nih.gov/medlineplus/ency/article/000636.htm>. Accessed February 2014.
- Bowden FJ, on behalf of the National Donovanosis Eradication Advisory Committee. Donovanosis in Australia: going, going . . . *Sex Transm Infect* 2005. 81:365–366.
- CDC. Treatment of Sexually Transmitted Diseases. Diseases characterized by genital ulcers—Granuloma inguinale (Donovanosis). 2011. Available from: <http://www.cdc.gov/std/treatment/2010/genital-ulcers.htm>. Accessed February 2014.
- CDC. Treatment of Sexually Transmitted Diseases. Diseases characterized by genital ulcers—Lymphogranuloma Venereum. 2011. Available from: <http://www.cdc.gov/std/treatment/2010/genital-ulcers.htm>. Accessed February 2014.
- Martin-Iguacel, R., Llibre, J.M., Nielsen, H., Heras, E., Matas, L., Lugo, R., Clotet, B., Siera, G. (2010) Lymphogranuloma venereum proctocolitis: a silent endemic disease in men who have sex with men in industrialized countries. *European Journal of Clinical Microbial Infectious Disease*. 29:917–925.
- Blank, S., Schillinger, JA., Harbatkin, D. (2005) Comment: Lymphogranuloma venereum in the industrialized world. *The Lancet*. 365: 1607–08.
- Johnson, LF., Coetzee, DJ., & Dorrington, RE. (2005). Sentinel surveillance of sexually transmitted infections in South Africa: a review. *Sexually Transmitted Infections*. 81: 287–293.
- WHO, Global incidence and incidence of selected curable sexually transmitted infections 2001. Available from: [http://www.who.int/hiv/pub/sti/en/who\\_hiv\\_aids\\_2001.02.pdf](http://www.who.int/hiv/pub/sti/en/who_hiv_aids_2001.02.pdf). Accessed February 2014
- WHO, Global incidence and incidence of four curable sexually transmitted infections (STIs): New estimates from WHO. 2009.
- United States. Department of Homeland Security. Yearbook of Immigration Statistics: 2010. Washington, DC: U.S. Department of Homeland Security, Office of Immigration Statistics, 2011.
- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Arlington, VA, American Psychiatric Association, 2013.
- International Classification of Diseases (ICD), Ninth Revision, World Health Organization.

### List of Subjects in 42 CFR Part 34

Aliens, Health care, Medical examination, Passports and visas, Public health, Scope of examination.

For the reasons discussed in the preamble, the Centers for Disease Control and Prevention, Department of Health and Human Services proposes to amend 42 CFR part 34 as follows:

- 1. Revise part 34 to read as follows:

### PART 34—MEDICAL EXAMINATION OF ALIENS

Sec.

- 34.1 Applicability.
- 34.2 Definitions.
- 34.3 Scope of examinations.
- 34.4 Medical notifications.
- 34.5 Postponement of medical examination.
- 34.6 Applicability of Foreign Quarantine Regulations.
- 34.7 Medical and other care; death.
- 34.8 Reexamination; convening of review boards; expert witnesses; reports.

**Authority:** 42 U.S.C. 252; 8 U.S.C. 1182 and 1222.

#### § 34.1 Applicability.

The provisions of this part shall apply to the medical examination of:

- (a) Aliens applying for a visa at an embassy or consulate of the United States;
- (b) Aliens arriving in the United States;
- (c) Aliens required by DHS to have a medical examination in connection with the determination of their admissibility into the United States; and
- (d) Aliens applying for adjustment of status.

#### § 34.2 Definitions.

As used in this part, terms shall have the following meanings:

(a) *CDC*. Centers for Disease Control and Prevention, Department of Health and Human Services, or an authorized representative acting on its behalf.

(b) *Communicable disease of public health significance*. Any of the following diseases:

(1) Communicable diseases as listed in a Presidential Executive Order, as provided under Section 361(b) of the Public Health Service Act. The current revised list of quarantinable communicable diseases is available at <http://www.cdc.gov> and <http://www.archives.gov/federal-register>.

(2) Communicable diseases that may pose a public health emergency of international concern if it meets one or more of the factors listed in § 34.3(d) and for which the Director has determined (A) a threat exists for importation into the United States, and (B) such disease may potentially affect the health of the American public. The determination will be made consistent with criteria established in Annex 2 of the revised International Health Regulations (<http://www.who.int/csr/ihr/en/>), as adopted by the Fifty-Eighth World Health Assembly in 2005, and as entered into effect in the United States in July 2007, subject to the U.S. Government's reservation and understandings:

(i) Any of the communicable diseases for which a single case requires notification to the World Health Organization (WHO) as an event that may constitute a public health emergency of international concern, or

(ii) Any other communicable disease the occurrence of which requires notification to the WHO as an event that may constitute a public health emergency of international concern. HHS/CDC's determinations will be announced by notice in the **Federal Register**.

(3) Gonorrhea.

(4) Hansen's disease, infectious.

(5) Syphilis, infectious.

(6) Tuberculosis, active.

(c) *Civil surgeon*. A physician designated by DHS to conduct medical examinations of aliens in the United States who are applying for adjustment of status to permanent residence or who are required by DHS to have a medical examination.

(d) *Class A medical notification*. Medical notification of:

(1) *A communicable disease of public health significance*;

(2) A failure to present documentation of having received vaccination against "vaccine-preventable diseases" for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for

permanent residence, which shall include at least the following diseases: Mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, *Haemophilus influenza* type B and hepatitis B, and any other vaccinations recommended by the Advisory Committee for Immunization Practices (ACIP) for which there is a public health need at the time of immigration or adjustment of status. Provided, however, that in no case shall a Class A medical notification be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive parent or prospective adoptive parent of the child, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that, within 30 days of the child's admission, or at the earliest time that is medically appropriate, the child will receive the vaccinations identified in the requirement.

(3)(i) A current physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;

(ii) A history of a physical or mental disorder and behavior associated with the disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior; or

(4) Drug abuse or addiction.

(e) *Class B medical notification*. Medical notification of a physical or mental health condition, disease, or disability serious in degree or permanent in nature.

(f) *DHS*. U.S. Department of Homeland Security.

(g) *Director*. The Director of the Centers for Disease Control and Prevention or a designee as approved by the Director or Secretary of Health and Human Services.

(h) *Drug abuse*. "Current substance use disorder or substance-induced disorder, mild" as defined in the most recent edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM) as published by the American Psychiatric Association, or by another authoritative source as determined by the Director, of a substance listed in Section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802).

(i) *Drug addiction*. "Current substance use disorder or substance-induced disorder, moderate or severe" as defined in the most recent edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM), as published

by the American Psychiatric Association, or by another authoritative source as determined by the Director, of a substance listed in Section 202 of the Controlled Substances Act, as amended (21 U.S.C. 802).

(j) *Medical examiner*. A panel physician, civil surgeon, or other physician designated by the Director to perform medical examinations of aliens.

(k) *Medical hold document*. A document issued to the DHS by a quarantine officer of HHS at a port of entry which defers the inspection for admission until the cause of the medical hold is resolved.

(l) *Medical notification*. A medical examination document issued to a U.S. consular authority or DHS by a medical examiner, certifying the presence or absence of:

(1) A communicable disease of public health significance;

(2) Documentation of having received vaccination against "vaccine-preventable diseases" for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, which shall include at least the following diseases: mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, *Haemophilus influenza* type B and hepatitis B, and any other vaccinations recommended by the Advisory Committee for Immunization Practices (ACIP) for which HHS/CDC determines there is a public health need at the time of immigration or adjustment of status.

Provided, however, that in no case shall a Class A medical notification be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive parent or prospective adoptive parent of the child, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that, within 30 days of the child's admission, or at the earliest time that is medically appropriate, the child will receive the vaccinations identified in the requirement;

(3)(i) A current physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;

(ii) A history of a physical or mental disorder and behavior associated with the disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior;

(4) Drug abuse or addiction; or

(5) Any other physical or mental condition, disease, or disability serious in degree or permanent in nature.

(m) *Medical officer*. A physician or other medical professional assigned by the Director to conduct physical and mental examinations of aliens on behalf of HHS/CDC.

(n) *Mental disorder*. A currently accepted psychiatric diagnosis, as defined by the current edition of the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association or by another authoritative source as determined by the Director.

(o) *Panel physician*. A physician selected by a United States embassy or consulate to conduct medical examinations of aliens applying for visas.

(p) *Physical disorder*. A currently accepted medical diagnosis, as defined by the current edition of the Manual of the International Classification of Diseases, Injuries, and Causes of Death published by the World Health Organization or by another authoritative source as determined by the Director.

### § 34.3 Scope of examinations.

(a) *General*. In performing examinations, medical examiners shall consider those matters that relate to the following:

- (1) Communicable disease of public health significance;
- (2) Documentation of having received vaccination against “vaccine-preventable diseases” for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, which shall include at least the following diseases: mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, *Haemophilus influenzae* type B and hepatitis B, and any other vaccinations recommended by the Advisory Committee for Immunization Practices (ACIP) for which HHS/CDC determines there is a public health need at the time of immigration or adjustment of status.

Provided, however, that in no case shall a Class A medical notification be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive parent or prospective adoptive parent of the child, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that, within 30 days of the child’s admission, or at the earliest time that is medically appropriate, the child will receive the

vaccinations identified in the requirement;

(3)(i) A current physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others;

(ii) A history of a physical or mental disorder and behavior associated with the disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior;

(4) Drug abuse or drug addiction; and

(5) Any other physical or mental health condition, disease, or disability serious in degree or permanent in nature.

(b) *Scope of all medical examinations*.

(1) All medical examinations will include the following:

(i) A general physical examination and medical history, evaluation for tuberculosis, and serologic testing for syphilis.

(ii) A physical examination and medical history for diseases specified in § 34.2(b)(1) and (b)(4) through (10).

(2) For the examining physician to reach a determination and conclusion about the presence or absence of a physical or mental abnormality, disease, or disability, the scope of the examination shall include any laboratory or additional studies that are deemed necessary, either as a result of the physical examination or pertinent information elicited from the alien’s medical history or other relevant records.

(c) *Additional medical screening and testing for examinations performed outside the United States*. (1) HHS/CDC may require additional medical screening and testing for medical examinations performed outside the United States for diseases specified in § 34.2(b)(2) and (3) by applying the risk-based medical and epidemiologic factors in paragraph (d)(2) of this section.

(2) Such examinations shall be conducted in a defined population in a geographic region or area outside the United States as determined by HHS/CDC.

(3) Additional medical screening and testing shall include a medical interview, physical examination, laboratory testing, radiologic exam, or other diagnostic procedure, as determined by HHS/CDC.

(4) Additional medical screening and testing will continue until HHS/CDC determines such screening and testing is no longer warranted based on factors such as the following: Results of disease outbreak investigations and response

efforts; effectiveness of containment and control measures; and the status of an applicable determination of public health emergency of international concern declared by the Director General of the WHO.

(5) HHS/CDC will directly provide medical examiners information pertaining to all applicable additional requirements for medical screening and testing, and will post these at the following Internet addresses: <http://www.cdc.gov/ncidod/dq/technica.htm> and <http://www.globalhealth.gov>.

(d) *Risk-based approach*. (1) HHS/CDC will use the medical and epidemiological factors listed in paragraph (d)(2) of this section to determine the following:

(i) Whether a disease as specified in § 34.2(b)(3)(ii) is a communicable disease of public health significance; and

(ii) Which diseases in § 34.2(b)(2) and (3) merit additional screening and testing, and the geographic area in which HHS/CDC will require this screening.

(2) Medical and epidemiological factors include the following:

(i) The seriousness of the disease’s public health impact;

(ii) Whether the emergence of the disease was unusual or unexpected;

(iii) The risk of the spread of the disease in the United States;

(iv) The transmissibility and virulence of the disease;

(v) The impact of the disease at the geographic location of medical screening; and

(vi) Other specific pathogenic factors that would bear on a disease’s ability to threaten the health security of the United States.

(e) *Persons subject to requirement for chest radiograph examination and serologic testing*. (1) As provided in paragraph (e)(2) of this section, a chest radiograph examination and serologic testing for syphilis shall be required as part of the examination of the following:

(i) Applicants for immigrant visas;

(ii) Students, exchange visitors, and other applicants for non-immigrant visas required by a U.S. consular authority to have a medical examination;

(iii) Applicants outside the United States who apply for refugee status;

(iv) Applicants in the United States who apply for adjustment of their status under the immigration statute and regulations.

(v) Applicants required by DHS to have a medical examination in connection with determination of their admissibility into the United States.

(2) *Chest radiograph examination and serologic testing*. Except as provided in

paragraph (e)(2)(iv) of this section, applicants described in paragraph (e)(1) of this section shall be required to have the following:

(i) For applicants 15 years of age and older, a chest radiograph examination;

(ii) For applicants under 15 years of age, a chest radiograph examination if the applicant has symptoms of tuberculosis, a history of tuberculosis, or evidence of possible exposure to a transmissible tuberculosis case in a household or other enclosed environment for a prolonged period;

(iii) For applicants 15 years of age and older, serologic testing for syphilis and other *communicable diseases of public health significance* as determined by the Director through technical instructions.

(iv) *Exceptions.* Serologic testing for syphilis shall not be required if the alien is under the age of 15, unless there is reason to suspect infection with syphilis. An alien, regardless of age, in the United States, who applies for adjustment of status to lawful permanent resident, shall not be required to have a chest radiograph examination unless their tuberculin skin test, or an equivalent test for showing an immune response to *Mycobacterium tuberculosis* antigens, is positive. HHS/CDC may authorize exceptions to the requirement for a tuberculin skin test, an equivalent test for showing an immune response to *Mycobacterium tuberculosis* antigens, or chest radiograph examination for good cause, upon application approved by the Director.

(3) *Immune response to Mycobacterium tuberculosis antigens.*

(i) All aliens 2 years of age or older in the United States who apply for adjustment of status to permanent residents, under the immigration laws and regulations, or other aliens in the United States who are required by the DHS to have a medical examination in connection with a determination of their admissibility, shall be required to have a tuberculin skin test or an equivalent test for showing an immune response to *Mycobacterium tuberculosis* antigens. Exceptions to this requirement may be authorized for good cause upon application approved by the Director. In the event of a positive test of immune response, a chest radiograph examination shall be required. If the chest radiograph is consistent with tuberculosis, the alien shall be referred to the local health authority for evaluation. Evidence of this evaluation shall be provided to the civil surgeon before a medical notification may be issued.

(ii) Aliens in the United States less than 2 years old shall be required to

have a tuberculin skin test, or an equivalent, appropriate test to show an immune response to *Mycobacterium tuberculosis* antigens, if there is evidence of contact with a person known to have tuberculosis or other reason to suspect tuberculosis. In the event of a positive test of immune response, a chest radiograph examination shall be required. If the chest radiograph is consistent with tuberculosis, the alien shall be referred to the local health authority for evaluation. Evidence of this evaluation shall be provided to the civil surgeon before a medical notification may be issued.

(iii) Aliens outside the United States required to have a medical examination shall be required to have a tuberculin skin test, or an equivalent, appropriate test to show an immune response to *Mycobacterium tuberculosis* antigens, and, if indicated, a chest radiograph.

(iv) Aliens outside the United States required to have a medical examination shall be required to have a tuberculin skin test, or an equivalent, appropriate test to show an immune response to *Mycobacterium tuberculosis* antigens, and a chest radiograph, regardless of age, if he/she has symptoms of tuberculosis, a history of tuberculosis, or evidence of possible exposure to a transmissible tuberculosis case in a household or other enclosed environment for a prolonged period, as determined by the Director.

(4) *Additional testing requirements.* All applicants may be required to undergo additional testing for tuberculosis based on the medical evaluation.

(5) *How and where performed.* All chest radiograph images used in medical examinations performed under the regulations to this part shall be large enough to encompass the entire chest.

(6) *Chest x-ray, laboratory, and treatment reports.* The chest radiograph reading and serologic test results for syphilis shall be included in the medical notification. When the medical examiner's conclusions are based on a study of more than one chest x-ray image, the medical notification shall include at least a summary statement of findings of the earlier images, followed by a complete reading of the last image, and dates and details of any laboratory tests and treatment for tuberculosis.

(f) *Procedure for transmitting records.* For aliens issued immigrant visas, the medical notification and chest radiograph images, if any, shall be placed in a separate envelope, which shall be sealed. When more than one chest radiograph image is used as a basis for the examiner's conclusions, all

images shall be included. Records may be transmitted by other means, as approved by the Director.

(g) *Failure to present records.* When a determination of admissibility is to be made at the U.S. port of entry, a medical hold document shall be issued pending completion of any necessary examination procedures. A medical hold document may be issued for aliens who:

(1) Are not in possession of a valid medical notification, if required;

(2) Have a medical notification which is incomplete;

(3) Have a medical notification which is not written in English;

(4) Are suspected to have an inadmissible medical condition.

(h) The Secretary of Homeland Security, after consultation with the Secretary of State and the Secretary of Health and Human Services, may in emergency circumstances permit the medical examination of refugees to be completed in the United States.

(i) All medical examinations shall be carried out in accordance with such technical instructions for physicians conducting the medical examination of aliens as may be issued by the Director. Copies of such technical instructions are available upon request to the Director, Division of Global Migration and Quarantine, Mailstop E03, HHS/CDC, Atlanta GA 30333.

#### § 34.4 Medical notifications.

(a) Medical examiners shall issue medical notifications of their findings of the presence or absence of Class A or Class B medical conditions. The presence of such condition must have been clearly established.

(b) *Class A medical notifications.* (1) The medical examiner shall report his/her findings to the consular officer or DHS by Class A medical notification which lists the specific condition for which the alien may be inadmissible, if an alien is found to have:

(i) A *communicable disease of public health significance*;

(ii) A lack of documentation, or no waiver, for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, of having received vaccination against vaccine-preventable diseases which shall include at least the following diseases: Mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, *Haemophilus influenza* type B and hepatitis B, and any other vaccinations recommended by the Advisory Committee for Immunization Practices (ACIP) for which HHS/CDC determines there is a

public health need at the time of immigration or adjustment of status.

Provided however, that a Class A medical notification shall in no case be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive parent or prospective adoptive parent of the child, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that, within 30 days of the child's admission, or at the earliest time that is medically appropriate, the child will receive the vaccinations identified in the requirement;

(iii)(A) A current physical or mental disorder, and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others; or

(B) A history of a physical or mental disorder and behavior associated with the disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which behavior is likely to recur or lead to other harmful behavior;

(iv) *Drug abuse or drug addiction.*

Provided, however, that a Class A medical notification of a physical or mental disorder, and behavior associated with that disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others, shall in no case be issued with respect to an alien having only mental shortcomings due to ignorance, or suffering only from a condition attributable to remediable physical causes or of a temporary nature, caused by a toxin, medically prescribed drug, or disease.

(2) The medical notification shall state the nature and extent of the abnormality; the degree to which the alien is incapable of normal physical activity; and the extent to which the condition is remediable. The medical examiner shall indicate the likelihood, that because of the condition, the applicant will require extensive medical care or institutionalization.

(c) *Class B medical notifications.* (1) If an alien is found to have a physical or mental abnormality, disease, or disability serious in degree or permanent in nature amounting to a substantial departure from normal well-being, the medical examiner shall report his/her findings to the consular or DHS officer by Class B medical notification which lists the specific conditions found by the medical examiner. Provided, however, that a Class B medical notification shall in no case be

issued with respect to an alien having only mental shortcomings due to ignorance, or suffering only from a condition attributable to remediable physical causes or of a temporary nature, caused by a toxin, medically prescribed drug, or disease.

(2) The medical notification shall state the nature and extent of the abnormality, the degree to which the alien is incapable of normal physical activity, and the extent to which the condition is remediable. The medical examiner shall indicate the likelihood, that because of the condition, the applicant will require extensive medical care or institutionalization.

(d) *Other medical notifications.* If as a result of the medical examination, the medical examiner does not find a Class A or Class B condition in an alien, the medical examiner shall so indicate on the medical notification form and shall report his findings to the consular or DHS officer.

#### **§ 34.5 Postponement of medical examination.**

Whenever, upon an examination, the medical examiner is unable to determine the physical or mental condition of an alien, completion of the medical examination shall be postponed for such observation and further examination of the alien as may be reasonably necessary to determine his/her physical or mental condition. The examination shall be postponed for aliens who have an acute infectious disease until the condition is resolved. The alien shall be referred for medical care as necessary.

#### **§ 34.6 Applicability of Foreign Quarantine Regulations.**

Aliens arriving at a port of the United States shall be subject to the applicable provisions of 42 CFR part 71, Foreign Quarantine, with respect to examination and quarantine measures.

#### **§ 34.7 Medical and other care; death.**

(a) An alien detained by or in the custody of DHS may be provided medical, surgical, psychiatric, or dental care by HHS through interagency agreements under which DHS shall reimburse HHS. Aliens found to be in need of emergency care in the course of medical examination shall be treated to the extent deemed practical by the attending physician and if considered to be in need of further care, may be referred to DHS along with the physician's recommendations concerning such further care.

(b) In case of the death of an alien, the body shall be delivered to the consular or immigration authority concerned. If

such death occurs in the United States, or in a territory or possession thereof, public burial shall be provided upon request of DHS and subject to its agreement to pay the burial expenses. Autopsies shall not be performed unless approved by DHS.

#### **§ 34.8 Reexamination; convening of review boards; expert witnesses; reports.**

(a) The Director shall convene a board of medical officers to reexamine an alien:

(1) Upon the request of DHS for a reexamination by such a board; or

(2) Upon an appeal to DHS by an alien who, having received a medical examination in connection with the determination of admissibility to the United States (including examination on arrival and adjustment of status as provided in the immigration laws and regulations) has been certified for a Class A condition.

(b) The board shall reexamine an alien certified as:

(1) Having a communicable disease of public health significance;

(2) Lacking documentation of having received vaccination against "vaccine-preventable diseases" for an alien who seeks admission as an immigrant, or who seeks adjustment of status to one lawfully admitted for permanent residence, which shall include at least the following diseases: Mumps, measles, rubella, polio, tetanus and diphtheria toxoids, pertussis, *Haemophilus influenza* type B and hepatitis B, and any other vaccinations recommended by the Advisory Committee for Immunization Practices (ACIP) for which HHS/CDC determines there is a public health need at the time of immigration or adjustment of status.

Provided, however, that in no case shall a Class A medical notification be issued for an adopted child who is 10 years of age or younger if, prior to the admission of the child, an adoptive or prospective adoptive parent, who has sponsored the child for admission as an immediate relative, has executed an affidavit stating that the parent is aware of the vaccination requirement and will ensure that the child will be vaccinated within 30 days of the child's admission, or at the earliest time that is medically appropriate.

(3)(i) Having a current physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others; or

(ii) Having a history of a physical or mental disorder and behavior associated with the disorder, which behavior has posed a threat to the property, safety, or welfare of the alien or others and which

behavior is likely to recur or lead to other harmful behavior; or

(iii) Having drug abuse or drug addiction;

(c) The board shall consist of the following:

(i) In circumstances covered by paragraph (b)(1) of this section, the board shall consist of at least one medical officer who is experienced in the diagnosis and treatment of the communicable disease for which the medical notification has been made;

(ii) In circumstances covered by paragraph (b)(2) of this section, the board shall consist of at least one medical officer who is experienced in the diagnosis and treatment of the vaccine-preventable disease for which the medical notification has been made;

(iii) In circumstances covered by paragraph (b)(3) of this section, the board shall consist of at least one medical officer who is experienced in the diagnosis and treatment of the physical or mental disorder, or substance-related disorder for which medical notification has been made.

(d) The decision of the majority of the board shall prevail, provided that at least two medical officers concur in the judgment of the board.

(e) Reexamination shall include:

(1) Review of all records submitted by the alien, other witnesses, or the board;

(2) Use of any laboratory or additional studies which are deemed clinically necessary as a result of the physical examination or pertinent information elicited from the alien's medical history;

(3) Consideration of statements regarding the alien's physical or mental condition made by a physician after his/her examination of the alien; and

(4) A physical or psychiatric examination of the alien performed by the board, at the board's discretion.

(f) An alien who is to be reexamined shall be notified of the reexamination not less than 5 days prior thereto.

(g) The alien, at his/her own cost and expense, may introduce as witnesses before the board such physicians or medical experts as the board may in its discretion permit; provided that the alien shall be permitted to introduce at least one expert medical witness. If any witnesses offered are not permitted by the board to testify (either orally or through written testimony), the record of the proceedings shall show the reason for the denial of permission.

(h) Witnesses before the board shall be given a reasonable opportunity to review the medical notification and other records involved in the reexamination and to present all relevant and material evidence orally or in writing until such time as the

reexamination is declared by the board to be closed. During the course of the reexamination the alien's attorney or representative shall be permitted to question the alien and he/she, or the alien, shall be permitted to question any witnesses offered in the alien's behalf or any witnesses called by the board. If the alien does not have an attorney or representative, the board shall assist the alien in the presentation of his/her case to the end that all of the material and relevant facts may be considered.

(i) Any proceedings under this section may, at the board's option, be conducted based on the written record, including through written questions and testimony.

(j) The findings and conclusions of the board shall be based on its medical examination of the alien, if any, and on the evidence presented and made a part of the record of its proceedings.

(k) The board shall report its findings and conclusions to DHS, and shall also give prompt notice thereof to the alien if his/her reexamination has been based on his/her appeal. The board's report to DHS shall specifically affirm, modify, or reject the findings and conclusions of prior examining medical officers.

(l) The board shall issue its medical notification in accordance with the applicable provisions of this part if it finds that an alien it has reexamined has a Class A or Class B condition.

(m) If the board finds that an alien it has reexamined does not have a Class A or Class B condition, it shall issue its medical notification in accordance with the applicable provisions of this part.

(n) After submission of its report, the board shall not be reconvened, nor shall a new board be convened, in connection with the same application for admission or for adjustment of status, except upon the express authorization of the Director.

Dated: June 12, 2015.

**Sylvia M. Burwell,**

*Secretary.*

[FR Doc. 2015-15236 Filed 6-22-15; 8:45 am]

**BILLING CODE 4150-28-P**

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS-R8-ES-2011-0055; 4500030113]

#### Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List Leona's Little Blue Butterfly as Endangered or Threatened

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of 12-month petition finding.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce a 12-month finding on a petition to list Leona's little blue butterfly (*Philotiella leona*) as an endangered or threatened species under the Endangered Species Act of 1973, as amended (Act). After a review of the best available scientific and commercial information, we find that listing Leona's little blue butterfly is not warranted at this time. However, we ask the public to submit to us any new information that becomes available concerning threats to the species or its habitat at any time.

**DATES:** The finding announced in this document was made on June 23, 2015.

**ADDRESSES:** This finding is available on the internet at <http://www.regulations.gov> under Docket No. FWS-R8-ES-2011-0055 and on the Klamath Falls Fish and Wildlife Office Web site at <http://www.fws.gov/klamathfallsfwo/>. Supporting documentation we used in preparing this finding is available for public inspection, by appointment, during normal business hours at: U.S. Fish and Wildlife Service; Klamath Falls Fish and Wildlife Office; 1936 California Ave; Klamath Falls, OR 97601; telephone: (541) 885-8481; facsimile (541) 885-7837. Please submit any new information, materials, or questions concerning this finding to the above street address.

**FOR FURTHER INFORMATION CONTACT:**

Laurie Sada, Field Supervisor, U.S. Fish and Wildlife Service, Klamath Falls Fish and Wildlife Office; 1936 California Ave; Klamath Falls, OR 97601; telephone: (541) 885-8481; facsimile (541) 885-7837. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:**

**Background**

Section 4(b)(3)(B) of the Act (16 U.S.C. 1531 *et seq.*) requires that, for



any petition to revise the Federal Lists of Endangered and Threatened Wildlife and Plants that contains substantial scientific or commercial information that listing the species may be warranted, we make a finding within 12 months of the date of receipt of the petition. As discussed above, in this finding, we have determined that adding Leona's little blue butterfly to the Federal Lists of Endangered or Threatened Wildlife is not warranted.

This finding is based upon the "Species Report for Leona's Little Blue Butterfly (*Philotiella leona*)," (Service 2015, entire) (Species Report) and the scientific analyses of available information prepared by Service biologists from the Service's Klamath Falls Fish and Wildlife Office, the Pacific Southwest Regional Office, and the Headquarters Office. The Species Report contains the best scientific and commercial data available concerning the status of Leona's little blue butterfly, including the past, present, and future stressors to the species. As such, the Species Report provides the scientific basis that informs our regulatory decision in this document, which involves the further application of standards within the Act and its implementing regulations and policies.

Below is a summary of the background information on Leona's little blue butterfly. For additional information and a detailed discussion of the species' description, taxonomy, life history, habitat, soils, distribution, and abundance, please see the Species Report for Leona's Little Blue Butterfly (*Philotiella leona*) (Service 2015, entire) available under Docket No. FWS-R8-ES-2011-0055 at <http://www.regulations.gov>, or from the Klamath Falls Fish and Wildlife Office (see ADDRESSES).

#### Previous Federal Action

On May 12, 2010, we received a petition from the Xerces Society, Dr. David McCorkle of Western Oregon University, and Oregon Wild (Petitioners), requesting that Leona's little blue butterfly be listed as endangered (Matheson *et al.* 2010, entire). On August 17, 2011, we published in the **Federal Register** (76 FR 50971) a 90-day finding on the petition and found that the petition presented substantial scientific or commercial information indicating that listing Leona's little blue butterfly may be warranted.

On July 1, 2013, the Petitioners filed an action with the U.S. District Court of Oregon challenging the Service for failure to issue the 12-month finding on the petition (*Xerces Society for*

*Invertebrate Conservation, et al., Plaintiffs, v. S.M.R. Jewell, et al.*; Case No. 3:13-CV-01103-MO). On July 31, 2014, the parties entered into a stipulated settlement agreement and order in which the Court ordered the Service to make the required finding pursuant to 16 U.S.C. 1533(b)(3)(B) no later than June 30, 2015. This notice constitutes our compliance with the Court Order and completes our review and final action regarding the petition to list Leona's little blue butterfly as endangered or threatened under the Act.

#### Species Description

Leona's little blue butterfly is a member of the butterfly family Lycaenidae (gossamer-winged butterflies) and the tribe Polyommata (Pyle 2002, p. 222). The species has a wingspan of less than 0.75 to 1.0 inches (in) (1.9 to 2.5 centimeters (cm)) (Pyle 2002, p. 236). The dorsal wing color for males is dark dusky blue with black submargins and is brown for the female. The ventral wing color for both sexes is white with black spots on fore- and hind-wings (Hammond and McCorkle 1999, p. 77). Leona's little blue butterfly may be confused with other co-occurring species of little blue butterflies such as the glaucous blue (*Euphilotes glaucus*) and the lupine blue (*Plebejus lupini*) (Ross 2010, pp. 10–12). Additional species description information can be found in the Species Report (Service 2015, pp. 4–7).

#### Biological Information

The biology of Leona's little blue butterfly is very closely tied to its larval annual host plant, *Eriogonum spergulinum* (spurry buckwheat) (Hammond and McCorkle, 1999 p. 80; James 2012, pp. 93, 95; James *et al.* 2014, p. 269). Buckwheat species, such as spurry buckwheat, are known to be pioneer plants. Pioneer plants are plants that colonize disturbed sites and other open, less vegetated areas (Meyer 2008, pp. 499–503). Food sources for adult Leona's little blue butterfly include spurry buckwheat as well as other flowering plants that produce nectar (Ross 2009, p. 17; Johnson 2010, p. 5; Johnson 2011, p. 9; James 2012, p. 95; James *et al.* 2014, pp. 269–271). Adult Leona's little blue butterfly begin flying and mate in mid- to late-June, which coincides with the period when spurry buckwheat is beginning to flower and providing sources of nectar (Ross 2008, p. 5; James *et al.* 2014, p. 268). The lifespan of adults is thought to be 2 weeks (James *et al.* 2014, p. 272). The eggs of Leona's little blue butterfly are laid on the host plant in early July and hatch into larvae a few days later (James

2011, p. 19; James 2012, p. 94). The larvae appear to feed only on the bud and flower of spurry buckwheat (James 2011, p. 19; James 2012, p. 94). Larvae continue to mature and develop into pupa before the plants senesce (Holdren and Ehrlich 1981, p. 128; Ehrlich and Murphy 1987, p. 124). The pupa overwinter (some captive bred pupa remained dormant for 2 years) and emerge as adult butterflies to complete the cycle (James 2012, pp. 94–95). Additional biological information on the species can be found in the Species Report (Service 2015, pp. 7–15).

#### Population Size and Distribution

Information provided in the petition stated that Leona's little blue butterfly was known from a single population (estimated at 1,000 to 2,000 individuals) and that its range was limited to a 6-square-mile (sq-mi) (15.5-square-kilometer (sq-km)) area in the rain shadow of the Cascades near Sand and Scott Creek of the Antelope Desert in Klamath County, Oregon (Matheson *et al.* 2010, pp. 7–8). Additional surveys conducted in 2011 used a predictive habitat model to search 18,654 acres (ac) (7,549 hectares (ha)) in Oregon adjacent to and more distant from the known population (Johnson 2011, p. 5). No other populations were located outside the Sand and Scott Creek area despite other areas seemingly having the appropriate habitat characteristics (Ross 2008, pp. 5–9; Ross 2009, pp. 4, 8–17; Johnson 2010, p. 2; Johnson 2011, p. 5; Chew 2013, p. 2; Johnson and Ross 2013, pp. 2–12). This indicates that new populations of Leona's little blue butterfly are not likely to be discovered based on negative survey results from Oregon and California in habitat having appropriate characteristics and, therefore, a high potential for the species to be present (Johnson and Ross 2013, p. 2).

Based on a better understanding of habitat requirements, more focused survey efforts, and more rigorous sampling methods for the species between 2009 and 2013, the current known range of the species has doubled in size from 6 sq mi (15.5 sq km) to 12.8 sq mi (33.1 sq km) (James *et al.* 2014, p. 272; Service 2015, p. 16). Similarly, the population size estimates have increased to approximately 20,000 individuals as a result of the additional survey efforts (James *et al.* 2014, p. 272). Leona's little blue butterfly occupancy appears to be coincident with the northern edge of the Sand Creek and Scott Creek alluvial fans (fan-shaped deposits of volcanic material) deposited after the eruption of Mt. Mazama (present day Crater Lake, OR) 6,600 to



7,700 years ago (Tilden 1963, pp. 110–111; Hammond 1981, p. 180; Harris 1988, p. 105; U.S. Geological Survey (USGS) 2002, p. 1; Cummings 2007, p. 30; Johnson 2010, p. 4). Additional population size and distribution information can be found in the Species Report (Service 2015, pp. 5, 15–18).

**Habitat Characteristics**

Habitat for Leona’s little blue butterfly is influenced by the geology of the Sand and Scott Creek area, characteristics of vegetation and soil distribution and composition, and factors contributing to the area’s disturbance regime (i.e., timber management and fire). Leona’s little blue butterfly inhabits open and often disturbed areas associated with the distribution of its host plant, spurry buckwheat (Ross 2009, p. 20; Service 2015, p. 11). The unique assemblage of plant species found in the vicinity of Sand and Scott Creeks is not likely to occur outside the ash and pumice fields deposited during the eruption of Mt. Mazama (Johnson 2011, p. 2). One reason for this may be the presence of subsurface moisture present from an alluvial fan (Johnson 2011, p. 2). Sand Creek and Scott Creek alluvial fans are thicker than other alluvial fans immediately to the north of the occupied habitat area (Johnson 2011, p. 7). Sand Creek and Scott Creek have removed most of the fine ash layer from the eruption of Mt. Mazama, improving porosity and permeability of the area (Johnson 2011, p. 2).

The transition zone between the Bitterbrush/Needlegrass-Sedge and

Lodgepole Pine/Bitterbrush/Fescue plant communities coincides with the boundary of Leona’s little blue butterfly occupancy (Volland 1988, pp. 29, 39; Johnson 2010, p. 2). Annual and perennial plants occurring within the occupied habitat include, but are not limited to: Spurry buckwheat, *Eriogonum umbellatum* (sulphur-flower buckwheat), *Hemizonella minima* (least tarweed), *Cistanthe umbellata* (Mt. Hood pussypaws), *Plagiobothrys hispidus* (Cascade popcorn flower), *Machaeranthera canescens* var. *shastensis* (hoary aster), *Packera cana* (woolly groundsel), *Gayophytum diffusum* (spreading groundsmoke), *Phacelia hastata* (silverleaf phacelia), *Agoseris glauca* (pale agoseris), *Antennaria rosea* (rosy pussytoes), *Epilobium* spp., *Pinus contorta* (lodgepole pine), *Pinus ponderosa* (ponderosa pine), and *Populus tremuloides* (quaking aspen).

The habitat is a dry, high desert with a limited ability of the ash-pumice fields to retain moisture (Hammond 1981, pp. 180, 190). Topography of the area occupied by Leona’s little blue butterfly is relatively flat, with elevations ranging from 4,530 ft (1,381 m) on the west to 4,660 ft (1,420 m) on the east (Ross 2009, p. 19; Esri, Inc. ArcMap 10.2.2 1999–2014). Most precipitation in the Sand and Scott Creek area falls in non-summer months with annual rain and snowfall totals ranging from 15–30 in (38–76 cm) (Youngberg and Dyrness 1959, p. 111; Dyrness and Youngberg 1966, p. 123). The porous ash-pumice fields fail to retain moisture during the

short summer growing season, with the exception of some areas where ground water does come to the surface (Hammond 1981, p. 180; Hammond and Dornfeld 1983, p. 120). However, subsurface moisture in the Sand and Scott Creeks area may be greater than the surrounding area because Sand and Scott Creeks flow year-round (Cummings 2007, pp. 49, 72, 105). Additional information on habitat characteristics can be found in the Species Report (Service 2015, pp. 11–15).

**Land Ownership and Management**

Land ownership in the range of Leona’s little blue butterfly includes Federal and private land. The majority of the land is held by a single private landowner and their lands have been managed for commercial timber operations. This property has recently (2015) been sold to another private timber company, and management of the area is expected to continue as commercial timber land. The Federal land is part of the Fremont-Winema National Forest and is managed for conservation of resources, per their Land and Resource Management Plan (USFS 1990, entire). The remaining private lands are made up of many small parcels with multiple land owners. Additional land ownership information can be found in the Species Report (2015, Figure 1). Table 1 identifies the land ownership, approximate amount of land, and percentage of habitat area.

TABLE 1—LAND OWNERSHIP, AREA OF LAND, AND PERCENTAGE OF LEONA’S LITTLE BLUE BUTTERFLY HABITAT WITHIN THE SPECIES’ RANGE

Population name	Land ownership	Approximate area (acres (hectares))	Approximate area of habitat (percent)
Sand Creek <sup>1</sup>	Private Timber Lands <sup>2</sup>	7,654 (3,097)	93.7
Fremont-Winema National Forest	120 (48)	1.5	
Other Private Lands	396 (160) from a total of 48 parcels.	4.8	

<sup>1</sup> The species was first described in the vicinity of Sand Creek, and is the name that has been adopted to identify the population. Further surveys expanded the range, and the species is now known from the vicinity of both Sand and Scott Creeks.

<sup>2</sup> Private timber lands previously owned by Fidelity National Financial, the property has recently been sold to Whitefish Cascade Forest Resources of Salem, Oregon and Singapore.

**Summary of Factors Affecting the Species**

In development of the Species Report for Leona’s little blue butterfly and conducting our status review, we identified those stressors that may potentially impact Leona’s little blue butterfly individuals or their habitat. The following sections provide a summary of the current stressors impacting Leona’s little blue butterfly.

Table 2 below summarizes the stressors identified for the species over time since the species was first petitioned for listing and compares these with the current situation. The stressors are not listed in order of magnitude or level of severity. The level of impact of each stressor on Leona’s little blue butterfly or its habitat is provided in the summary for the stressor in both the Species Report and this 12-month finding. Low-level impacts are those

that are considered baseline for a species under natural conditions that may cause a minor amount of loss of individuals and/or habitat currently or in the future, but which do not affect the species as a whole. Moderate-level impacts are those that are causing a more than minor but not widespread loss of individuals and/or habitat currently or that may do so in the future. High-level impacts are those that are causing widespread loss of

individuals and/or habitat currently or that may do so in the future. In our evaluation, we did not find any high-level impacts affecting the species or its habitat.

In this document, we discuss those stressors currently identified as potentially impacting Leona's little blue butterfly or its habitat including those stressors that have changed since our

August 17, 2011, 90-day finding (76 FR 50971) published in the **Federal Register**. A complete discussion of stressors can be found in the Species Report (Service 2015, pp. 19–70).

TABLE 2—STRESSORS IDENTIFIED FOR LEONA'S LITTLE BLUE BUTTERFLY OVER TIME

Stressor	Assessment of the stressor's impact to Leona's little blue butterfly or its habitat		
	2010 Petition	2011 90-day finding <sup>1</sup>	2015 Species report
Timber Management .....	–/+ .....	Not substantial .....	Low-level
Lodgepole Pine Encroachment .....	– .....	Substantial .....	Moderate-level
Fire .....	– .....	Substantial (catastrophic fire) .....	Low-level
Fire Retardant .....	n/a .....	n/a .....	Low-level
Fire Suppression .....	n/a <sup>2</sup> .....	n/a <sup>2</sup> .....	Low-level
Right-of-Way Maintenance .....	n/a .....	n/a .....	Low-level
Cinder Mining .....	– .....	Not substantial .....	Not Present
Livestock Grazing .....	– .....	Not substantial .....	Not Present
Herbivory from Native Animals .....	n/a .....	n/a .....	Low-level
Herbicides .....	– .....	Not substantial .....	Low-level
Invasive Plants .....	n/a .....	n/a .....	Low- to moderate-level
Insect Collection .....	–/+ .....	Not substantial .....	Low-level
Competition with Other Invertebrates.	n/a .....	n/a .....	Low-level
Predation .....	– .....	Not substantial .....	Low-level
Disease .....	– .....	Not substantial .....	Low-level
Pesticides .....	– .....	Not substantial .....	Low-level
Isolated Population (drought, fire, disease, inbreeding).	– .....	Substantial (catastrophic fire) .....	Low-level
Effects of Climate Change .....	n/a .....	n/a .....	Low- to moderate-level
Potential Change in Land Ownership.	– .....	Not substantial .....	Not applicable

n/a = not addressed; “–” = negative impact; “+” = positive impact; “–/+” positive and negative impact.

<sup>1</sup> Service's determination that the petition presented either “Substantial” or “Not substantial” information indicating that listing may be warranted. Substantial stressors are those stressors that necessitated further review in this 12-month finding.

<sup>2</sup> Discussed in reference to lodgepole pine encroachment in petition and 90-day finding.

Section 4 of the Act (16 U.S.C. 1533) and implementing regulations (50 CFR part 424) set forth procedures for adding species to, removing species from, or reclassifying species on the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, a species may be determined to be endangered or threatened based on any of the following five factors:

- (A) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) Overutilization for commercial, recreational, scientific, or educational purposes;
- (C) Disease or predation;
- (D) The inadequacy of existing regulatory mechanisms; or
- (E) Other natural or manmade factors affecting its continued existence.

In making our 12-month finding on the petition, we considered and evaluated the best available scientific and commercial information pertaining to Leona's little blue butterfly in relation to the five factors provided in section 4(a)(1) of the Act. In considering what factors (stressors) might constitute threats, we must look beyond the mere exposure of the species to the factor to

determine whether the species responds to the factor in a way that causes actual impacts to the species. If there is exposure to a factor, but no response, or only a positive response, that factor is not a threat. If there is exposure and the species responds negatively, the factor may be a threat and we then attempt to determine if that factor rises to the level of a threat, meaning that it may drive or contribute to the risk of extinction of the species such that the species warrants listing as an endangered or threatened species as those terms are defined by the Act. This does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of factors that could impact a species negatively is not sufficient to compel a finding that listing is appropriate; we require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of an endangered or threatened species under the Act.

Listing actions may be warranted based on any of the above factors, singly or in combination. The information pertaining to the five factors found

under section 4(a)(1) of the Act is discussed for the species below. In this notice, we focused our discussion of threats to those stressors currently found to be potentially impacting Leona's little blue butterfly or its habitat (see Table 2 above). A complete discussion of all the stressors identified in Table 2 including how and to what extent they may impact Leona's little blue butterfly or its habitat can be found in the Species Report (Service 2015, pp. 19–70).

*Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*

The stressors that may impact the habitat or range of Leona's little blue butterfly include: Timber management, lodgepole pine encroachment, fire, fire suppression, right-of-way maintenance, herbivory from native animals, herbicide application, invasive plants, and the effects of climate change. Some of the same potential activities that affect the habitat of Leona's little blue butterfly can also affect individuals. While these impacts to Leona's little blue butterfly may better be characterized under Factor E (Other Natural or Manmade Factors Affecting

Its Continued Existence), they are included here in the Factor A discussion for ease of discussion and analysis.

#### Timber Management

The majority (93.7 percent) of land occupied by Leona's little blue butterfly is managed for timber production (commercial timber lands). Timber management is a broad term that encompasses many activities associated with the removal of trees for commercial or noncommercial purposes. Activities may include creation of temporary or permanent roads, use of existing roads, creation of new landings for log or equipment staging, use of existing landings, heavy equipment traveling on and off roads, felling of trees, limbing trees, skidding of trees to landings, piling of logging slash by machine or hand, and burning slash piles. Ground disturbance from all of these activities can impact Leona's little blue butterfly habitat through trampling of host and nectar plants thus making them a less viable resource for Leona's little blue butterfly. Similarly, timber management activities that utilize heavy machinery can affect all life stages of individual Leona's little blue butterfly through crushing of eggs, larvae, pupae, and adults. Activities that result in clearing of suitable habitat (e.g., creation of new roads and landings) have a greater potential impact since host and nectar plants are no longer available for use by Leona's little blue butterfly until plants regenerate during the following growing season. However, timber management activities can also be beneficial to Leona's little blue butterfly and its habitat. The removal of trees and ground disturbance provides conditions suitable to colonization by spurry buckwheat.

Spurry buckwheat is a colonizer plant species and is capable of rapidly inhabiting open areas resulting from timber management that may not have been previously available to Leona's little blue butterfly. As spurry buckwheat and nectar plants become abundant in the open areas, the habitat becomes suitable for Leona's little blue butterfly. Additionally, the removal of trees and logging slash reduces the overall potential risk of wildfire and limits the potential intensity, severity, and rate of spread of wildfire (see *Fire* discussion below). This stressor has occurred in the past and will occur in the near- and long-term future. See *Timber Management* section in the Species Report (Service 2015, pp. 20–23) for additional discussion of this stressor.

As a result, we have determined that timber management acts as a low-level stressor on Leona's little blue butterfly and its habitat because impacts are more likely to affect forested areas that are not suitable habitat and are not occupied by Leona's little blue butterfly. Impacts to existing open areas containing butterflies would be localized and affect few individuals. Beneficial effects from timber management promote the development of new habitat and maintenance of existing habitat. The limited scope and low severity of the stressor suggest that this is not a considerable source of loss of individuals or habitat. Rather, the longer term benefits from timber management promote continued occupancy and habitat for Leona's little blue butterfly. As a result, we have determined that the impacts from timber management do not rise to the level of a threat.

#### Lodgepole Pine (*Pinus contorta*) Encroachment

Leona's little blue butterflies occupy open habitat areas that are treeless or sparsely treed. In some cases, natural openings are being encroached by lodgepole pine. Encroachment is different from the natural regeneration of previously forested areas. Encroachment occurs when lodgepole pine, for example, gradually expands into open areas where it was previously absent. Natural regeneration occurs when areas that were harvested become forested again through the gradual sprouting of seeds and growth of seedlings over time. Encroachment and natural regeneration may result in the gradual conversion of these open habitat areas to forested habitats.

Lodgepole pine encroachment is believed to have reduced the extent of openings in areas occupied by Leona's little blue butterfly (Johnson 2010, p. 6). However, other researchers note that "only a small number of trees" have become established in meadows (Hatcher 2014a, p. 3). Despite the documented presence of lodgepole pine and its encroachment or natural regeneration into occupied Leona's little blue butterfly habitat, there are large openings that appear to have never supported lodgepole pine (Ross and Johnson 2012, p. 2; Johnson 2014e, pers. comm.). This may be due to the deep soils that are present within the Sand Creek Basin. Tilden (1963, p. 111) suggests that the recovery of vegetation since the eruption of Mt. Mazama appears to be inversely related to the depth of the pumice. See *Lodgepole Pine (*Pinus contorta*) Encroachment* section in the Species Report (Service

2015, pp. 23–26) for additional discussion of this stressor.

Lodgepole pine encroachment and natural regeneration is an ongoing stressor affecting the area occupied by Leona's little blue butterfly. The rate of encroachment and regeneration within the range of the butterfly is not known; however, other areas near Sand Creek have shown that the overall amount of encroachment and regeneration of lodgepole pine is increasing (Horn 2009, pp. 200–204). For example, in the Pumice Desert, (a broad flat area north of Crater Lake, Oregon, that is somewhat similar to the Sand Creek area), lodgepole pine encroachment increased threefold over a period of 40 years and was greater near the forest edge (Horn 2009, pp. 200–204). In the Sand Creek area, lodgepole pine encroachment is believed to have reduced the extent of openings in areas occupied by Leona's little blue butterfly (Johnson 2010, p. 6). However, encroachment is absent in areas that appear to lack suitable conditions for lodgepole pine establishment (Cochran 1973, pp. 3–5; Lotan and Critchfield 1990, pp. 307–309), and based on aerial imagery, our review has found openings that were present in 1995 were still present in 2012. Past and current actions on private timber lands and on the Fremont-Winema National Forest are limiting the encroachment and natural regeneration of lodgepole pine in some areas occupied by Leona's little blue butterfly (USFS 2014, p. 2). Land management practices that result in the removal of lodgepole pine by private timber companies and the U.S. Forest Service are expected to maintain and enhance some open patches through expansion of their perimeters.

Based on this information, we have determined that the effects from lodgepole pine encroachment and natural regeneration are moderate in areas where this is occurring because lodgepole pine has the ability to render as unsuitable the open habitats used by Leona's little blue butterfly. However, large open areas are present that do not show signs of lodgepole pine encroachment; this may be related to the depth of the pumice, which may act as a natural inhibitor to encroachment by lodgepole pine. In addition, only a small number of trees have become established in meadows. Despite the documented presence of lodgepole pine and its encroachment or natural regeneration into occupied Leona's little blue butterfly habitat, there are large openings that appear to have never supported lodgepole pine. As a result, we have determined that the level of encroachment of lodgepole pine into

Leona's little blue butterfly habitat under current natural and managed conditions is not a significant concern and does not rise to the level of a threat now or into the future.

#### Fire

There are two types of fires that may impact Leona's little blue butterfly: wildfire and prescribed fire. Wildfires are unplanned and started by natural events (*i.e.*, lightning) or non-natural sources (*e.g.*, arson, machinery, power lines, etc.). Prescribed fires are burn operations that follow a prescription dictating proper fuel and weather conditions that allow for control of fire severity, intensity, and rate of spread per stated management objectives. Prescribed fire can occur in many forms, ranging from burning material piled after timber harvest to broadcast burning in which large areas are burned over a series of days.

Both types of fire can result in the loss of Leona's little blue butterfly host and nectar plants, but can also create new openings if a fire burns through dense brush or at high severity through dense forest-stands. Fire may completely consume stands of trees or it may creep around in the understory; fire behavior is dependent upon weather conditions and fuel loading. Extreme weather conditions including high temperature, high wind-speed, and low relative-humidity can result in rapid rates of fire spread at higher intensity and severity than would be expected under more normal weather conditions. Areas with light fuel loads are not expected to burn at the same intensity or severity as those with higher fuel loads. Soils within the range of Leona's little blue butterfly are pumice-based and have low productivity for sustaining fire (Dunn 2011a, p. 9). Because of the low productivity, the types of vegetation that grow in the Sand Creek and Scott Creek area (Volland 1988, p. 38) are not the kinds that will carry fire very far (low leaf litter, very little if any duff layer, no or very few ladder fuels) (Simpson 2007, p. 9–5; Dunn 2011a, p. 9). See *Fire* section in the Species Report (Service 2015, pp. 26–30) for additional discussion of this stressor.

The forested stands within Leona's little blue butterfly habitat area are at greater risk of high-intensity and severe fires than the more open areas occupied by Leona's little blue butterfly (Blackwell 2006, p. 236; Dunn 2011b p. 12). However, past fires have been small in size, and the presence of fire suppression crews at nearby Sand Creek Guard Station suggest that, while there is risk of fire in Leona's little blue butterfly habitat, the impacts of fire are

not expected to encompass large areas or be widespread. The condition of the standing and ground fuels are mixed, and some areas would not be able to carry fire, further increasing the likelihood that if a large fire were to occur, it would burn in a mosaic pattern and open areas could continue to support Leona's little blue butterfly and its habitat. Beneficial effects from wildfire and prescribed fire promote the development of new habitat and maintenance of existing habitat for Leona's little blue butterfly. For example, Dunn (2011a, p. 9) found that fires occurring during the spurry buckwheat growing season (June through August) could result in an initial reduction in plants immediately following fire, but 2 to 3 years later, spurry buckwheat is likely to increase in the fire-affected areas. Fire can result in brush clearing that reduces competition for Leona's little blue butterfly host and nectar plants (Dunn 2011a, p. 9). James *et al.* (2014, p. 270) provided an anecdotal observation that spurry buckwheat thrives in the footprints of burned slash piles, and Huntzinger (2003, p. 9) found that Leona's little blue butterflies were more frequent in areas that were prescribe-burned, possibly due to increased sunlight.

Based on this information, we have determined that fire acts as a low-level stressor on Leona's little blue butterfly and its habitat. The low severity of the stressor suggests that, even though this stressor may occur range-wide, this stressor is not a considerable source of loss of individuals or habitat. Additionally, fire benefits the butterfly by creating and maintaining habitat. As a result, we have determined that the impacts from controlled and wildfire on Leona's little blue butterfly habitat under current natural and managed conditions and in the future are not a significant concern individually or in combination and do not rise to the level of a threat.

#### Fire Suppression

The intent of fire suppression is to extinguish fires quickly. Fire suppression, in turn, interrupts historic fire return intervals by not allowing fires to burn to the extent and degree as they may have in the past and changes the habitat from its expected, natural condition (Crawford 2011, p. 3). Suppression allows for vegetation to become denser and more susceptible to disease, and conifer encroachment to occur over time. Fire suppression, consequently, can lead to loss of open areas and also to larger fires. Ground disturbing activities arising from fire suppression efforts have the ability to

impact Leona's little blue butterfly habitat and individuals. These activities may include creation of fire lines (areas cleared of vegetation intended to prevent spread of fire) by hand or machinery and vehicle travel on and off roads. Creation of fire lines involves digging down to mineral soil, which may remove host and nectar plants and disrupt the life cycle of Leona's little blue butterfly. Other actions associated with the creation of fire lines include the felling of trees and/or limbing of trees to reduce ladder fuels (*e.g.* tall shrubs, small-sized trees, dead branches that provide vertical continuity between strata, thereby allowing fire to carry from surface fuels into the crowns of trees or shrubs). Felling and limbing of trees are likely to result in more open areas and more open forest canopy, which can provide new areas for host and nectar plants to colonize. In addition, when machinery is moved from one area to another, there is the potential for the spread of invasive plants. The stressor of *Invasive Plants* to Leona's little blue butterfly is discussed below.

The use of fire retardant to suppress fire is also a concern for Leona's little blue butterfly and its habitat. Fire retardant coats and adheres to vegetation, which slows the progression of fires. Any fire retardant exposure is likely to be lethal to Leona's little blue butterfly life forms that are above ground due to its inherent stickiness, which would severely restrict movement and could also result in suffocation (USFS 2011, p. 179). No data are available regarding the toxicity of fire retardant to larvae of invertebrates (USFS 2011, p. 179). Leona's little blue butterfly in the pupa stage may or may not be exposed to fire retardant dependent upon whether they are at or below ground level. Fire retardant would also potentially result in the killing of host and nectar plants if photosynthesis were inhibited; similarly, flowers coated in retardant would not be available for nectaring. Fire retardant may also act as a fertilizer, increasing plant growth of both native and non-native species. The U.S. Forest Service (USFS) uses mapped buffers to avoid the aerial application of fire retardant in waterways and habitats occupied by some, but not all, threatened or endangered species or those proposed for listing under the Act (USFS 2011, p. 3). These mapped avoidance area buffers occur only on National Forest lands. There are no mapped avoidance buffer areas within the range of Leona's little blue butterfly.

See *Fire Suppression* in the Species Report (Service 2015, pp. 32–33) for additional discussion of this stressor.

Fire suppression activities can have positive and negative impacts to Leona's little blue butterfly and its habitat. Habitat and individuals can be destroyed by suppression that removes habitat. Ground disturbance and tree felling can improve habitat for Leona's little blue butterfly. Suppression can result in densely stocked forests, accumulation of fuels, and conifer encroachment in open areas, which can result in impacts to Leona's little blue butterfly from encroachment and fire that are described above. Fire suppression may act as a low-level stressor on Leona's little blue butterfly and its habitat. The low severity of the stressor suggests that, even though this stressor may occur range-wide, it is not a considerable source of loss of individuals or habitat. Beneficial effects from ground disturbance and tree felling will promote colonization of spurry buckwheat, which will create or enhance habitat for Leona's little blue butterfly. As a result, we have determined that the impacts from fire suppression on Leona's little blue butterfly habitat under current natural and managed conditions and in the future is not a significant concern and does not rise to the level of a threat.

#### Right-of-Way Maintenance

Several rights-of-way occur within the range of Leona's little blue butterfly. The rights-of-way are maintained by Bonneville Power Administration (BPA), TransCanada (Pacific Gas Transmission Company), Oregon Department of Transportation (ODOT), Klamath County, and American Tower Corporation (Johnson 2014e, pers. comm.).

Maintenance of power line and roadway rights-of-way results in the reduction of woody plants and encourages early successional plants (Forrester *et al.* 2005, p. 489). As a result, the maintenance of rights-of-way may also be beneficial to Leona's little blue butterfly and its habitat because it maintains open areas that are preferred by host and nectar plants. Power line rights-of-way can also be important butterfly habitat and have been correlated with higher butterfly abundance when compared to semi-natural grasslands (pastures) (Berg *et al.* 2013, pp. 644, 646).

Habitat loss and potential direct impacts on Leona's little blue butterfly can also be a concern. Vehicles and equipment traveling off roads are assumed to trample host and nectar plants used by Leona's little blue

butterfly. Trampling results in loss of habitat for eggs and larvae and a loss of potential nectar sources for Leona's little blue butterfly. Similar effects are expected from the removal or cutting of vegetation. If activities occur during the flight period, adult Leona's little blue butterfly may be killed by vehicles directly.

The use of biological control agents is not expected to occur within the range of Leona's little blue butterfly. Biological control agents are used only to treat noxious weeds (BPA 2000, p. 3) and are regulated by the Oregon Department of Agriculture (ODOT 2013, pp. 7–8). Noxious weeds have not been documented within the range of Leona's little blue butterfly (Johnson 2011, p. 9).

Herbicide application may result in changes to plant distribution and abundance. Information is not available to determine the frequency or area impacted by herbicide application within the rights-of-way. ODOT does recommend herbicide application during certain periods. Please see the *Herbicide* section below for more information on how herbicides may act as a stressor on Leona's little blue butterfly. See *Right-of-Way Maintenance* section in the Species Report (Service 2015, pp. 34–36) for additional discussion of this stressor.

Right-of-way maintenance may act as a low-level stressor on Leona's little blue butterfly and its habitat. The limited scope and low severity of the stressor indicate that this is not a considerable source of loss of individuals or habitat, because this stressor is limited to rights-of-way that occur within the Leona's little blue butterfly range and the maintenance of rights-of-way retains open areas beneficial for the species' habitat. As a result, we have determined that the impacts from maintenance of rights-of-way on Leona's little blue butterfly habitat under current natural and managed conditions are not a significant concern and this activity does not rise to the level of a threat.

#### Cinder Mining

Cinder mining activities including exploration, drilling, and expansion of existing sites could remove habitat for Leona's little blue butterfly and may result in mortality of individuals. Mortality of individuals may result from trampling by vehicles or equipment. See *Cinder Mining* section in the Species Report (Service 2015, p. 37) for additional discussion of this stressor.

Cinder mines are not currently present within areas occupied by Leona's little blue butterfly. If cinder mining were to occur, it could impact

habitat and individuals. The potential for future cinder mines to impact habitat and individuals would be on small, localized scales. Information other than that provided by the petitioner is not available to assess the potential area of impact. Future cinder mining is not planned by the Fremont-Winema National Forest, and no information about plans for future cinder mines is available for private lands. Cinder mining is not currently a stressor acting on Leona's little blue butterfly and its habitat. Cinder mining is not presently affecting the species, and the small, potential scope and low potential severity of the stressor suggest that cinder mining is not expected to be a significant cause of loss of individuals or habitat in the future. As a result, we have determined that the impacts from cinder mining activities on Leona's little blue butterfly habitat under current natural and managed conditions is not a significant concern and does not rise to the level of a threat now or into the future.

#### Livestock Grazing

Livestock grazing can impact both Leona's little blue butterfly habitat and individuals. Habitat effects are through potential shifts in vegetation community (*i.e.*, selective preference of livestock for some plant species over others), consumption of host and nectar plants, and trampling of vegetation (which reduces the potential for flowers to provide nectar). Eggs and larvae may be consumed if spurry buckwheat is consumed. Spurry buckwheat grows in a very open, small-stemmed shape, giving it a very wispy look (Blackwell 2006, p. 236) that is not likely to be favored as a food source for livestock. Other plants in the occupied habitat area have more robust growth forms with dense foliage that could provide better nutritive value, if only based on the sheer volume of material to eat. Adult Leona's little blue butterfly are expected to fly away if livestock approach and, therefore, are not expected to be consumed by livestock. Nectar plants are likely to be eaten by livestock and could result in a reduction of food for adult Leona's little blue butterfly. Grazing, were it to occur, may also result in beneficial effects to the extent that grazing may result in reduced competition for host and nectar plants by creating or maintaining openings.

There are no grazing allotments on the Fremont-Winema National Forest portion of the occupied habitat; therefore, Leona's little blue butterfly are not affected by livestock grazing in that area. Information is not available on

whether livestock grazing is permitted on private lands in the remainder of the occupied habitat area. Livestock use of lands now owned by Whitefish was not observed during fieldwork conducted in 2010 and 2011 (Johnson 2014b, pers. comm.) See *Livestock Grazing* section in the Species Report (Service 2015, pp. 37–39) for additional discussion of this stressor.

Livestock grazing of vegetation may benefit Leona's little blue butterfly by reducing competition for host and nectar plants, thus providing more abundant host and nectar plants for the species. Although livestock grazing could have moderately severe impacts on habitat for Leona's little blue butterfly, it does not appear to be a stressor that is acting on the species or its habitat presently. Because this activity is not occurring and is not expected to occur (based on past land use) within the range of Leona's little blue butterfly, this is not a considerable source of loss of individuals or habitat despite a potential moderate severity should land use activities change in the future. As a result, we have determined that the impacts from livestock grazing on Leona's little blue butterfly habitat under current natural and managed conditions is not a significant concern now or in the future and does not rise to the level of a threat.

#### Herbivory from Native Animals

The entire range of Leona's little blue butterfly habitat has the potential to be impacted by herbivory from native animals with few exceptions. Native animals, such as deer and rabbits, may forage on plants that are used by Leona's little blue butterfly as a larval host plant or for nectar. Deer are known to favor bitterbrush, which occurs in Leona's little blue butterfly habitat. Bitterbrush has not been documented as a known nectar plant for Leona's little blue butterfly (Johnson 2011, p. 9). Spurry buckwheat grows in a very open, small-stemmed shape giving it a very wispy shape that is not likely to be a favored food source for herbivores (Blackwell 2006, p. 236). Other plants in the occupied habitat have more robust growth forms with dense foliage that could provide better nutritive value, if only based on the sheer volume of material to eat. Leona's little blue butterfly eggs and larvae are not expected to be consumed by native animals unless spurry buckwheat is consumed incidentally with other vegetation. Adult Leona's little blue butterfly are likely to flee approaching animals and are not expected to be eaten by herbivores.

Herbivory is a natural condition in which animals and Leona's little blue butterfly have evolved. Herbivory from native animals is most likely to impact Leona's little blue butterfly nectar plants, with a very small potential for impacts to Leona's little blue butterfly eggs, larvae, and host plants. There is no information available that indicates herbivory is adversely impacting Leona's little blue butterfly or its habitat and to what degree. However, if herbivory is occurring, it is occurring at very low levels that are not expected to reduce adult Leona's little blue butterfly fitness because the butterflies are able to utilize a variety of plants for nectaring and because herbivory would likely not focus on the species' host plant. In addition, Leona's little blue butterfly has evolved with this stressor and there is no information to suggest that the pressure from herbivory has changed. See *Herbivory from Native Animals* section in the Species Report (Service 2015, pp. 39–40) for additional discussion of this stressor.

The low severity and natural condition of the stressor indicates that, even though this stressor may occur range-wide, it is not a considerable source of loss of individuals or habitat. As a result, we have determined that the impacts from herbivory from native animals on Leona's little blue butterfly habitat under current and future conditions is not a significant concern and does not rise to the level of a threat.

#### Invasive Plants

Within the range of Leona's little blue butterfly, *Bromus tectorum* (cheatgrass) is the only known invasive species. Cheatgrass germinates in the fall in arid portions of the Great Basin (Young et al. 1987, p. 266), but may germinate in the spring if fall moisture is not sufficient (Stewart and Hull 1949, p. 58). Invasive or nonnative plants, such as cheatgrass can outcompete native plants for resources. Competition with nonnative plants can result in reduced native plant vigor and distribution. This, in turn, can reduce growth and abundance of host and nectar plants used by Leona's little blue butterfly. Over time, the distribution and abundance of invasive plants may alter the species composition within Leona's little blue butterfly habitat. Changes to species composition may result in starvation of larvae and adults if they are not able to find adequate sources for oviposition and nectar.

Invasive plants are not known to occur in the Fremont-Winema National Forest portion of the Leona's little blue butterfly range (USFS 2014, p. 4). Surveys of the vegetation community of

Sand and Scott Creeks were conducted to determine plant species presence (Johnson 2011, p. 9). Cheatgrass, an invasive plant, is known to occur within the Whitefish portion of the Leona's little blue butterfly range (Johnson 2012, pers. comm.). Cheatgrass occurrences within the range of Leona's little blue butterfly have not been mapped, but these occurrences are not widespread (Johnson 2014c, pers. comm.).

Based on the information above, we have determined that the severity of invasive plants acting as a stressor on Leona's little blue butterfly and its habitat is low. The severity is low because, while cheatgrass is present, there is no information to suggest that cheatgrass has overrun suitable habitat for Leona's little blue butterfly, nor has it contributed to spread of fire. As a result, the impact of invasive plants is low and does not rise to the level of a threat.

**Combination of Stressors Under Factor A:** As discussed above, we have determined that the above identified stressors individually are not acting on Leona's little blue butterfly or its habitat to the extent that they would be considered threats. We now also determine that these stressors collectively or cumulatively do not rise to the level of a threat. See the *Cumulative, Synergistic, and Beneficial Effects* section below for additional discussion.

#### Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Based on the best available scientific and commercial information, insect collection for commercial, recreational, scientific, or educational purposes is the only known stressor under Factor B and is discussed below.

#### Insect Collection

There is potential for insect collection within the range of Leona's little blue butterfly. The Sand Creek area has been a popular location for insect collection over the last half-century (Ross and Johnson 2012, p. 9). The area is popular because it supports a unique assemblage of rare invertebrate species. However, there is no information regarding which species may be favored by collectors, and there is no available information regarding unauthorized insect collection within the range of Leona's little blue butterfly. Leona's little blue butterfly is similar in appearance to two other species in the Sand Creek area—the glaucous blue butterfly (*Euphilotes glaucus*) and the lupine blue butterfly (*Plebejus lupini*). It is not known if these similar-appearing species are sought for

collection in the range of Leona's little blue butterfly. Some collection for scientific research on Leona's little blue butterfly has been conducted within the range of the species in the past and at least 579 adult Leona's little blue butterflies, seven eggs, and one fourth instar larva have been collected since 1996. See *Insect Collection* section in the Species Report (Service 2015, pp. 43–45) for additional discussion of this stressor.

However, permission is needed to collect butterflies for non-recreational or commercial purposes on lands owned by Fremont-Winema National Forest. Ongoing collection is currently limited by a lack of accessibility to the private timber lands (Lidell 2012, pers. comm.) and permissions required by the Fremont-Winema National Forest (Callaghan 2014, pers. comm.). We are not aware of unauthorized insect collection within the range of Leona's little blue butterfly. We have no information to indicate that collection of insects on other small private lands (likely associated with residences) is allowed, but even if such collection occurs, it is unlikely it would result in collections of large numbers of individuals. All known collections for Leona's little blue butterfly have been limited in scope and associated with a specific purpose (description of species, life history study, mark-release-capture study), and we would not expect two of the studies (description of species, life-history study) to be repeated (Hammond and McCorkle 1999, p. 77; Ross 2009, p. 1; James 2012, p. 93; James *et al.* 2014, pp. 264, 269). The lack of public access to lands in the majority of the species' range will most likely continue into the future. The lack of access to private lands and permitting requirements by the USFS limits the impact of collection on the species.

Even though collection may occur range-wide, this stressor has not been shown to be a great source of loss of individuals. This is based on the limited extent of collection for research purposes, no known commercial or recreational collection, and lack of permitted access to a majority of the species' range. As a result, the best available scientific and commercial information indicates that this level of collection is not a current or expected future threat to Leona's little blue butterfly.

Because collection is the only known commercial, recreational, scientific, or educational use of Leona's little blue butterfly, we have determined, based on the information above that there are no stressors under Factor B that are now or

are likely in the near future to rise to the level of a threat.

#### *Factor C. Disease or Predation*

##### Disease

Butterflies are susceptible to infections from parasites, viruses, bacteria, and fungi as part of the natural conditions in which they have evolved (Davis and Lawrence 2006, p. 1; Altizer and de Roode 2010, p. 18). Viruses and bacteria can be common in butterfly larvae, which ingest capsules or spores incidentally (Davis and Lawrence 2006, p. 1; Altizer and de Roode 2010, p. 20). Fungi can grow on the outside or inside of infected caterpillars, ultimately killing the caterpillar (Altizer and de Roode 2010, p. 21). Symptoms of disease include changes in color, size, shape, and movement (Davis and Lawrence 2006, p. 2). Specific investigations into disease have not been conducted for Leona's little blue butterfly; however, exposure to disease and disease vectors is part of the natural conditions in which Leona's little blue butterfly likely evolved. There is no information on diseases affecting Leona's little blue butterfly from wild or captive-reared individuals (Ross and Johnson 2012, pp. 27, 42–46. See *Disease* section in the Species Report (Service 2015, pp. 47–48) for additional discussion of this stressor.

The low severity and natural condition of the stressor suggests that even though disease may occur range-wide, we have no information that indicates losses of individuals are occurring from this potential stressor. As a result, the best available scientific and commercial information indicates that this level of disease is not a current or expected future threat to Leona's little blue butterfly.

##### Predation

We assume that Leona's little blue butterfly and its predators evolved together. Limited information exists on actual predation events of Leona's little blue butterfly. If it occurs, predation on Leona's little blue butterfly could result in reduced numbers of eggs, larvae, and adults. A study conducted in 2011 identified hornets (Vespidae), dragonflies (Odonata), damselflies (Odonata), robberflies (Asilidae), stiltbugs (Berytidae), and spiders (Arachnid) as potential predators of Leona's little blue butterfly (Ross and Johnson 2012, pp. 16–17). The authors of the study concluded that predators are relatively rare within the range of Leona's little blue butterfly. The Asian lady beetle (*Harmonia axyridis*), suggested as a predator of Leona's little

blue butterfly by the Xerces Society for Invertebrate Conservation (Matheson *et al.* 2010, p. 16), is not known to occur within the range of Leona's little blue butterfly (Ross and Johnson 2012, pp. 33–48). Leona's little blue butterfly lay eggs on or very near flower buds and do not attempt to hide them (*e.g.*, laying on underside of leaves). This behavior suggests that there may be a low relative risk of predation on eggs (Henry and Schultz 2013, p. 190). However, Leona's little blue butterfly larva are typically pink and white, which blends in with the colors of the host plant and may provide camouflage from predators. James *et al.* (2014, pp. 271–272) suggest that Leona's little blue butterfly mortality from predation is likely very low, as this was not observed during a 3-year study. See *Predation* section in the Species Report (Service 2015, pp. 46–47) for additional discussion of this stressor.

Predation can reduce overall abundance of Leona's little blue butterfly. While potential predators are present when Leona's little blue butterfly are active, predation has not been observed. Similarly, pressure from predation is likely one that Leona's little blue butterfly evolved with and to which it has adapted. Predation may be a low-level stressor acting on Leona's little blue butterfly. The low severity and natural condition of the stressor suggests that, even though predation may occur range-wide, this stressor is unlikely to be a considerable source of loss of individuals. As a result, the best available scientific and commercial information indicates that this level of predation is not a current or expected future threat to Leona's little blue butterfly.

**Combination of Stressors Under Factor C:** As discussed above, we have determined that disease and predation individually are not acting on Leona's little blue butterfly to the extent that they would be considered threats. Based on the limited known instances of disease or predation, we also determine that disease or predation collectively or cumulatively do not rise to the level of a threat. See the *Cumulative, Synergistic, and Beneficial Effects* section below for additional discussion.

#### *Factor D. The Inadequacy of Existing Regulatory Mechanisms*

The Act requires that the Secretary assess available regulatory mechanisms in order to determine whether existing regulatory mechanisms may be inadequate as designed to address threats to the species being evaluated (Factor D). Under this factor, we examine whether existing regulatory



mechanisms are inadequate to address the potential threats to Leona's little blue butterfly discussed under other factors. We consider relevant Federal, State, and tribal laws and regulations when evaluating the status of a species. Regulatory mechanisms, if they exist, may preclude the need for listing if we determine that such mechanisms adequately address the threats to the species such that listing is not warranted. Only existing ordinances, regulations, and laws that have a direct connection to a stressor are applicable. Under this factor, we analyze statutes and their implementing regulations, and management direction that stems from those laws and regulations. Such laws and regulations are nondiscretionary and enforceable, and are considered a regulatory mechanism under this analysis. Examples include State government actions enforced under a State statute or constitution, or Federal action under statute. We do not consider the lack of any regulatory mechanisms addressing a specific threat that we identified under one of the other factors as a rationale to conclude that the existing regulatory mechanisms are inadequate for a species under Factor D.

The Species Report includes a discussion of regulatory mechanisms applicable to Leona's little blue butterfly. In the Species Report (Service 2015, pp. 71–72), we examine the applicable Federal, State, and other statutory and regulatory mechanisms to determine whether these mechanisms are operating as designed to provide conservation for Leona's little blue butterfly or its habitat.

*Federal Regulatory Mechanisms:* There are no Federal regulatory mechanisms in place that are specifically designed to ameliorate or reduce stressors on Leona's little blue butterfly or its habitat. However, Leona's little blue butterfly was added to the USFS Region 6 list of Sensitive Species on December 1, 2011 (USFS 2014, p. 1). With this status, Leona's little blue butterfly is required to be considered in USFS Region 6 biological evaluations when proposed projects have the potential to affect the species or its habitat. The objective of this status is to avoid project impacts that result in a loss of viability or contribute toward trends for listing under the Act (USFS and Bureau of Land Management (BLM) 2002, pp. 2, 4). According to USFS Forest Service Manual (FSM) 2670, “[t]here must be no impacts to sensitive species without an analysis of the significance of adverse effects on the populations, its habitat, and on the viability of the species as a whole. It is essential to establish population

viability objectives when making decisions that would significantly reduce sensitive species numbers.” The loss of population viability is a concern, when evidenced by either a significant current or predicted downward trend in population numbers or density; or a significant current or predicted downward trend in habitat capability that would reduce a species' existing distribution. Proposed activities that occur within the Fremont-Winema National Forest portion of Leona's little blue butterfly range will include measures to avoid or minimize project-related impacts to Leona's little blue butterfly and its habitat. This status as a sensitive species will continue regardless of Federal listing status under the Act.

*State Regulatory Mechanisms:* Oregon State agencies do not have responsibilities for the conservation of invertebrates. The Oregon State Endangered Species Act also does not include protections for invertebrates. Scientific taking permits are required only for birds, mammals, amphibians, and reptiles in the State of Oregon.

The State of Oregon through the Oregon Department of Agriculture is responsible for pesticide use and application. The Oregon Department of Agriculture helps protect endangered and threatened species in a number of ways including helping educate pesticide users on current application standards and pesticide label language designed to protect waterways, endangered fish and aquatic organisms, plants, insects, and animal species, and critical habitats and makes referrals to wildlife agencies or other agencies in the case of an incident. These standards for application and use of pesticides would benefit Leona's little blue butterfly and its habitat as they are designed to limit impacts to nontarget species and curtail drift of pesticide during application. See *Pesticides* discussion below or *Pesticides* section in the Species Report (Service 2015, pp. 48–50) for additional discussion of this stressor.

The Oregon Biodiversity Information Center (ORBIC) is the State agency responsible for tracking rare invertebrates in Oregon. The Oregon Natural Areas Program has limited authority to assist in the conservation of Oregon's invertebrate species, and via Section 6 of the Endangered Species Act they can receive funding from the U.S. Fish and Wildlife Service to help conserve listed and candidate species. This cooperation between the Oregon Natural Areas Program and the U.S. Fish and Wildlife Service provides opportunities to gather information that

can be used to help understand and conserve invertebrates in Oregon (Oregon Biodiversity Information Center 2013, p. 6). The 2013 book of Rare, Threatened, and Endangered Species of Oregon identifies and categorizes species (including Leona's little blue butterfly) into several levels of regulatory or conservation status based on various factors (e.g., Federal or State listed, NatureServe/Natural Heritage ranking, ORBIC list) (Oregon Biodiversity Information Center 2013, entire).

The ORBIC list identifies species on a scale of 1 to 4 with 1 having the most conservation concern (Oregon Biodiversity Information Center 2013, p. 4). Leona's little blue butterfly has an ORBIC list value of 1. ORBIC list 1 species are defined as those “taxa that are threatened with extinction or presumed to be extinct throughout their entire range” (Oregon Biodiversity Information Center 2013, pp. 4, 32). The NatureServe/Natural Heritage ranking is divided into five categories (identified as 1 again having the most conservation concern) on both a Statewide (S) and global (G) scale. Leona's little blue butterfly is considered an S1, G1 species with “1” defined as species that are “[c]ritically imperiled because of extreme rarity or because it is somehow especially vulnerable to extinction or extirpation, typically with 5 or fewer occurrences” (Oregon Biodiversity Information Center 2013, p. 5, 32). However, the document further explains that the compilation of information on invertebrates has been difficult due to the acknowledgement that “[l]ittle is known about the status and distribution of most invertebrate taxa found in Oregon, especially those which appear to be rare, threatened or otherwise vulnerable.” The document then further qualifies its rankings by stating that “[a]s a result state ranks may not accurately reflect the true population status for some species” (Oregon Biodiversity Information Center 2013, p. 6).

*Summary of the Inadequacy of Existing Regulatory Mechanisms:* We have assessed the available regulatory mechanisms in order to determine whether any are inadequate as designed to address threats to Leona's little blue butterfly. The only mechanism in place is the designation of Leona's little blue butterfly as sensitive species by the USFS which requires that USFS consider any impacts to the species or its habitat in their biological evaluations of potential projects. The objective of this status is to avoid project impacts that result in a loss of viability or contribute toward trends for listing



under the Act. In the only project currently proposed for the area occupied by Leona's little blue butterfly on the Fremont-Winema National Forest, the USFS has initiated a habitat improvement project for the species that will implement conservation measures specific to the butterfly. No other Federal regulatory mechanisms specifically apply to the management and/or protection of Leona's little blue butterfly or its habitat. There are no State or private regulatory mechanisms that specifically apply to the management and/or protection of Leona's little blue butterfly or its habitat. Based on the information contained within the Species Report and outlined above on the existing regulatory mechanisms for Leona's little blue butterfly, we conclude that the best available scientific and commercial information does not indicate that the existing regulatory mechanisms are inadequate as designed to address impacts to the species or its habitat.

*Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence*

For ease of discussion, the impacts to individual Leona's little blue butterfly from habitat disturbance activities are discussed under Factor A. For a complete discussion of potential impacts to both habitat and individuals from these activities, see our Factor A discussion, above.

*Competition with Other Invertebrates*

Limited information exists on potential competitive interactions between Leona's little blue butterfly and other species that occur within its range. A study conducted in 2011 identified 37 species of butterflies and 159 species of moths as potential competitors for nectar (Ross and Johnson 2012, p. 8). Competition between species is considered to be a natural condition under which Leona's little blue butterfly evolved. Competitors are relatively abundant in the Leona's little blue butterfly range (Ross and Johnson 2012, p. 24). There is no information to suggest that populations of competitors have increased. The only insect identified using spurry buckwheat as an herbivore is the stiltbug, which uses piercing mouthparts to suck nutrients from plants (Ross and Johnson 2012, pp. 17, 41).

Competition with other invertebrates may be a low-level stressor acting on Leona's little blue butterfly. The severity is low because Leona's little blue butterfly evolved with competitors, utilizes a wide variety of nectar plants, and is reasonably expected to be able to

find food resources when competitors are present. Similarly, the host plant is not known to be used as a larval host plant by other species within the range of the Leona's little blue butterfly. See *Competition with Other Invertebrates* section in the Species Report (Service 2015, pp. 45–46) for additional discussion of this stressor.

The low severity and the natural condition of the stressor indicate that, even though competition may occur range-wide, this stressor is not a considerable source of loss of individuals. As a result, the best available scientific and commercial information does not indicate that competition with other invertebrates is now, or will be in the future, a threat to Leona's little blue butterfly.

*Pesticides*

Pesticides may be acting as a low-level stressor on Leona's little blue butterfly. Pesticides are a potential stressor to Leona's little blue butterfly and its habitat, but exposure to pesticides is only likely from sources outside the range of the species; further, the forested habitat surrounding Leona's little blue butterfly habitat forms a barrier to wind and potential pesticide drift into these areas. In addition, the Oregon Department of Agriculture oversees the implementation of the Oregon State Pesticide Control Act for the proper application and use of pesticides (Legislative Counsel Committee 2014, Chapter 634). The Oregon Department of Agriculture is also responsible for ensuring that sensitive species and their environments are protected from improper pesticide use and application through education and reporting (Oregon Department of Agriculture 2015, entire). The proper application and use of pesticides according to the Oregon Department of Agriculture guidelines will limit potential exposure of pesticides to nontarget species and their habitat, including Leona's little blue butterfly. The Fremont-Winema National Forest does not use pesticides in the area occupied by Leona's little blue butterfly and the Animal and Plant Health Inspection Service (APHIS) is not expected to implement grasshopper control on rangelands in the range of the species. The Service's Klamath Marsh National Wildlife Refuge, located 3 mi (4.8 km) east of occupied Leona's little blue butterfly habitat, has used pesticides for grasshopper control (Service 2010b, p. 68). However, drift is unlikely due to the prevailing winds occurring from west to east, and Service personnel follow standard application and use restrictions for drift. See

*Pesticides* section in the Species Report (Service 2015, pp. 48–50) for additional discussion of this stressor.

As a result, the best available scientific and commercial information does not indicate that pesticide use and application is a threat to Leona's little blue butterfly or its habitat now or in the future.

*Stressors on Isolated Populations*

Leona's little blue butterfly is an endemic species known from one geographic area. Because Leona's little blue butterfly is known from only this one location, the population is confined, or isolated, by the elements that compose suitable habitat. Isolated populations of species with specific habitat requirements may be more vulnerable to effects from disease, inbreeding, and habitat loss because individuals are not replaced through immigration from other populations and are not always able to occupy new areas. Thus isolated populations may be less able to recover from widespread loss of individuals and habitat. Because Leona's little blue butterfly is known from only one population, it may be more susceptible to events related to inbreeding or stochastic events such as drought or catastrophic fire. See *Stressors on Isolated Populations* in the Species Report (Service 2015, pp. 50–55) for additional discussion of this stressor.

*Stochastic events.* Stochastic events (e.g., drought and catastrophic fire) as identified by the petitioner (Matheson *et al.* 2010, p. 17), may act as a stressor on Leona's little blue butterfly. Leona's little blue butterfly is currently known from one population. Random events in small populations may have a large impact on population dynamics and persistence for a species. If the rate of population growth varies from one generation to the next, random stochastic events in successive generations can lead to population declines even if the population is growing, on average (Holsinger 2000, pp. 55–74; Holsinger 2013, pp. 1–8).

*Drought.* Drought over a prolonged period can alter the species composition, relative abundance, and growing season of plants. Drought may result in indirect impacts to individuals using these plants if they are less abundant or have reduced vigor due to competition for resources (Ehrlich *et al.* 1980, p. 101). Drought may shorten the period of growth for plants due to diminished water availability resulting in early senescence. Early plant senescence can limit the amount of time butterfly larvae have to reach pupa diapause (the period during which

growth or development is suspended preceding development into a butterfly) (Holdren and Ehrlich 1981, p. 128; Ehrlich and Murphy 1987, p. 124). However, there is no information on drought relating directly to Leona's little blue butterfly population size or apparent geographic isolation. The available literature does contain information on drought response from other butterfly species. In two species of checkerspot butterflies (*Euphydryas editha* and *Euphydryas chalcedona*) from California, drought effects were observed in relationships with the host plant and competition for food (Ehrlich *et al.* 1980, p. 101). While the life-history traits and habitats of these two species are dissimilar from Leona's little blue butterfly, the study suggests that drought-resistant host plants and the use of a variety of food plants provide protection from the harmful effects of drought (Ehrlich *et al.* 1980, p. 105). Spurry buckwheat is a desert-restricted annual (James 2012, p. 93) that grows in dry conditions (Hickman 1993, p. 879) and is locally abundant within the range of Leona's little blue butterfly and are very likely to be adapted to drought conditions. Similarly, nectar plants used by Leona's little blue butterfly occurring in this area likely also are adapted to dry conditions.

Drought has the potential for widespread impacts to many plant species. However, Leona's little blue butterfly occupies a desert ecosystem that is composed of drought-tolerant plants. Because the plants are drought tolerant, they are expected to survive drought years and continue to provide resources for Leona's little blue butterfly. Droughts follow cyclic patterns and are not a persistent stressor for Leona's little blue butterfly habitat, and, therefore, we find that drought does not rise to the level of a threat.

**Catastrophic Fire.** The area within the range of Leona's little blue butterfly is a fire-adapted ecosystem with a mixed-severity fire regime (Dunn 2011a, pp. 1, 4). The potential for catastrophic fire events is limited by the mix of forested, recently logged, and non-forested areas contained within the range of Leona's little blue butterfly. There is no information to suggest that catastrophic fires have occurred within the range of Leona's little blue butterfly. Catastrophic fires could result in the widespread loss of forested habitats adjacent to areas occupied by Leona's little blue butterfly. However, given the mixed-severity fire regime of Leona's little blue butterfly range, catastrophic fire is not expected to occur in the near-term. If forest management practices change so that there is an increase in

forest cover or fewer open areas between forested patches, the potential for catastrophic fire could increase.

The potential rates of fire spread and intensity vary widely based on fuel loading. Open areas occupied by Leona's little blue butterfly are not as likely to be subject to catastrophic fire, and Leona's little blue butterfly are expected to persist in these areas after fire (Dunn 2011b p. 12). Therefore, based on current habitat conditions and the use of open areas less susceptible to catastrophic fire by Leona's little blue butterfly, we conclude that catastrophic fire is not a threat to the species now or into the future.

**Inbreeding.** Inbreeding is most common in small or isolated populations where immigration and emigration are not occurring regularly enough to maintain genetic variability. Inbreeding can result in changes to morphology, survival, lifespan, and sterility in invertebrates (Frankham and Ralls 1998, p. 441; Lande 1988, p. 1456). Inbreeding in small populations of butterflies has not been a sole factor associated with butterfly extinction; rather, extinction is more likely from other sources such as demographic effects from habitat loss or environmental factors. There is no available information to indicate that inbreeding is a threat to Leona's little blue butterfly, and if it is occurring, the literature suggest that demography and environmental factors are more likely to contribute to a species' extinction than inbreeding alone (Lande 1988, p. 1457). As a result, we have determined that inbreeding is not a concern and does not rise to the level of a threat.

#### Summary of Isolated Populations Stressors

Drought may be acting as a low-level stressor on Leona's little blue butterfly and its habitat, but no information is available to indicate that catastrophic fire or inbreeding are occurring or likely to occur. Recent population estimates by James *et al.* (2014, p. 272) indicate that there may be 20,000 Leona's little blue butterflies, which is larger than the original population estimates of 1,000 to 2,000 (Ross 2008, p. 4) known at the time of receipt of the petition. The difference in population estimates is a result of a more thorough search of potential habitat and more rigorous sampling methods. The severity of the stressors is low because, even though these stressors may occur across the species' range, they are not a considerable source of loss of individuals or habitat individually or in combination. As a result, the best available scientific and commercial

information does not indicate that stressors on isolated populations pose a significant impact to Leona's little blue butterfly or its habitat and do not rise to the level of a threat.

#### The Effects of Climate Change

The effects of climate change may be affecting both Leona's little blue butterfly habitat (Factor A) and individuals (Factor E) through several means. For the ease of analysis, the discussion of the effects of climate change on both individuals and habitat is discussed below.

Various changes in climate may have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as interactions of climate with other phenomena (for example, habitat fragmentation) (IPCC 2014, pp. 4–11). Global climate projections are informative, and, in some cases, the only or the best scientific information available for us to use. However, projected changes in climate and related impacts can vary substantially across and within different regions of the world (IPCC 2013b, pp. 15–16). Therefore, we use “downscaled” projections when they are available and have been developed through appropriate scientific procedures, because such projections provide higher resolution information that is more relevant to spatial scales used for analyses of a given species (see Glick *et al.* 2011, pp. 58–61, for a discussion of downscaling). With regard to our analysis for Leona's little blue butterfly, downscaled projections are available for the Klamath Basin. See *The Effects of Climate Change* in the Species Report (Service 2015, pp. 55–59) for additional discussion of this stressor.

Climate change is an ongoing stressor with projections into the future indicating trends towards warmer temperatures, highly variable precipitation alternating between drier and wetter conditions than had been previously experienced, and less precipitation as snowfall in the Klamath Basin. The entire Leona's little blue butterfly range is subject to impacts from climate change. Negative impacts to Leona's little blue butterfly habitat arise from shifts in plant growing season, diversity, distribution, and abundance (Kittel 1998, p. 79). In turn, Leona's little blue butterfly larvae and adults may have a reduced ability to complete lifecycle events relating to development and egg laying. However, it is expected that the butterfly will continue to follow external cues of

temperature and humidity for emergence from pupa such that nectar resources will be available when they emerge (Caldas 2011, p. 80). Potential increases in wildfires as a result of drier conditions may benefit Leona's little blue butterfly by maintaining open habitat areas used by the species. Because of the variable precipitation patterns associated with the effects of climate change, we cannot determine the likely effects of a potential change in precipitation patterns in either the near- or long-term future.

Because of the uncertainty of information related to the effects of climate change, we cannot conclude it is a threat to Leona's little blue butterfly or its habitat.

#### Fire Retardant

Fire retardant is a substance or chemical agent that reduces the flammability of combustibles and is typically applied by aircraft (National Wildfire Coordinating Group 2014, p. 150). Fire retardant used by the USFS is approximately 85 percent water mixed with inorganic fertilizers (ammonia polyphosphate makes up 60–90 percent of the remaining 15 percent), thickeners, suspending agents, dyes, and corrosion inhibitors (USFS 2011, pp. 15–16). Fire retardant coats and adheres to vegetation, which slows the progression of fires. Fire retardant can be applied during direct attack or indirect attack fire suppression activities. Fire retardant is not used on every fire event; its use is dependent upon the values at risk (human safety, natural resources, and commercial or private property) and the potential for rapid fire growth (USFS 2011, p. 8). Fire retardant exposure is likely to be lethal to Leona's little blue butterfly life forms that are above ground due to its inherent stickiness, which would severely restrict movement and could also result in suffocation (USFS 2011, p. 179). No data are available regarding the toxicity of fire retardant to larvae of invertebrates (USFS 2011, p. 179). Leona's little blue butterfly in the pupa stage may or may not be exposed to fire retardant dependent upon whether they are at or below ground level. Fire retardant would also potentially result in the killing of host and nectar plants if photosynthesis was inhibited; similarly, flowers coated in retardant would not be available for nectaring. Fire retardant may also act as a fertilizer, increasing plant growth of both native and nonnative species.

The USFS uses mapped buffers to avoid the aerial application of fire retardant in waterways and habitats occupied by some, but not all,

threatened and endangered species, or those proposed for listing under the Act. These mapped avoidance area buffers occur only on USFS lands. There are no mapped avoidance buffer areas within the range of Leona's little blue butterfly.

Exposure to fire retardant can result in lethal impacts to Leona's little blue butterfly and the plants it depends upon to complete its lifecycle. Aerial application of fire retardant generally has a relatively small footprint and would not result in widespread loss of Leona's little blue butterfly or its habitat. Further, fires in the area have historically been small in size and few in number, indicating that this stressor has low potential for widespread impacts to Leona's little blue butterfly or its habitat. Fire retardant may act as a low-level stressor on Leona's little blue butterfly and its habitat currently or in the future. The low severity of the stressor indicates that even though this stressor may occur range-wide, it is not a considerable source of loss of individuals or habitat. Use of fire retardant can slow or inhibit the progression of fire spread in areas occupied by Leona's little blue butterfly. As a result, the best available scientific and commercial information does not indicate that use of fire retardant is a threat to Leona's little blue butterfly or its habitat.

#### Change in Land Ownership

The Mazama Forest has recently been sold by Fidelity National Financial to the Whitefish Cascade Forest Resources of Salem, Oregon, and Singapore. The lands that have been sold overlap the range of Leona's little blue butterfly. There is uncertainty about how the area may be managed into the future; however, we have no information to suggest that the management of the area would change. We would expect the operations to manage timber are likely to continue much as they have in the past. A rotation of harvest and non-harvest would probably be followed to allow for tree growth to sizes desirable for the timber products the company produces. As a result, the best available scientific and commercial information does not indicate that the change in ownership is a threat currently or in the future to Leona's little blue butterfly or its habitat. See *Potential Change in Land Ownership* in the Species Report (Service 2015, pp. 59–60) for additional discussion of this stressor.

#### Cumulative, Synergistic, and Beneficial Effects

Stressors may combine and interact, resulting in impacts to species not accounted for when stressors are

analyzed individually. Stressors that appear minor when viewed individually may have greater impacts when analyzed cumulatively with other stressors. Furthermore, some stressors may act synergistically to cause impacts greater than the sum of the individual stressors. Beneficial effects from stressors (for example, the beneficial effect of wildfire maintaining open areas used by Leona's little blue butterfly) may outweigh the potential negative effects from that stressor or others. When conducting our analysis about the potential threats affecting Leona's little blue butterfly, we also assessed whether the species may be affected by a combination of factors. In the Species Report, we identified multiple potential stressors that may have interrelated impacts on the species or its habitat.

*Cumulative Effects:* Potential cumulative effects to Leona's little blue butterfly habitat may occur when lodgepole pine encroachment and invasive plant stressors are viewed together. The larval host plant, spurry buckwheat, grows in open areas, making openings an essential component to the survival of Leona's little blue butterfly. Lodgepole pine encroachment gradually converts open areas with forested habitats. One invasive plant, cheatgrass, is known to occur in a portion of the area occupied by Leona's little blue butterfly. This plant has the ability to rapidly colonize open areas and outcompete native plant species. The combination of lodgepole pine encroachment and invasion by cheatgrass has the potential to create unsuitable habitat conditions for Leona's little blue butterfly.

*Synergistic Effects:* When stressors occur together, one stressor may exacerbate the effects of another stressor, causing effects not accounted for when stressors are analyzed individually. Synergistic effects can be observed in a short amount of time. If stressors hinder Leona's little blue butterfly ability to lay eggs in one year, the number of adult butterflies that emerge the following year will be reduced. Stressors that act on the ability of larvae to reach the diapause stage successfully will also reduce the number of adult butterflies that emerge the following year. Stressors that could contribute to synergistic effects for Leona's little blue butterfly are insect collection, pesticides, predation, disease, competition, drought, and climate change. Even when considered together, the severity of these stressors is low or uncertain. The severity is low because even though these stressors may be acting on the population, the observed impact has been very low in

the past and under current conditions. In the long term, synergistic effects may increase if the models for climate change are correct. For example, it is conceivable that Leona's little blue butterfly will not be able to adapt its life cycle to changes in plant growing seasons if growing seasons are altered too much. However, the information available at this time is not sufficient to determine if change in growing seasons would be of such magnitude that Leona's little blue butterfly would not be able to adapt.

**Beneficial Effects:** A number of the stressors discussed above have the potential to reduce habitat for Leona's little blue butterfly. In particular, timber management activities can remove habitat when new roads or landings are constructed in suitable habitat; vegetation may also be trampled, resulting in damage to host and nectar plants. However, these activities can also create or maintain more habitat for Leona's little blue butterfly than remove or damage it. Based on past timber harvest practices in the range of Leona's little blue butterfly, the amount of forested area that is harvested does not include all of the butterfly's habitat within the area, but is selective. These newly open areas have the potential to become the next area of suitable habitat for Leona's little blue butterfly and may be much greater than the amount of habitat damaged or removed. The creation of new habitat through timber management can occur over large areas in short periods of time and be very effective at offsetting the potential loss of habitat from lodgepole pine encroachment and timber harvest. See *Stressors on Isolated Populations and Cumulative, Synergistic, and Beneficial Effects* section of the Species Report (Service 2015, pp. 50–55, pp. 61–62) for further discussion.

**Summary of Cumulative, Synergistic, and Beneficial Effects:** All or some of the potential stressors could also act in concert as a cumulative threat to Leona's little blue butterfly. Of the stressors reviewed, lodgepole pine encroachment and invasive plants can result in considerable loss of habitat and ultimately individuals of Leona's little blue butterfly. The impacts of climate change are less certain, but, if models are correct, this factor could also interfere with the ability of Leona's little blue butterfly to reproduce. However, the best available scientific and commercial information currently does not indicate that these stressors singularly or cumulatively are causing now or will cause in the future a substantial decline of the total extant population of the species or have large

impacts to Leona's little blue butterfly at the species level. Therefore, we do not consider the cumulative or synergistic impacts of these stressors to Leona's little blue butterfly to be a threat at this time, nor into the future.

#### Available Conservation Measures

The only example of conservation measures specific to Leona's little blue butterfly are included in a USFS proposal to improve habitat for the butterfly. The Fremont-Winema National Forest has initiated a habitat improvement project for Leona's little blue butterfly that will implement conservation measures specific to the butterfly. Because Leona's little blue butterflies are known to occupy the project area, project operations will occur over frozen ground or snow in winter to minimize the potential for crushing pupae. Logging slash is to be piled at least 50 feet (ft) (15 meters (m)) from occupied habitat and, to the extent possible, where timber operations just occurred to avoid piling and burning of this material in areas with a high likelihood of occupancy by Leona's little blue butterfly. Similarly, staging areas for equipment will be coordinated to minimize the potential for impacts to Leona's little blue butterfly or its habitat. The Oregon Biodiversity Information Center identifies and categorizes Leona's little blue butterfly as a level 1 species. The level 1 value indicates "taxa that are threatened with extinction or presumed to be extinct throughout their entire range" (Oregon Biodiversity Information Center 2013, pp. 4, 32). Occurring on this list does not necessitate the use of any conservation measures for actions that may impact species identified on this list, but may provide educational information or lead to voluntary conservation for or management of the species or its habitat.

#### Finding

The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future." After review of the best available scientific and commercial information pertaining to Leona's little blue butterfly and its habitat, we have determined that the ongoing stressors (identified in Table 2 above) are not of sufficient imminence, intensity, or magnitude to manifest as threats to Leona's little blue butterfly such that it would be presently in danger of extinction throughout all of

the species' range, or likely to become so in the foreseeable future. As stated in the Species Report (Service 2015, pp. 15–17), the location, distribution, and abundance of Leona's little blue butterfly populations have been shown to be greater than at the time of the petition. We have determined that the risk and severity of stressors acting on the population are minimal. For Leona's little blue butterfly, we evaluated the potential past, ongoing, and future stressors that may be acting on Leona's little blue butterfly and its habitat and defined the time periods and the foreseeable future of each stressor in the Species Report (Service 2015, pp. 19–20). The time periods identified for each stressor are based on the timeframes associated with known impacts for the stressor on which we can reasonably rely for predictions regarding the future populations, status, trends, and impacts to the species and its habitat. Some stressors may be affecting the species currently, but they have not had measureable effects on the species. In addition, available information does not support a conclusion that potential future stressors are likely to significantly affect Leona's little blue butterfly to an extent that they would have population-level impacts.

#### Significant Portion of the Range Determination

Under the Act and our implementing regulations, a species may warrant listing if it is an endangered or a threatened species throughout all or a significant portion of its range. The Act defines "endangered species" as any species which is "in danger of extinction throughout all or a significant portion of its range," and "threatened species" as any species which is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The term "species" includes "any subspecies of fish or wildlife or plants, and any distinct population segment [DPS] of any species of vertebrate fish or wildlife which interbreeds when mature." We published a final policy interpreting the phrase "significant portion of its range" (SPR) (79 FR 37578; July 1, 2014). The final policy states that (1) if a species is found to be an endangered or a threatened species throughout a significant portion of its range, the entire species is listed as an endangered or a threatened species, respectively, and the Act's protections apply to all individuals of the species wherever found; (2) a portion of the range of a species is "significant" if the species is not currently an endangered or a threatened species throughout all of

its range, but the portion's contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range; (3) the range of a species is considered to be the general geographical area within which that species can be found at the time the Service or the National Marine Fisheries Service makes any particular status determination; and (4) if a vertebrate species is an endangered or a threatened species throughout an SPR, and the population in that significant portion is a valid DPS, we will list the DPS rather than the entire taxonomic species or subspecies.

The SPR policy is applied to all status determinations, including analyses for the purposes of making listing, delisting, and reclassification determinations. The procedure for analyzing whether any portion is an SPR is similar, regardless of the type of status determination we are making. The first step in our analysis of the status of a species is to determine its status throughout all of its range. If we determine that the species is in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range, we list the species as an endangered (or threatened) species, and no SPR analysis will be required. If the species is neither an endangered nor a threatened species throughout all of its range, we determine whether the species is an endangered or a threatened species throughout a significant portion of its range. If it is, we list the species as an endangered or a threatened species, respectively; if it is not, we conclude that listing the species is not warranted.

When we conduct an SPR analysis, we first identify any portions of the species' range that warrant further consideration. The range of a species can theoretically be divided into portions in an infinite number of ways. However, there is no purpose to analyzing portions of the range that are not reasonably likely to be significant for either an endangered or a threatened species. To identify only those portions that warrant further consideration, we determine whether there is substantial information indicating that (1) the portions may be significant and (2) the species may be in danger of extinction in those portions or likely to become so within the foreseeable future. We emphasize that answering these questions in the affirmative is not a determination that the species is an

endangered or a threatened species throughout a significant portion of its range—rather, it is a step in determining whether a more detailed analysis of the issue is required. In practice, a key part of this analysis is whether the threats are geographically concentrated in some way. If the threats to the species are affecting it uniformly throughout its range, no portion is likely to warrant further consideration. Moreover, if any concentration of threats apply only to portions of the range that clearly do not meet the biologically based definition of “significant” (*i.e.*, the loss of that portion clearly would not be expected to increase the vulnerability to extinction of the entire species), those portions will not warrant further consideration.

If we identify any portions that may be both (1) significant and (2) endangered or threatened, we engage in a more detailed analysis to determine whether these standards are indeed met. The identification of an SPR does not create a presumption, prejudice, or other determination as to whether the species in that identified SPR is an endangered or a threatened species. We must go through a separate analysis to determine whether the species is an endangered or a threatened species in the SPR. To determine whether a species is an endangered or a threatened species throughout an SPR, we will use the same standards and methodology that we use to determine if a species is an endangered or a threatened species throughout its range.

Depending on the biology of the species, its range, and the threats it faces, it may be more efficient to address the “significant” question first, or the status question first. Thus, if we determine that a portion of the range is not “significant,” we do not need to determine whether the species is an endangered or a threatened species there; if we determine that the species is not an endangered or a threatened species in a portion of its range, we do not need to determine if that portion is “significant.”

We consider the “range” of Leona's little blue butterfly to include the entire population within the Sand and Scott Creek area in South Eastern Oregon. This is the only known population for the current and known historical distribution of the species.

In considering any significant portion of the range of this species, we evaluated whether the stressors facing Leona's little blue butterfly might be geographically concentrated in any one portion of its range and whether these stressors manifest as threats to Leona's

little blue butterfly such that it would be presently in danger of extinction throughout all of the species' range. We examined stressors from timber management, lodgepole pine encroachment, fire, fire retardant, fire suppression, right-of-way maintenance, cinder mining, livestock grazing, herbivory from native animals, herbicides, invasive plants, insect collection, competition with other invertebrates, predation, disease, pesticides, isolated population effects, effects of climate change, change in land ownership, and the inadequacy of existing regulatory mechanisms. We found no concentration of stressors that suggests that Leona's little blue butterfly may be in danger of extinction in a portion of its range. We also found no portion of its range where the stressors are significantly concentrated or substantially greater than in any other portion of its range (Service 2015, pp. 19–70). Therefore, we find that factors affecting Leona's little blue butterfly are essentially uniform throughout its range, indicating no portion of the range warrants further consideration of possible endangered or threatened status under the Act.

Our review of the best available scientific and commercial information indicates that Leona's little blue butterfly is not in danger of extinction (an endangered species) nor likely to become endangered within the foreseeable future (a threatened species), throughout all or a significant portion of its range. Therefore, we find that listing Leona's little blue butterfly as an endangered or threatened species under the Act is not warranted at this time.

We request that you submit any new information concerning the status of, or threats to, Leona's little blue butterfly to our Klamath Falls Fish and Wildlife Office (see **ADDRESSES**) whenever it becomes available. New information will help us monitor the species and encourage its conservation. If an emergency situation develops for the species, we will act to provide immediate protection as required under the Act.

#### References Cited

A complete list of all references cited in this finding is available on the Internet at <http://www.regulations.gov> under Docket No. FWS-R8-ES-2011-0055 or upon request from the Field Supervisor, Klamath Falls Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

**Authors**

The primary authors of this finding are staff from the Pacific Southwest Regional Office in Sacramento, California, in coordination with staff from the Klamath Falls Fish and

Wildlife Office in Klamath Falls, Oregon.

**Authority**

The authority for this action is section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: June 11, 2015.

**Stephen Guertin,**

*Acting Director, U.S. Fish and Wildlife Service.*

[FR Doc. 2015-15296 Filed 6-22-15; 8:45 am]

**BILLING CODE 4310-55-P**

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

## DEPARTMENT OF AGRICULTURE

### Food and Nutrition Service

#### Request for Information: SNAP and WIC Seeking Input Regarding Procurement and Implementation of Electronic Benefit Transfer (EBT) Services

**AGENCY:** Food and Nutrition Service (FNS), USDA.

**ACTION:** Notice; Request for Information.

**SUMMARY:** The Food and Nutrition Service (FNS) is interested in identifying ways to stimulate increased competition in the Electronic Benefit Transfer (EBT) marketplace and identify procurement or systems features that are barriers to new entrants. FNS is also seeking suggestions which will improve procurement of the delivery of EBT transaction processing services through modifications to, or replacement of, the existing business model. The procurement and implementation of EBT systems by State agencies administering the Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) needs to be sustainable for all parties involved.

The landscape of EBT is in a heightened state of change, due in part to the recent decision by one of three primary companies providing EBT transaction processing services for SNAP and WIC to no longer solicit or accept any new prepaid card business, including for SNAP and WIC EBT services. In addition, there are numerous EBT projects moving toward the October 1, 2020, statutorily-mandated deadline for WIC Program implementation.

This Request for Information (RFI) seeks to obtain input from EBT stakeholders and other financial payment industry members and interested parties, regarding options and

alternatives available to improve the procurement and current operational aspects of EBT. In this document, FNS has posed various questions to prompt stakeholder responses. We intend to consider and follow up on the alternatives and suggestions that appear to be most viable from both a technical and a cost/benefit standpoint.

Interested stakeholders are invited to respond to any or all of the questions that follow, and to identify issues which may not be listed.

**DATES:** Comments must be submitted on or before August 24, 2015.

**ADDRESSES:** Comments may be submitted through the Federal eRulemaking Portal at [www.regulations.gov](http://www.regulations.gov). Follow the online instructions for submitting comments electronically. Comments can also be mailed or delivered to: Andrea Gold, Director, Retailer Policy and Management Division, Supplemental Nutrition Assistance Program, Food and Nutrition Service, U.S. Department of Agriculture, 3101 Park Center Drive, Room 424, Alexandria, Virginia, 22302.

All comments submitted in response to this notice will be included in the record and will be made available to the public at [www.regulations.gov](http://www.regulations.gov). Please be advised that the substance of the comments and the identity of the individuals or entities commenting will be subject to public disclosure.

**FOR FURTHER INFORMATION CONTACT:** Andrea Gold, Director, Retailer Policy and Management Division, Supplemental Nutrition Assistance Program, (703) 305-2434, or via email at [andrea.gold@fns.usda.gov](mailto:andrea.gold@fns.usda.gov)

#### Background

All SNAP State agencies and some WIC State agencies conduct EBT using magnetic stripe cards similar to debit or credit cards. Almost all EBT systems today are integrated such that all of the service requirements are provided within a single system to the relevant State agencies, often referred to as a turnkey system. Over the years, some States have obtained SNAP EBT services by contracting for individual EBT service components to one or more service providers (such as authorization platform, retailer management, transaction switching, client help desk services, and card production). A few State agencies have performed certain EBT services themselves, to control

costs or meet the needs of State operations. These State-operated services may include such functions as transaction authorization, retailer training and management, EBT card distribution, and management and customer service. In the WIC Program, several of the State agencies use smart card or chip card systems, sometimes referred to as off-line systems, while others have chosen an on-line system using a magnetic stripe reader. The trend in WIC, for State agencies choosing both mag-stripe and smart card solutions, is toward contracted EBT services via a turnkey processor.

Contractors compete for State EBT business in a comparatively small marketplace. FNS has long encouraged healthy competition in this marketplace because the Agency believes it helps to control costs, ensures a level playing field for businesses who are interested in supporting EBT delivery processes, and encourages innovation. Two of the biggest concerns for FNS and State agencies with the limited competition within the EBT market, are the increased risk for sustainability of the industry over time, and the impact limited competition could have on pricing.

Up until most recently, in the SNAP EBT environment, there have been three dominant primary EBT contractors with State agency EBT contracts. In the WIC EBT environment, these same three on-line EBT SNAP contractors have also provided EBT on-line services for WIC. There are also two other off-line EBT contractors for WIC.

In January 2014, one of the primary contractors announced that the firm would no longer solicit or accept any new prepaid card business, which includes their EBT services. The firm is in the process of fulfilling its existing contracts but is not pursuing any further business in this area. As a result, only two of those three active primary EBT contractors remain in the market. There has been a new entrant to the SNAP market, a company that has been active in the WIC market; however, at this time, it is unclear whether any other firms will choose to enter this market.

State agencies have acquired EBT service through one of two major approaches: Procurements dedicated to a single State agency, and multi-state procurements. The latter approach leverages pricing through economies of

scale and standardizes requirements and contract provisions in a way that can reduce the burden on contractors of responding to separate contract solicitations by many State agencies. Typical contracts have a base period such as 5 years with several optional extension years, but there are situations where State procurement rules dictate a shorter timeframe with limited renewals. Due to the burden to develop re-procurements and manage the potential transition to a new contractor when an incumbent does not win award, it is not unusual to see a State agency choose to exercise the optional years, resulting in contract lengths of 7–10 years. It is safe to say that FNS and State agencies are interested in the best value and service for EBT projects regardless of the size of a specific State agency.

The Agricultural Act of 2014, Public Law 113–79 (the Act) has also brought important changes to the SNAP EBT landscape that impacts States and SNAP EBT contractors looking forward.

That legislation removed the requirement for States and their contractors to provide no cost point-of-sale (POS) devices to all authorized SNAP retailers who were not already using a commercial payment provider. The Act also changed manual voucher processing used when retailer sales do not warrant the cost to receive a POS device from the government and for back up during system outages and disasters.

On the WIC side, while there is no new legislation at play, most of the 90 WIC State agencies are beginning to convert to an EBT delivery model to meet the October 1, 2020, deadline mandated by the Healthy Hunger-Free Kids Act of 2010, Public Law 111–296. These State agencies are acquiring services from the on-line and off-line contractors.

In sum, EBT services have developed a pricing model that has evolved since the early projects were initiated in the 1980s. Currently, contractors will bid to provide all the services, including cards, benefit account management, purchase authorization, customer service, retailer equipage and settlement to food retailers for a single cost for each household or case served in a month. Sometimes retailer equipage, pay-phone surcharges for toll-free calls and other fees have been separated from the case-month price. This pricing model allows for fluctuations in caseload related to economic changes or other growth factors. To the degree other pricing models exist, they have not taken root within either SNAP or WIC to date. Pricing can be, and often is, set up in

tiers to reduce the case-month fee when certain caseload thresholds are reached either due to increases (or decreases) in household participation or if multiple State agencies have contracted together for economies of scale with the same requirements and contract standards.

The major functional components of on-line EBT for SNAP and WIC are outlined in Appendix A, and off-line smart card WIC EBT is described in Appendix B.

### Request for Information

This RFI seeks to obtain input from EBT stakeholders, other financial payments industry members and other interested parties regarding options and alternatives available to improve the procurement and operational aspects of EBT. FNS has posed various questions below to prompt stakeholder responses, and, before those, has also noted a few primary concerns and key objectives for this effort.

### Primary Concerns

- Less available competition and potential that smaller State agencies may not receive affordable proposals, or even any proposals, in response to State agency solicitations.
- An increase in procurement activity and system conversions by SNAP State agencies as those using the services of the departing company migrate to the remaining processors.
- Significant increase in procurement activity and system implementation by WIC State agencies leading up to the October 1, 2020, deadline for WIC State agencies to convert to an EBT delivery system.
- Management of risks associated with greater activity in a shorter period of time.

### Main Objectives

FNS is inviting stakeholder input on how the opportunities and risks associated with these changes can best be recognized and managed. There are two main objectives:

1. Increased competition for EBT services, including that which can possibly be achieved through changes or alternatives to the current business model.
2. More stability and sustainability for this market, including that which can possibly be achieved through alternative pricing models and contract terms.

### Questions

The Agency will consider all comments, and plans to follow up on alternatives and suggestions that appear to be most viable from both a technical and a cost/benefit standpoint.

Responses will help inform any future actions or guidance issued by the Agency, including guidance to States on issuing EBT Requests for Proposals (RFPs).

Interested stakeholders are invited to respond to any or all of the following questions, and to identify other issues which may not be listed. Responses which clearly reference the pertinent question below would facilitate FNS' review of the stakeholder feedback.

### Procurement

1. Do State agency procurements provide sufficient information about the operational characteristics of their EBT projects for new entrants to the EBT market? If not, are there alternatives for potential vendors to obtain the information needed?

2. How do State Agency requirements, (such as call center response standards, transaction processing requirements, card issuance timeframes and adjustment policies), compare to commercial practices? Would adjusting some of these requirements to closely resemble the commercial world increase the interest of potential new vendors, or impact contract costs or willingness of current vendors to bid? If so, what requirements or practices should be considered?

3. Are the amounts for liquated damages and penalty clauses currently required by State agencies reasonable? If not, what would be more reasonable amounts or ways for State agencies to safeguard against such problems as project delays, unscheduled system downtime, and below-standard processing times, etc.?

4. Can more economies of scale be realized without increasing complexity through any of the following:

a. Multi-state shared services for commercial call center services, card production and delivery, training and other services?

b. The inclusion of more agencies/ programs?

5. Are there requirements for vendor experience that are necessary to establish minimum qualifications to bid to provide EBT services? Are there requirements you have seen that should not be used because you believe that they unnecessarily limit competition?

6. Would any vendors be interested in providing select service components (*i.e.* call centers, transaction processing, training, etc.) if there were an option to offer proposals for one or some rather than all of the service components? What pricing model(s) would work best for separate services when not bundled into the cost per case month pricing (CPCM)?



7. What alternative procurement models might State Agencies consider to ensure they receive viable competitive bids?

8. Should State agencies pursue coalition procurements with the benefits they bring, such as economies of scale, or does it tend to limit competition or discourage new entrants into the marketplace?

### Pricing

9. Does the impact of the EBT vendor assuming development and implementation costs before they begin processing transactions pose a major barrier to entering the market?

10. Are there ways to separate EBT system development/startup costs from operational costs to reduce risk for new entrants when bidding on a project? If so, what are they?<sup>1</sup>

11. Are there other changes to the CPCM pricing model that would encourage potential vendors to enter the EBT market?

12. The tiered pricing model involves tiers within the CPCM pricing model, adjusted at smaller or larger intervals for different caseload levels. How can State consortia which want to procure together better realize economies of scale given their varying caseload sizes, and still benefit from a blended CPCM price based on their collective caseload volumes?

13. Are there pricing models other than the CPCM model that would be advantageous in reducing pricing risk to the vendor and still maintain sustainable prices for the State agencies? How can the disadvantages to State agencies in forecasting expenses be overcome, if costs are no longer tied to caseload levels?

### Managing Risk

Several stakeholders have advised FNS that too many procurements occurring in close succession may increase the risk that smaller State Agencies may receive fewer or even no bids, as vendors will devote scarce resources to preparing proposals for the most potentially profitable customers. Similarly, if too many implementations or conversions are scheduled in close succession, it may mean that vendors will not have sufficient technical resources to assign their top team to each one. Both of these situations represent risks which FNS would like to

<sup>1</sup> SNAP procurements involve acquiring an operational process with costs for start-up activities included in the monthly operational cost-per-case-month. WIC procurements are conversions from paper to electronic delivery with deliverables and milestones for start-up that may be priced separately.

help State Agencies manage and mitigate.

14. Besides sharing known and estimated RFP release dates and conversion dates, what can FNS do to help State Agencies manage these risks and ensure smooth transitions?

### Other Questions

15. Are there other areas or issues that we have not specifically asked for a response on which you would like to offer comment related to the two main objectives of this RFI?

Dated: June 10, 2015.

**Jeffrey J. Tribiano,**

*Acting Administrator, Food and Nutrition Service.*

Attached: Appendix A: EBT Functions for Online SNAP and WIC EBT

Appendix B: EBT Functions for Offline WIC EBT Cards (Smart Cards)

Appendix C: Web sites to RFP and other EBT information:

### Appendix A

#### EBT Functions for On-line SNAP and WIC EBT

(1) Account setup and benefit authorization—support for on-line accounts for SNAP or WIC households authorized to receive benefits;

(2) Card issuance and participant training—provide cards, equipment (PIN pads, card readers and training materials);

(3) Participant account maintenance—receive daily and monthly benefit updates from State agency systems, aging benefits and reporting;

(4) Transaction processing—approval or denial of food purchases made at authorized SNAP and WIC retailers/vendors; WIC processing includes, but is not limited to, matching of food item UPC, price and quantity;

(5) Customer service—24x7 toll-free call support with help desk customer service representatives and Interactive Voice Response and web portal services inquiries related to purchase activities and balances from cardholders, merchants and State agency staff;

(6) Retailer participation—support commercial third party switching services and installation and maintenance of payment terminals in smaller retail locations. Manual backup vouchers for authorizations during system interruptions or for low volume SNAP merchants;

(7) EBT settlement—daily payment to authorized retailers for approved purchases; reconciliation via reports and data file exchanges, WIC also includes food item detail;

(8) EBT reporting—administrative and batch data exchange for reporting card account activities by card number and retail location; daily financial settlement reporting and reconciliation; and,

(9) Disaster Benefit Services (SNAP only)—providing card and benefit services for natural disasters.

### Appendix B

#### EBT Functions for Offline WIC EBT (Smart Cards)

WIC off-line EBT processing relies on State agencies to load a smart card chip with WIC food balances that can be read in grocery store lanes. Card and Personal Identification Number (PIN) support is provided by the State agency using the clinic system that tracks and determines participant benefits. Purchases are authorized off-line in the grocery lane (without an on-line authorization) and a daily claim file is sent to the WIC EBT host for processing payment to the WIC vendors. A hot card file, reconciliation file and authorized product list (APL) (containing the list of approved Universal Product Codes (UPC) and price look-up (PLU) codes called the APL file) are provided to the WIC grocer via the EBT host (an FTP server).

(1) EBT host processing—processing of daily WIC claim files containing WIC transaction purchases, editing for Not-to-Exceed price limits, and pick-up of hot card, APL and reconciliation files to authorized WIC retail vendors.

(2) Retail vendor equipage & integrated support (State agency option)

(3) Customer Service (State agency option)—toll-free call center support including customer service representatives, Interactive Voice Response (IVR) and/or web portal services for cardholder and retailer and State agency staff inquiries.

(4) EBT Reporting—administrative and batch data to support all processing and authorization activities.

(5) Settlement and Reconciliation—similar to SNAP settlement but also includes food product information.

### Appendix C

#### Web sites to RFP and other EBT information

SNAP EBT Status—<http://www.fns.usda.gov/ebt/general-electronic-benefit-transfer-ebt-information>

WIC EBT Status—<http://www.fns.usda.gov/wic/wic-ebt-activities>

WIC Technology Partners (Provides links to new and updated solicitations)—<http://www.wictechnologypartners.com/solicitations/RFP-B2Z12017/index.php>

[FR Doc. 2015-15336 Filed 6-22-15; 8:45 am]

BILLING CODE 3410-30-P

## DEPARTMENT OF AGRICULTURE

### Forest Service

#### Tongass National Forest; Alaska; Forest Plan Amendment

**AGENCY:** Forest Service, USDA.

**ACTION:** Notice of Intent to prepare an environmental impact statement; correction.

**SUMMARY:** A Notice of Intent (NOI) to prepare an Environmental Impact Statement to amend the 2008 Tongass National Forest Land and Resource

Management Plan (Forest Plan) was published in the **Federal Register** (79 FR 30074) on May 27, 2014. The Tongass National Forest is publishing this corrected NOI due to changes in the anticipated dates for the draft environmental impact statement (DEIS) and Record of Decision (ROD, to designate a new responsible official for the plan amendment, and to clarify the pre-decisional administrative review process. The 2012 Planning Rule (36 CFR part 219) includes subpart B, which establishes a pre-decisional administrative review (hereinafter referred to as “objection”) process for plan amendments giving an individual or entity an opportunity for an independent Forest Service review and resolution of issues before the approval of a plan amendment documented with a ROD (reference 36 CFR part 219, subpart B). This Forest Plan Amendment is subject to the objection process.

**FOR FURTHER INFORMATION CONTACT:**

Susan Howle, Project Manager, Tongass National Forest, Ketchikan, AK 99901, (907) 228-6340.

**Corrections**

In the **Federal Register** (79 FR 30074) of May 27, 2014 on page 30074, in the third column under the “Dates” caption, correct the second and fourth sentences to read:

The draft environmental impact statement is expected to be published in October 2015, which will begin a 90-day public comment period.

The Record of Decision is expected to be signed in October 2016.

In the **Federal Register** (79 FR 30074) of May 27, 2014 on page 30075, in the third column under “Scoping Process” caption, correct by adding the following as a third paragraph:

Forest Service regulations at 36 CFR 219, subpart B; published April 9, 2012 (77 FR 21162) include an objection process that applies to plan amendments. This proposed plan amendment is subject to 36 CFR 219, subpart B. There will be an objection process before the final decision is made, and after the final environmental impact statement and draft Record of Decision are made available to the public. Individuals and entities as defined in 36 CFR 219.53 who have submitted substantive formal comments related to the plan amendment during the opportunities for public comment as provided in subpart A (reference 36 CFR 219.16) may file an objection. Objections will be accepted only from those who have previously submitted substantive formal comments related to the plan amendment during scoping, the 90-day DEIS comment period, or other public involvement opportunity where comments are requested

by the responsible official in accordance with 36 CFR 219.16.

In the **Federal Register** (79 FR 30074) of May 27, 2014 on page 30075, in the third column at bottom, correct the name and title “Forrest Cole, Tongass Forest Supervisor” to read:

M. Earl Stewart, Tongass Forest Supervisor

Dated: June 16, 2015.

**M. Earl Stewart,**

*Forest Supervisor, Tongass National Forest.*

[FR Doc. 2015-15362 Filed 6-22-15; 8:45 am]

**BILLING CODE 3410-11-P**

**DEPARTMENT OF COMMERCE**

**Foreign-Trade Zones Board**

**[B-10-2015]**

**Foreign-Trade Zone 245—Decatur, Illinois; Authorization of Production Activity; Thyssenkrupp Presta Danville, LLC (Camshafts); Danville, Illinois**

On February 18, 2015, the Economic Development Corporation of Decatur & Macon County, grantee of FTZ 245, submitted a notification of proposed production activity to the Foreign-Trade Zones (FTZ) Board on behalf of Thyssenkrupp Presta Danville, LLC, within Subzone 245C, in Danville, Illinois.

The notification was processed in accordance with the regulations of the FTZ Board (15 CFR part 400), including notice in the **Federal Register** inviting public comment (80 FR 9693, 2-24-2015). The FTZ Board has determined that no further review of the activity is warranted at this time. The production activity described in the notification is authorized, subject to the FTZ Act and the Board’s regulations, including Section 400.14.

Dated: June 18, 2015.

**Elizabeth Whiteman,**

*Acting Executive Secretary.*

[FR Doc. 2015-15475 Filed 6-22-15; 8:45 am]

**BILLING CODE 3510-DS-P**

**DEPARTMENT OF COMMERCE**

**International Trade Administration**

**[A-570-893]**

**Certain Frozen Warmwater Shrimp From the People’s Republic of China: Rescission 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 rescinding the administrative review of the antidumping duty order on certain frozen warmwater shrimp (“shrimp”) from the People’s Republic of China (“PRC”) for the period February 1, 2014 through January 31, 2015.

**DATES:** *Effective Date:* June 23, 2015.

**FOR FURTHER INFORMATION CONTACT:**

Annatheia Cook, AD/CVD Operations, Office V, Enforcement and Compliance, International Trade Administration, Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482-7425.

**SUPPLEMENTARY INFORMATION:**

**Background**

On April 3, 2015, based on a timely request for review on behalf of the Ad Hoc Shrimp Trade Action Committee (“Petitioner”) <sup>1</sup> and the American Shrimp Processors Association (“Domestic Processors”), <sup>2</sup> the Department published in the **Federal Register** a notice of initiation of an administrative review of the antidumping duty order on shrimp from the PRC covering the period February 1, 2014, through January 31, 2015. <sup>3</sup> The review covers sixty two companies. <sup>4</sup> On April 16, 2015, and May 1, 2015, respectively, Petitioner and Domestic Processors withdrew their requests for an administrative review on all of the sixty two companies listed in the *Initiation Notice*. <sup>5</sup> No other party requested a review of these companies or any other exporters of subject merchandise.

<sup>1</sup> See Letter to the Secretary of Commerce from the Ad Hoc Shrimp Trade Action Committee (“AHSTAC”) “Certain Frozen Warmwater Shrimp from the People’s Republic of China: Request for Administrative Reviews” (February 27, 2015).

<sup>2</sup> See Letter to the Secretary of Commerce from the American Shrimp Processors Association (“ASPA”) “Administrative Review of the Antidumping Duty Order Covering Frozen Warmwater Shrimp From the People’s Republic of China (POR 10:2/1/14-1/31/15): American Shrimp Processors Association’s Request for an Administrative Review” (February 27, 2015).

<sup>3</sup> See *Initiation of Antidumping and Countervailing Duty Administrative Reviews*, 80 FR 18202, 18208 (April 3rd, 2015) (“*Initiation Notice*”).

<sup>4</sup> See *id.*

<sup>5</sup> See Letter to the Secretary of Commerce from Petitioner “Certain Frozen Warmwater Shrimp from the People’s Republic of China: Domestic Producers’ Withdrawal of Review Requests” (April 16, 2015); Letter to the Secretary of Commerce from Domestic Processors “Administrative Review of Antidumping Duty Order Covering Certain Frozen Warmwater Shrimp From the People’s Republic of China: Withdrawal of Review Request on Behalf of the American Shrimp Processors Association” (May 1, 2015).

### Rescission of Review

Pursuant to 19 CFR 351.213(d)(1), the Department will rescind an administrative review, in whole or in part, if the party that requested the review withdraws its request within 90 days of the publication of the notice of initiation of the requested review. In this case, Petitioner and Domestic Processors timely withdrew their request by the 90-day deadline, and no other party requested an administrative review of the antidumping duty order. As a result, pursuant to 19 CFR 351.213(d)(1), we are rescinding the administrative review of shrimp from the PRC for the period February 1, 2014, through January 31, 2015, in its entirety.

### Assessment

The Department will instruct U.S. Customs and Border Protection (“CBP”) to assess antidumping duties on all appropriate entries. Because the Department is rescinding this administrative review in its entirety, the entries to which this administrative review pertained shall be assessed antidumping duties at rates equal to the cash deposit of estimated antidumping duties required at the time of entry, or withdrawal from warehouse, for consumption, in accordance with 19 CFR 351.212(c)(1)(i). The Department intends to issue appropriate assessment instructions to CBP 15 days after the publication of this notice in the **Federal Register**, if appropriate.

### Notifications

This notice serves as a final 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 Department’s presumption that reimbursement of the antidumping duties occurred and the subsequent assessment of doubled antidumping duties.

This notice also serves as a final reminder to parties subject to administrative protective order (“APO”) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3), which continues to govern business proprietary information in this segment of the proceeding. Timely written notification of the return or destruction of APO materials, or conversion to judicial protective order, is hereby requested. Failure to comply with the

regulations and terms of an APO is a violation which is subject to sanction.

This notice is issued and published in accordance with sections 751(a)(1) and 777(i)(1) of the Tariff Act of 1930, as amended, and 19 CFR 351.213(d)(4).

Dated: June 17, 2015.

**Christian Marsh,**

*Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.*

[FR Doc. 2015–15468 Filed 6–22–15; 8:45 am]

**BILLING CODE 3510–DS–P**

## DEPARTMENT OF COMMERCE

### International Trade Administration

[A–475–818]

#### **Certain Pasta from Italy: Notice of Preliminary Results of Antidumping Duty Changed Circumstances Review**

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

**SUMMARY:** On August 12, 2014, the Department of Commerce (the Department) initiated a changed circumstances review of the antidumping duty order on certain pasta from Italy in order to determine whether La Molisana S.p.A. (La Molisana) is the successor-in-interest to La Molisana Industrie Alimentari, S.p.A. (LMI), a respondent in the investigation and several administrative reviews.<sup>1</sup> We preliminarily determine that La Molisana is not the successor-in-interest to LMI. We invite interested parties to comment on these preliminary results.

**DATES:** Effective date June 23, 2015.

**FOR FURTHER INFORMATION CONTACT:** Stephanie Moore, Office III, AD/CVD Operations, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–3962.

**SUPPLEMENTARY INFORMATION:**

#### **Background**

On July 24, 1996, the Department published in the **Federal Register** the antidumping duty order on pasta from Italy.<sup>2</sup> The most recently completed administrative review for LMI was for the July 1, 1998 to June 30, 1999

<sup>1</sup> See *Certain Pasta from Italy: Initiation of Changed Circumstances Review*, 79 FR 47090 (August 12, 2014) (*Initiation Notice*).

<sup>2</sup> See *Notice of Antidumping Duty Order and Amended Final Determination of Sales at Less Than Fair Value: Certain Pasta From Italy*, 61 FR 38547 (July 24, 1996); see also *Notice of Second Amendment to the Final Determination and Antidumping Duty Order: Certain Pasta From Italy*, 61 FR 42231 (August 14, 1996).

period.<sup>3</sup> Pursuant to Section 129 of the Uruguay Round Agreements Act, the Department recalculated the cash deposit rate for LMI and assigned it a *de minimis* margin.<sup>4</sup>

On June 23, 2014, La Molisana requested a changed circumstances review. On August 12, 2014, the Department initiated this review.<sup>5</sup> On October 20, 2014, New World Pasta Company and Dakota Growers Pasta Company (hereinafter referred to as Petitioners) submitted comments on La Molisana’s request for a changed circumstance review. On December 3, 2014, the Department requested additional information from La Molisana, which was submitted, in part, on January 9, 2015, and after an extension was granted, the remainder was submitted on January 28, 2015 (hereinafter referred to as the Supplemental Response).

On February 6, 2015, Petitioners submitted comments on La Molisana’s Supplemental Response. On February 11, 2015, La Molisana objected to Petitioners’ February 6, 2015, submission and requested that the Department reject it because it contained untimely filed, uncertified, new factual information. On February 20, 2015, the Department decided not to reject Petitioners’ February 6, 2015 submission.<sup>6</sup> La Molisana filed comments on February 27, 2015, regarding the Department’s decision. On March 4, 2015, the Department requested additional information from La Molisana, which was provided on March 24, 2015 (hereinafter referred to as Second Supplemental Response).

On April 27, 2015, we extended the time period for issuing the final results of this changed circumstance review by 90 days.<sup>7</sup>

#### **Scope of the Order**

Imports covered by this order are shipments of certain non-egg dry pasta

<sup>3</sup> See *Certain Pasta From Italy: Final Results of Antidumping Duty Administrative Review*, 65 FR 77852 (December 13, 2000).

<sup>4</sup> See *Notice of Implementation of Determination Under Section 129 of the Uruguay Round Agreements Act: Stainless Steel Plate in Coils From Belgium, Steel Concrete Reinforcing Bars From Latvia, Purified Carboxymethylcellulose From Finland, Certain Pasta From Italy, Purified Carboxymethylcellulose From the Netherlands, Stainless Steel Wire Rod From Spain, Granular Polytetrafluoroethylene Resin From Italy, Stainless Steel Sheet and Strip in Coils From Japan*, 77 FR 36257 (June 18, 2012) (*Notice of Section 129 Implementation*).

<sup>5</sup> See *Initiation Notice*.

<sup>6</sup> See letter from Eric B. Greynolds, Program Manager, Office III, AD/CVD Operations, dated February 20, 2015.

<sup>7</sup> See Letter from Melissa G. Skinner, Director Office III, Antidumping and Countervailing Duty Operations to La Molisana, dated April 7, 2015.

in packages of five pounds four ounces or less, whether or not enriched or fortified or containing milk or other optional ingredients such as chopped vegetables, vegetable purees, milk, gluten, diastasis, vitamins, coloring and flavorings, and up to two percent egg white. The pasta covered by this scope is typically sold in the retail market, in fiberboard or cardboard cartons, or polyethylene or polypropylene bags of varying dimensions.

For a full description of the scope, see the Preliminary Results of Changed Circumstances Review Regarding Successor-In-Interest Analysis: Certain Pasta from Italy memorandum dated concurrently with and hereby adopted by this notice.<sup>8</sup> The Preliminary Results of Changed Circumstances Review memorandum is a business proprietary document of which the public version 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 it is available to all parties in the Central Records Unit, room 7046, of the main Department of Commerce building. In addition, a complete version of the Preliminary Results of Changed Circumstances Review memorandum can be accessed directly on the internet at <http://enforcement.trade.gov/frn/>. The signed Preliminary Results of Changed Circumstances Review memorandum and the electronic version of the Preliminary Results of Changed Circumstances Review memorandum are identical in content.

### Preliminary Results of Changed Circumstances Review

In this changed circumstances review, pursuant to section 751(b) of the Tariff Act of 1930, as amended (the Act), the Department conducted a successor-in-interest analysis. In making such a successor-in-interest determination, the Department examines several factors including, but not limited to, changes in: (1) Management; (2) production facilities; (3) supplier relationships; and (4) customer base.<sup>9</sup> While no one or

<sup>8</sup> See Memorandum to Paul Piquado, Assistant Secretary for Enforcement and Compliance from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, titled "Preliminary Results of Changed Circumstances Review Regarding Successor-In-Interest Analysis: Certain Pasta from Italy" dated concurrently with this notice (Preliminary Results of Changed Circumstances Review memorandum).

<sup>9</sup> See, e.g., *Pressure Sensitive Plastic Tape from Italy: Preliminary Results of Antidumping Duty Changed Circumstances Review*, 75 FR 8925 (February 26, 2010), unchanged in *Pressure Sensitive Plastic Tape From Italy: Final Results of*

combination of these factors will necessarily provide a dispositive indication, the Department will generally consider the new company to be the successor to the previous company if its resulting operation is not materially dissimilar to that of its predecessor.<sup>10</sup> Thus, if the evidence demonstrates that, with respect to the production and sale of the subject merchandise, the new company operates as the same business entity as the former company, the Department will assign the new company the cash deposit rate of its predecessor.<sup>11</sup>

Based on the totality of the record evidence and on comments from interested parties, we preliminarily determine that La Molisana is materially dissimilar to LMI in terms of management, production facilities, and supplier relationships. Therefore, we preliminarily find that La Molisana is not the successor-in-interest to LMI.<sup>12</sup>

Consequently, we preliminarily determine that La Molisana should not be given the same antidumping duty treatment as LMI. This determination will apply to all entries of the subject merchandise entered or withdrawn from warehouse, for consumption on or after the date of publication of the final results of this changed circumstances review.<sup>13</sup> If we reach the same conclusion in the final results, then the cash deposit for La Molisana will continue to be 15.45 percent, the all-others rate established in the antidumping duty investigation, as modified by the section 129 determination.<sup>14</sup> This cash deposit requirement will remain in effect until

*Antidumping Duty Changed Circumstances Review*, 75 FR 27706 (May 18, 2010); and *Brake Rotors From the People's Republic of China: Final Results of Changed Circumstances Antidumping Duty Administrative Review*, 70 FR 69941 (November 18, 2005) (*Brake Rotors*), citing *Brass Sheet and Strip from Canada: Final Results of Antidumping Duty Administrative Review*, 57 FR 20460 (May 13, 1992), and *Certain Pasta From Italy: Notice of Final Results of Antidumping Duty Changed Circumstances Review*, 79 FR 56339 (September 19, 2014) (*Delverde*).

<sup>10</sup> See, e.g., *Brake Rotors*. See also *Delverde*.

<sup>11</sup> *Id.*; see also, e.g., *Notice of Initiation and Preliminary Results of Antidumping Duty Changed Circumstances Review: Certain Frozen Warmwater Shrimp From India*, 77 FR 64953 (October 24, 2012), unchanged in *Final Results of Antidumping Duty Changed Circumstances Review: Certain Frozen Warmwater Shrimp From India*, 77 FR 73619 (December 11, 2012).

<sup>12</sup> See Preliminary Results in Changed Circumstances Review memorandum.

<sup>13</sup> See *Granular Polytetrafluoroethylene Resin from Italy: Final Results of Changed Circumstances Review*, 68 FR 25327 (May 12, 2003). See also *Delverde*.

<sup>14</sup> See *Notice of Implementation of Section 129*.

a company-specific rate is calculated for La Molisana.<sup>15</sup>

### Public Comment

Pursuant to 19 CFR 351.309(c), interested parties may submit cases briefs not later than 10 days after the date of publication of this notice via ACCESS. ACCESS is available to registered users at <http://access.trade.gov> and is available to all parties in the Central Records Unit, room 7046, of the main Department of Commerce building. 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, 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 ACCESS, no later than 5:00 p.m. Eastern Time within 10 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 case briefs.

Consistent with 19 CFR 351.216(e), we will issue the final results of this changed circumstances review no later than 270 days after the date on which this review was initiated, or within 45 days after the publication of the preliminary results if all parties in this review agree to our preliminary results.

We are issuing and publishing this determination and notice in accordance with sections 751(b) and 777(i)(1) of the Act and 19 CFR 351.216 and 351.221.

Dated: June 10, 2015.

**Paul Piquado,**

*Assistant Secretary for Enforcement and Compliance.*

### Appendix

#### List of Topics Discussed in the Preliminary Changed Circumstances Review Decision Memorandum

##### I. Summary

<sup>15</sup> La Molisana is currently being reviewed in an administrative review covering the period July 1, 2013 through June 30, 2014. See *Initiation of Antidumping and Countervailing Duty Administrative Reviews*, 79 FR 51548 (August 29, 2014).

- II. Background
- III. Scope of the Order
- IV. Discussion of Methodology
- V. Analysis
  1. Management
  2. Production Facilities
  3. Supplier Relationship
  4. Customer Base

[FR Doc. 2015-15471 Filed 6-22-15; 8:45 am]

BILLING CODE 3510-DS-P

## COMMODITY FUTURES TRADING COMMISSION

### Agency Information Collection Activities Under OMB Review

**AGENCY:** Commodity Futures Trading Commission.

**ACTION:** Notice.

**SUMMARY:** In compliance with the Paperwork Reduction Act of 1995 (“PRA”), this notice announces that the Information Collection Request (“ICR”) abstracted below has been forwarded to the Office of Management and Budget (“OMB”) for review and comment. The ICR describes the nature of the information collection and its expected costs and burden.

**DATES:** Comments must be submitted on or before July 23, 2015.

**ADDRESSES:** Comments regarding the burden estimated or any other aspect of the information collection, including suggestions for reducing the burden, may be submitted directly to the Office of Information and Regulatory Affairs in OMB, within 30 days of the notice’s publication, by email at [OIRASubmissions@omb.eop.gov](mailto:OIRASubmissions@omb.eop.gov). Please identify the comments by OMB Control No. 3038-0013. Please provide the Commodity Futures Trading Commission (“Commission”) with a copy of all submitted comments at the address listed below. Please refer to OMB Reference No. 3038-0013, found on <http://reginfo.gov>. Comments may also be mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for the Commodity Futures Trading Commission, 725 17th Street NW., Washington, DC 20503, and Hannah Ropp, Surveillance Analyst, Division of Market Oversight, Commodity Futures Trading Commission, 1155 21st Street NW., Washington, DC 20581.

Comments may also be submitted by any of the following methods:

- The Agency’s Web site, via its Comments Online process: <http://comments.cftc.gov>. Follow the instructions for submitting comments through the Web site.

- Mail: Christopher Kirkpatrick, Secretary of the Commission, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.

- Hand Delivery/Courier: Same as Mail above.
- Federal eRulemaking Portal: <http://www.regulations.gov/>. Follow the instructions for submitting comments through the Portal.

A copy of the supporting statements for the collection of information discussed above may be obtained by visiting [RegInfo.gov](http://RegInfo.gov). 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>.

**FOR FURTHER INFORMATION CONTACT:**

Hannah Ropp, Surveillance Analyst, Division of Market Oversight; Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581; phone: (202) 418-5228; fax: (202) 418-5507; email: [hropp@cftc.gov](mailto:hropp@cftc.gov), and refer to OMB Control No. 3038-0013.

**SUPPLEMENTARY INFORMATION:**

*Title:* “Exemptions from Speculative Limits (OMB Control No. 3038-0013).” This is a request for extension of a currently approved information collection.

*Abstract:* Section 4a(a) of the Commodity Exchange Act (“Act”) allows the Commission to set speculative limits in any commodity for future delivery in order to prevent excessive speculation. Certain sections of the Act and the Commission’s Regulations allow exemptions from the speculative limits for persons using the market for hedging and, under certain circumstances, for commodity pool operators and similar traders. This information collection contains the recordkeeping and reporting requirements needed to ensure regulatory compliance with Commission rules relating to this issue.

*Burden Statement:* The respondent burden for this collection is estimated to be 3 hours per response. These estimates include the time to locate the information related to the exemptions and to file necessary exemption paperwork.

*Respondents/Affected Entities:* Swap Dealers, Large Traders, and other entities affected by Rules 1.47 and 1.48 and Part 150 of the Commission’s regulations.

*Estimated number of respondents:* 9.

*Estimated total annual burden on respondents:* 48 hours.

*Frequency of collection:* 1-2 reports annually.

There are no capital costs or operating and maintenance costs associated with this collection.

**Authority:** 44 U.S.C. 3501 *et seq.*

Dated: June 17, 2015.

**Robert N. Sidman,**

*Deputy Secretary of the Commission.*

[FR Doc. 2015-15344 Filed 6-22-15; 8:45 am]

BILLING CODE 6351-01-P

## CONSUMER PRODUCT SAFETY COMMISSION

[Docket No. CPSC- 2014-0033]

### Notice of Availability: Estimated Phthalate Exposure and Risk to Pregnant Women and Women of Reproductive Age as Assessed Using Four NHANES Biomonitoring Data Sets (2005/2006, 2007/2008, 2009/2010, 2011/2012)

**AGENCY:** U.S. Consumer Product Safety Commission.

**ACTION:** Notice of availability.

**SUMMARY:** The Consumer Product Safety Commission (“Commission,” or “CPSC”) is announcing the availability of a document titled, “Estimated Phthalate Exposure and Risk to Pregnant Women and Women of Reproductive Age as Assessed Using Four NHANES Biomonitoring Data Sets (2005/2006, 2007/2008, 2009/2010, 2011/2012).”

**DATES:** Submit comments by August 7, 2015.

**ADDRESSES:** You may submit comments, identified by Docket No. CPSC- 2014-0033, by any of the following methods:

*Electronic Submissions:* Submit electronic comments to the Federal eRulemaking Portal at: <http://www.regulations.gov>. Follow the instructions for submitting comments. The Commission does not accept comments submitted by electronic mail (email), except through [www.regulations.gov](http://www.regulations.gov). The Commission encourages you to submit electronic comments by using the Federal eRulemaking Portal, as described above.

*Written Submissions:* Submit written submissions by mail/hand delivery/courier to: Office of the Secretary, Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814; telephone (301) 504-7923.

*Instructions:* All submissions received must include the agency name and docket number for this notice. All comments received may be posted without change, including any personal identifiers, contact information, or other personal information provided, to:

<http://www.regulations.gov>. Do not submit confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public. If furnished at all, such information should be submitted in writing.

*Docket:* For access to the docket to read background documents or comments received, go to: <http://www.regulations.gov>, and insert the docket number CPSC-2014-0033, into the "Search" box, and follow the prompts.

**FOR FURTHER INFORMATION CONTACT:** Kent R. Carlson, Ph.D., Toxicologist, Division of Toxicology & Risk Assessment, Directorate for Health Sciences, U.S. Consumer Product Safety Commission, 5 Research Place, Rockville, MD 20850-3213; email: [kcarlson@cpsc.gov](mailto:kcarlson@cpsc.gov).

**SUPPLEMENTARY INFORMATION:** On December 30, 2014, the Commission issued a notice of proposed rulemaking ("NPR") that would prohibit children's toys and child care articles containing specified phthalates. 79 FR 78324 (December 30, 2014). As provided in section 108 of the Consumer Product Safety Improvement Act of 2008 ("CPSIA"), the NPR was based on a report to the Commission ("CHAP Report") from a Chronic Hazard Advisory Panel ("CHAP") that the CPSIA directed the Commission to convene. The CHAP report is available at <http://www.cpsc.gov/PageFiles/169902/CHAP-REPORT-With-Appendices.pdf>.

As stated in the NPR, the CHAP used several data sources for human biomonitoring analysis, including data from the National Human Health and Nutrition Survey ("NHANES"). See 79 FR at 78327. Specifically, the CHAP used biomonitoring data from the 2005/2006 NHANES data set, which was the most recent data available at the time of the CHAP's analysis.

CPSC staff has reviewed subsequent NHANES data sets that were released after the CHAP's analysis. Staff also reviewed the 2005/2006 data set to replicate the CHAP's methodology. CPSC staff has prepared a document titled, "Estimated Phthalate Exposure and Risk to Pregnant Women and Women of Reproductive Age as Assessed Using Four NHANES Biomonitoring Data Sets (2005/2006, 2007/2008, 2009/2010, 2011/2012)" reflecting the staff's analysis. The document is available on the Commission's Web site at: <http://www.cpsc.gov/Global/Regulations-Laws-and-Standards/CPSIA/CHAP/NHANES-Biomonitoring-analysis-for->

*Commission.pdf* and from the Commission's Office of the Secretary at the location listed in the **ADDRESSES** section of this notice.

The Commission invites comment on the document, "Phthalate Exposure and Risk to Pregnant Women and Women of Reproductive Age as Assessed Using Four NHANES Biomonitoring Data Sets (2005/2006, 2007/2008, 2009/2010, 2011/2012)." Comments should be submitted by August 7, 2015. Information on how to submit comments can be found in the **ADDRESSES** section of this notice.

Dated: June 18, 2015.

**Todd A. Stevenson,**  
Secretary, Consumer Product Safety Commission.

[FR Doc. 2015-15366 Filed 6-22-15; 8:45 am]

**BILLING CODE 6355-01-P**

## DEPARTMENT OF DEFENSE

### Department of the Army

#### Notice of Availability of Real Property for Public Health Purposes, Including Research, at the Former Walter Reed Army Medical Center

**AGENCY:** Department of the Army, DoD.

**ACTION:** Notice of availability of real property.

**SUMMARY:** Notice is hereby given that a portion of the former Walter Reed Army Medical Center (WRAMC), located at Alaska Avenue NW., and Fern Street NW., Washington, DC is available for conveyance to authorized recipients for the purpose of permitting the recipient to use the property for the protection of public health, including research. Interested authorized recipients must submit a written notice. The written notice shall disclose the contemplated use of the property, which must be associated with protection of public health, including research. Upon receipt of a written notice from an authorized recipient, the Army will promptly provide the interested party an application package and establish a date for submission of a formal application.

**DATES:** Interested authorized recipients must submit a written notice, within 30 days of publication of this notice in the **Federal Register**.

**ADDRESSES:** Submit written notice to the Chief, Real Estate Division, Baltimore District, U.S. Army Corps of Engineers, Mailing address: P.O. Box 1715, Attn: CENAB-RE-M, Baltimore, MD 21201-1715, Street address: 10 South Howard Street, Room 7600, Attn: CENAB-RE-M, Baltimore, MD 21201.

#### FOR FURTHER INFORMATION CONTACT:

More information about the property, including arrangements to tour the property, may be obtained by contacting Mr. Markus Craig, ACSIM BRAC Division, 2530 Crystal Drive, Room 5136C, Arlington, VA 22202, telephone (703)545-2474, or by email [Markus.a.craig.civ@mail.mil](mailto:Markus.a.craig.civ@mail.mil).

**SUPPLEMENTARY INFORMATION:** The property consists of approximately 11 acres, more or less, improved with buildings and structures as follows:

- Building 3, parking structure, approximately 341,000 gross square feet (gsf)
- Building 52, former warehouse and outpatient clinic, approximately 31,700 gsf
- Building 53, former post theater, approximately 17,400 gsf
- Building 54, former Armed Forces Institute of Pathology and Military Medical Museum, approximately 400,000 gsf
- Offsite utility infrastructure serving the site together with access and utility easements as necessary.

The property is available for disposal under the authority of section 2834(b) of the National Defense Authorization Act for Fiscal Year 2015, Public Law 113-291. Authorized recipients are the District of Columbia, a political subdivision or instrumentality of the District of Columbia, a tax-supported medical institution, or a hospital or similar institution not operated for profit that has been exempt from taxation under section 501(c) of the Internal Revenue Code of 1986. The Army intends to convey all of the Government's right, title and interest in the property by quitclaim deed; disposal of a lesser interest will not be considered.

The property is offered "AS IS" and "WHERE IS" without representation, warranty, or guaranty as to quantity, title, character, condition, size, or kind, or that the same is in condition or fit to be used for the purpose for which intended. The buildings contain asbestos and lead based paint. The property has been determined to be suitable for transfer in accordance with the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA). All necessary remediation under CERCLA of hazardous substance releases has been taken.

Buildings 52, 53 and 54 are considered contributing elements to the Walter Reed Historic District as nominated to both the National Register and District of Columbia Historic Listings. Building 54 is considered individually eligible for listing due to its

significance as a cold war relic. Applicable preservation laws apply. The District of Columbia Historic Preservation Act (DC Code §§ 6–1101 *et seq.*) requires the Mayor's Office to approve permits to demolish, subdivide, or alter a historic landmark or a building in a historic district or to construct a new structure on the site of a landmark or in a historic district. The property will be conveyed without consideration; however, the recipient shall pay the costs incurred by the Army to carry out this conveyance including survey costs, costs for environmental documentation (but not costs for Army environmental remediation of the property), and any other Army administrative costs related to the conveyance.

Dated: June 4, 2015.

**Paul D. Cramer,**

*Deputy Assistant Secretary of the Army,  
(Installations, Housing & Partnerships).*

[FR Doc. 2015–15347 Filed 6–22–15; 8:45 am]

**BILLING CODE 3710–08–P**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

[Docket ID: DoD–2015–OS–0061]

### Privacy Act of 1974; System of Records

**AGENCY:** Defense Contract Audit Agency, DoD.

**ACTION:** Notice to add a new System of Records.

**SUMMARY:** The Defense Contract Audit Agency (DCAA) proposes a new system of records notice, RDCAA 366.4, entitled “DCAA Telework Program Records,” in its existing inventory of record systems subject to the Privacy Act of 1974, as amended. This system will be used to collect employee telework agreements to assure compliance with Department of Defense and Defense Contract Audit Agency regulations.

**DATES:** Comments will be accepted on or before July 23, 2015. This proposed action will be effective 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 of Oversight and Compliance, Regulatory and Audit Matters Office, 9010 Defense Pentagon, Washington, DC 20301–9010.

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:** Mr. Keith Mastromichalis, DCAA FOIA/Privacy Act Management Analyst, 8725 John J. Kingman Road, Suite 2135, Fort Belvoir, VA 22060–6219, Telephone number: (703) 767–1022.

**SUPPLEMENTARY INFORMATION:** The Defense Contract Audit Agency system of records notices subject to the Privacy Act of 1974, 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://dpcl.d.defense.gov/privacy>.

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 12, 2015, 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,” dated February 8, 1996 (February 20, 1996, 61 FR 6427).

Dated: June 18, 2015.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

### RDCAA 366.4

#### SYSTEM NAME:

DCAA Telework Program Records.

#### SYSTEM LOCATION:

Records are maintained by the Human Resources Management Division, Office of the Defense Contract Audit Agency, 8725 John J. Kingman Road, Suite 2133, Fort Belvoir, VA 22060–6219.

#### CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees participating in the DCAA Telework Program.

#### CATEGORIES OF RECORDS IN THE SYSTEM:

Records include individual's name; position title, grade, and job series; duty station address and telephone number; telework address, telephone number(s), telework request forms (Telework Agreement, Self-Certification Home Safety Checklist, and Employee Checklist).

#### AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 65, Chapter 65, Telework; DoD Instruction 1035.01, Subject Telework Policy; DCAA Instruction 1035.01, DCAA Telework Policy; and DCAA National Collective Bargaining Agreement.

#### PURPOSE(S):

Records may be used by DCAA management, human resources offices, and program coordinator for managing and reporting Telework Program participation. DCAA may need to extract Agency-wide data and submit this data as part of the Agency's Annual Telework Report to DoD, Office of Personnel Management (OPM), and/or Congress.

#### ROUTINE USES 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 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:

To the Department of Labor when an employee is injured while teleworking, *i.e.*, telework address and safety checklists may be disclosed.

The DoD Blanket Routine Uses set forth at the beginning of the DCAA's 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://dpcl.d.defense.gov/Privacy/SORNsIndex/BlanketRoutineUses.aspx>.

#### POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

##### STORAGE:

Paper and electronic storage media.

##### RETRIEVABILITY:

Records are retrieved by name.

##### SAFEGUARDS:

Electronic records are maintained in a password-protected network and accessible only to DCAA management on a need-to-know basis to perform their duties. Access to the network where records are maintained requires a valid



Common Access Card (CAC). Paper records are secured in locked cabinets, offices, or buildings during non-duty hours. The same security standards currently applied to individually-issued CAC card are applicable to paper compilations.

**RETENTION AND DISPOSAL:**

Records are destroyed one (1) year after employee's participation in the program ends.

**SYSTEM MANAGER(S) AND ADDRESS:**

Human Resources Manager, Human Resources Management Division, Office of the Defense Contract Audit Agency, 8725 John J. Kingman Road, Suite 2133, Fort Belvoir, VA 22060-6219.

**NOTIFICATION PROCEDURE:**

Individuals seeking to determine whether information about themselves is contained in this system should address written inquiries to the Privacy Act Officer, Headquarters, Defense Contract Audit Agency, ATTN: CMR, 8725 John J. Kingman Road, Suite 2135, Fort Belvoir, VA 22060-6219.

Individual should provide full name and organizational information.

**RECORDS ACCESS PROCEDURES:**

Individuals seeking access to information about themselves contained in this system should address written inquiries to the Privacy Act Officer, Headquarters, Defense Contract Audit Agency, ATTN: CMR, 8725 John J. Kingman Road, Suite 2135, Fort Belvoir, VA 22060-6219.

Individual should provide full name and organizational information.

**CONTESTING RECORD PROCEDURES:**

DCAA's rules for accessing records, for contesting contents and appealing initial agency determinations are published in DCAA Instruction 5410.10; 32 CFR part 317; or may be obtained from the system manager.

**RECORD SOURCE CATEGORIES:**

Data is supplied by the subordinate employees submitted to the first level supervisor.

**EXEMPTIONS CLAIMED FOR THE SYSTEM:**

None.  
[FR Doc. 2015-15360 Filed 6-22-15; 8:45 am]

**BILLING CODE 5001-06-P**

**DEPARTMENT OF DEFENSE****Office of the Secretary**

[Transmittal No. 15-13]

**36(b)(1) Arms Sales Notification**

**AGENCY:** Defense Security Cooperation Agency, Department of Defense.

**ACTION:** Notice.

**SUMMARY:** The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996.

**FOR FURTHER INFORMATION CONTACT:** Ms. B. English, DSCA/DBO/CFM, (703) 601-3740.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 15-13 with attached Policy Justification and Sensitivity of Technology.

Dated: June 18, 2015.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*






DEFENSE SECURITY COOPERATION AGENCY  
201 12TH STREET SOUTH, STE 203  
ARLINGTON, VA 22202-5408

The Honorable John A. Boehner  
Speaker of the House  
U.S. House of Representatives  
Washington, DC 20515

JUN 05 2015

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 15-13, concerning the Department of the Air Force's proposed Letter(s) of Offer and Acceptance to Lebanon for defense articles and services estimated to cost \$462 million. After this letter is delivered to your office, we plan to issue a press statement to notify the public of this proposed sale.

Sincerely,  
  
J. W. Rixey  
Vice Admiral, USN  
Director

- Enclosures:
- 1. Transmittal
  - 2. Policy Justification
  - 3. Sensitivity of Technology
  - 4. Regional Balance (Classified Document Provided Under Separate Cover)



Transmittal No. 15-13

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) <i>Prospective Purchaser:</i> Lebanon	
(ii) <i>Total Estimated Value:</i>	
Major Defense Equipment * ..	\$224 million
Other .....	\$238 million
Total .....	\$462 million

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:* Six (6) A-29 Super Tucano aircraft, eight (8) PT6A-68A Turboprop engines (6 installed and 2 spares), eight (8) ALE-47 Countermeasure Dispensing Systems,

two thousand (2000) Advanced Precision Kill Weapon Systems, eight (8) AN/AAR-60(V)2 Missile Launch Detection Systems, non-SAASM Embedded Global Positioning System/ Initial Navigation System (EGIs), spare and repair parts, flight testing, maintenance support, support equipment, publications and technical documentation, ferry support, personnel training and training equipment, U.S. Government and contractor engineering and logistics support services, and other related elements of logistics support.

(iv) *Military Department:* Air Force (SAF)

(v) *Prior Related Cases, if any:* FMS case WFB-\$18M-12Nov14

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:* none

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:* See Attached Annex.

(viii) *Date Report Delivered to Congress:* 05 JUNE 2015

\* as defined in Section 47(6) of the Arms Export Control Act.

**POLICY JUSTIFICATION**

**Lebanon—A-29 Super Tucano Aircraft**

The Government of Lebanon has requested a possible sale of six (6) A-29 Super Tucano aircraft, eight (8) PT6A-68A Turboprop engines (6 installed and 2 spares), eight (8) ALE-47

Countermeasure Dispensing Systems, two thousand (2000) Advanced Precision Kill Weapon Systems, eight (8) AN/AAR-60(V)2 Missile Launch Detection Systems, non-SAASM Embedded Global Positioning System/Initial Navigation System (EGIs), spare and repair parts, flight testing, maintenance support, support equipment, publications and technical documentation, ferry support, personnel training and training equipment, U.S. Government and contractor engineering and logistics support services, and other related elements of logistics support. The estimated cost is \$462 million.

This proposed sale serves U.S. national, economic, and security interests by providing Lebanon with airborne capabilities needed to maintain internal security, enforce United Nation's Security Council Resolutions 1559 and 1701, and counter terrorist threats.

The proposed sale of these aircraft will provide Lebanon with a much needed Close Air Support (CAS) platform to meet present and future challenges posed by internal and border security threats. Lebanon should have no difficulty absorbing these additional aircraft into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractors will be:  
Sierra Nevada Corporation Centennial, Colorado  
BAE Systems Nashua, New Hampshire  
Pratt & Whitney East Hartford, Connecticut  
Terma North America Arlington, Virginia  
L-3COM Systems West Salt Lake City, Utah

There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will not require any additional U.S. Government or U.S. contractor personnel in Lebanon. However, periodic travel will be required on a temporary basis for program reviews and technical support.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 15-13

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

Annex

Item No. vii

(vii) *Sensitivity of Technology:*

1. The A-29 is a light attack aircraft which will provide Close Air Support

(CAS), Intelligence Surveillance Reconnaissance (ISR), Counter Terrorism/Counter Insurgency (CT/COIN), and Border Security to the Lebanese Air Force. It is equipped with an integrated MX-15 Electro-Optical Infrared (EO/IR) Laser sensor suite, which gives day/night Intelligence Surveillance Reconnaissance (ISR) capability and includes a laser illuminator/range finder/designator to allow employment of the AGM-114 Hellfire missile and GBU-12/58 Laser Guided Bomb (LGB). The aircraft has six external hard points for weapons and fuel carriage. The Lebanon variant will be capable of carrying:

- AGM-114M3, N3, & R5 missiles, classified as Secret
- External fuel tanks, classified as Unclassified
- 2.75" rockets (MK4, MK40, MK 66, Hydra 70), classified as Unclassified
- GBU-12, classified as Confidential
- GBU-58, classified at Confidential
- Advanced Precision Kill Weapon System, classified as Secret
- HMP-400 .50 caliber gun pods, classified as Unclassified

The ISR package is compatible with the current Lebanese ISR assets. Critical cockpit, fuel system and engine components will have aircraft armor able to withstand small arms fire. Technical data and documentation to be provided are Unclassified.

2. The MX-15 EO/IR sensor is a gyro-stabilized, multi-spectral, multi field of view EO/IR system. The system provides ISR capability and laser designation via an externally mounted turret sensor. Sensor video imagery is displayed in the aircraft real time and may be recorded for subsequent ground analysis. The hardware and technical data and documentation to be provided is Unclassified.

3. The AN/ALE-47 Counter-Measures Dispensing System (CMDS) is an integrated, threat-adaptive, software-programmable dispensing system capable of dispensing chaff and flares. The threats countered by the CMDS include radar-directed anti-aircraft artillery (AAA), radar command-guided missiles, radar homing-guided missiles, and infrared (IR) guided missiles. The system is internally mounted and may be operated as a stand-alone system. The AN/ALE-47 uses threat data received over the aircraft interfaces to assess the threat situation and to determine a response. The hardware and technical data and documentation to be provided is Unclassified.

4. The AN/AAR-60 Missile Warning System is an electronic warfare system designed to protect aircraft against

infrared-guided (IR) missile threats, laser-guided/laser-aided threats, and unguided munitions. Upon detection of the threat, the system will provide an audio and visual sector warning to the pilot. For IR missile threats, the system automatically initiates countermeasures by sending a command signal to the countermeasures dispensing unit. The AAR-60 is Unclassified.

5. The APKWS II All-Up-Round (AUR) is an air to ground weapon that consists of an APKWS II Guidance Section (GS), Legacy 2.75 inch MK 66 Mod 4 Rocket Motor and legacy MK 152 and MK455/436 warhead/fuze. The APKWS II GS is installed between the rocket motor and warhead and provides a Semi-Active Laser (SAL) precision capability to the legacy unguided 2.75" rocket. The APKWS II guidance section is procured as an individual component and mated with the rocket motor and warhead/fuze to create an AUR. Hardware is Unclassified; information related to performance, effectiveness, vulnerabilities and counter-measure is classified up to Secret.

6. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

7. A determination has been made that the recipient country can provide the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

8. All defense articles and services listed in this transmittal have been authorized for release and export to Lebanon.

[FR Doc. 2015-15367 Filed 6-22-15; 8:45 am]

BILLING CODE 5001-06-P

## DEPARTMENT OF DEFENSE

### Office of the Secretary

#### Independent Review Panel on Military Medical Construction Standards; Notice of Federal Advisory Committee Meeting

**AGENCY:** Department of Defense (DoD).

**ACTION:** Notice of meeting.

**SUMMARY:** The Department of Defense is publishing this notice to announce the following Federal Advisory Committee

meeting of the Independent Review Panel on Military Medical Construction Standards (“the Panel”).

**DATES:**

**Tuesday, July 14, 2015**

8:00 a.m.–9:00 a.m. EDT

(Administrative Working Meeting)

9:00 a.m.–11:30 a.m. EDT (Open Session)

11:30 a.m.–1:30 p.m. EDT

(Administrative Working Meeting)

**ADDRESSES:** Defense Health Headquarters (DHHQ), Pavilion Salons B–C, 7700 Arlington Blvd., Falls Church, Virginia 22042 (escort required; see guidance in **SUPPLEMENTARY INFORMATION**, “Public’s Accessibility to the Meeting”).

**FOR FURTHER INFORMATION CONTACT:** The Executive Director and Designated Federal Officer is Ms. Christine Bader, 7700 Arlington Boulevard, Suite 5101, Falls Church, Virginia 22042, *Christine.e.bader.civ@mail.mil*, (703) 681–6653, Fax: (703) 681–9539. For meeting information, please contact Ms. Kendal Brown, 7700 Arlington Boulevard, Suite 5101, Falls Church, Virginia 22042, *Kendal.l.brown2.ctr@mail.mil*, (703) 681–6670, Fax: (703) 681–9539.

**SUPPLEMENTARY INFORMATION:** This meeting is being held under the provisions of the Federal Advisory Committee Act of 1972 (5 U.S.C., Appendix, as amended), the Government in the Sunshine Act of 1976 (5 U.S.C. 552b, as amended), and 41 CFR 102–3.150.

**Purpose of the Meeting**

At this meeting, the Panel will address the Ike Skelton National Defense Authorization Act (NDAA) for Fiscal Year 2011 (Pub. L. 111–383), Section 2852(b) requirement to provide the Secretary of Defense independent advice and recommendations regarding a construction standard for military medical centers to provide a single standard of care, as set forth below:

a. Reviewing the unified military medical construction standards to determine the standards consistency with industry practices and benchmarks for world class medical construction;

b. Reviewing ongoing construction programs within the DoD to ensure medical construction standards are uniformly applied across applicable military centers;

c. Assessing the DoD approach to planning and programming facility improvements with specific emphasis on facility selection criteria and proportional assessment system; and facility programming responsibilities

between the Assistant Secretary of Defense for Health Affairs and the Secretaries of the Military Departments;

d. Assessing whether the Comprehensive Master Plan for the National Capital Region Medical (“the Master Plan”), dated April 2010, is adequate to fulfill statutory requirements, as required by section 2714 of the Military Construction Authorization Act for Fiscal Year 2010 (division B of Pub. L. 111–84; 123 Stat. 2656), to ensure that the facilities and organizational structure described in the Master Plan result in world class military medical centers in the National Capital Region; and

e. Making recommendations regarding any adjustments of the Master Plan that are needed to ensure the provision of world class military medical centers and delivery system in the National Capital Region.

**Agenda**

Pursuant to 5 U.S.C. 552b, as amended, and 41 CFR 102–3.140 through 102–3.165 and subject to availability of space, the Panel meeting is open to the public from 9:00 a.m. to 11:30 a.m. on July 14, 2015, as the Panel will meet in an open forum to deliberate the findings and recommendations that will be contained in the Panel’s final report to the Secretary of Defense.

**Availability of Materials for the Meeting**

A copy of the agenda or any updates to the agenda for the July 14, 2015 meeting, as well as any other materials presented, may be obtained at the meeting.

**Public’s Accessibility to the Meeting**

Pursuant to 5 U.S.C. 552b, as amended, and 41 CFR 102–3.140 through 102–3.165 and subject to availability of space, this meeting is open to the public. Seating is limited and is on a first-come basis. All members of the public who wish to attend the public meeting must contact Ms. Kendal Brown at the number listed in the section **FOR FURTHER INFORMATION CONTACT** no later than 12:00 p.m. on Wednesday, July 8, 2015, to register and make arrangements for an escort, if necessary. Public attendees requiring escort should arrive with sufficient time to complete security screening no later than 30 minutes prior to the start of the meeting. To complete security screening, please come prepared to present two forms of identification and one must be a picture identification card.

**Special Accommodations**

Individuals requiring special accommodations to access the public meeting should contact Ms. Kendal Brown at least five (5) business days prior to the meeting so that appropriate arrangements can be made.

**Written Statements**

Any member of the public wishing to provide comments to the Panel may do so in accordance with 41 CFR 102–3.105(j) and 102–3.140 and section 10(a)(3) of the Federal Advisory Committee Act, and the procedures described in this notice.

Individuals desiring to provide comments to the Panel may do so by submitting a written statement to the Executive Director (see **FOR FURTHER INFORMATION CONTACT**). Written statements should address the following details: The issue, discussion, and a recommended course of action. Supporting documentation may also be included, as needed, to establish the appropriate historical context and to provide any necessary background information.

If the written statement is not received at least five (5) business days prior to the meeting, the Executive Director may choose to postpone consideration of the statement until the next open meeting.

The Executive Director will review all timely submissions with the Panel Chairperson and ensure they are provided to members of the Panel before the meeting that is subject to this notice. After reviewing the written comments, the Panel Chairperson and the Executive Director may choose to invite the submitter to orally present their issue during an open portion of this meeting or at a future meeting. The Executive Director, in consultation with the Panel Chairperson, may allot time for members of the public to present their issues for review and discussion by the Panel.

Dated: June 17, 2015.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

[FR Doc. 2015–15285 Filed 6–22–15; 8:45 am]

**BILLING CODE 5001–06–P**

**DEPARTMENT OF DEFENSE**

**Office of the Secretary**

[Transmittal No. 15–24]

**36(b)(1) Arms Sales Notification**

**AGENCY:** Defense Security Cooperation Agency, Department of Defense.

**ACTION:** Notice.

**SUMMARY:** The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the

requirements of section 155 of Public Law 104-164 dated July 21, 1996.

**FOR FURTHER INFORMATION CONTACT:** Ms. B. English, DSCA/DBO/CFM, (703) 601-3740.

The following is a copy of a letter to the Speaker of the House of

Representatives, Transmittal 15-24 with attached Policy Justification and Sensitivity of Technology.

Dated: June 18, 2015.

**Aaron Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*



**DEFENSE SECURITY COOPERATION AGENCY**

201 12TH STREET SOUTH, STE 203  
ARLINGTON, VA 22202-6408

The Honorable John A. Boehner  
Speaker of the House  
U.S. House of Representatives  
Washington, DC 20515

**JUN 09 2015**

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 15-24, concerning the Department of the Navy's proposed Letter(s) of Offer and Acceptance to the Republic of Korea for defense articles and services estimated to cost \$1.91 billion. After this letter is delivered to your office, we plan to issue a press statement to notify the public of this proposed sale.

Sincerely,

J. W. Rixey  
Vice Admiral, USN  
Director

**Enclosures:**

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology



Transmittal No. 15-24  
Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

(i) *Prospective Purchaser:* Republic of Korea

(ii) *Total Estimated Value:*

Major Defense Equipment * ..	\$1.21 billion
Other .....	\$0.70 billion
<b>TOTAL .....</b>	<b>\$1.91 billion</b>

(iii) *Description and Quantity or Quantities of Articles or Services under*

*Consideration for Purchase:* 3 Aegis Shipboard Combat Systems, 3 MK-41 Vertical Launching Systems, 3 Common Data Link Management Systems, 3 AN/UPX-29(V) Identification Friend or Foe Interrogators, spare and repair parts, support equipment, publications and

technical documentation, personnel training and training equipment, tool and test equipment, U.S. Government and contractor technical, engineering, and logistics support services, and other related elements of logistics support.

(iv) *Military Department: Navy (LQI)*

(v) *Prior Related Cases, if any: FMS case LPN-\$1.06B-10Aug02*

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None*

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex*

(viii) *Date Report Delivered to Congress: 09 JUNE 2015*

\* as defined in Section 47(6) of the Arms Export Control Act.

## POLICY JUSTIFICATION

### *Republic of Korea—Aegis Combat System*

The Republic of Korea (ROK) has requested a possible sale of 3 Aegis Shipboard Combat Systems, 3 MK-41 Vertical Launching Systems, 3 Common Data Link Management Systems, 3 AN/UPX-29(V) Identification Friend or Foe Interrogators, spare and repair parts, support equipment, publications and technical documentation, personnel training and training equipment, tool and test equipment, U.S. Government and contractor technical, engineering, and logistics support services, and other related elements of logistics support. The total estimated cost is \$1.91 billion.

This proposed sale will contribute to the foreign policy and national security objectives of the United States by meeting the legitimate security and defense needs of an ally and partner nation. The ROK is one of the major political and economic powers in East Asia and the Western Pacific and a key partner of the United States in ensuring peace and stability in that region. It is vital to the U.S. interest to assist our Korean ally in developing and maintaining a strong and ready self-defense capability.

The Aegis Combat System will provide enhanced capabilities on the ROK's naval ships to defend against possible aggression and protect sea lines of communications. Aegis is the keystone in the ROK Navy's efforts to upgrade its shipboard combat and ballistic missile defense capability. The ROK will have no difficulty integrating this system into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractors will be Lockheed Martin Maritime Systems and Training in Morristown, New Jersey;

Raytheon Company in Andover, Massachusetts; General Dynamics Armament Systems in Burlington, Vermont. Although offsets are requested, they are unknown this time and will be determined during negotiations between the ROK and contractors.

Implementation of this proposal sale will not require any additional U.S. government or U.S. contractor personnel in Korea. However, U.S. Government or contractor personnel in-country visits will be required on a temporary basis in conjunction with program technical oversight and support requirements for approximately five years.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 15-24

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act Annex Item No. vii

(vii) *Sensitivity of Technology:*

1. Aegis Weapon System (AWS) hardware is Unclassified, with the exception of the RF oscillator used in the Fire Control transmitter, which is classified Confidential. Aegis document in general is unclassified. However, seven operation and maintenance manuals are classified Confidential, and there is also a classified Secret supplement to the Aegis Combat System Maintenance Manual. The manuals and technical documents are limited to those necessary for operational use and organizational maintenance.

2. While the hardware associated with the SPY-1D radar is Unclassified, the computer programs are classified Secret. It is the combination of the SPY-1D hardware and the computer program for the SPY-1D radar that constitutes the technology sensitive aspects of the AWS. SPY-1D radar hardware design and computer program documentation will not be released.

3. The AN/UPX-29(V) AIMS MK XIIA Identification Friend or Foe (IFF) system, includes the AN/UPX-41(C) Interrogator Set. The AN/UPX-29(V) IFF includes new waveforms that improve identification coverage, enhances the ability to discriminate between closely spaced platforms, is compatible with civilian air traffic control, and provides enhanced security. The equipment has embedded communication security and is protected internal to Unclassified equipment.

4. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used

to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

5. A determination has been made that the recipient country can provide the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

6. All defense articles and services listed in this transmittal have been authorized for release and export to the Republic of Korea.

[FR Doc. 2015-15358 Filed 6-22-15; 8:45 am]

BILLING CODE 5001-06-P

## DEPARTMENT OF EDUCATION

[Docket No.: ED-2015-ICCD-0080]

### Agency Information Collection Activities; Comment Request; Income Based Repayment Notifications

**AGENCY:** Federal Student Aid (FSA), Department of Education (ED).

**ACTION:** Notice.

**SUMMARY:** In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing an extension of an existing information collection.

**DATES:** Interested persons are invited to submit comments on or before August 24, 2015.

**ADDRESSES:** Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting Docket ID number ED-2015-ICCD-0080 or via postal mail, commercial delivery, or hand delivery. If the regulations.gov site is not available to the public for any reason, ED will temporarily accept comments at [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov). Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted; ED will ONLY accept comments during the comment period in this mailbox when the regulations.gov site is not available. 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, Mailstop L-OM-2-2E319, Room 2E103, Washington, DC 20202.

**FOR FURTHER INFORMATION CONTACT:** For specific questions related to collection activities, please contact Beth Grebeldinger, 202–377–4018.

**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:* Income Based Repayment Notifications.

*OMB Control Number:* 1845–0114.

*Type of Review:* An extension of an existing information collection.

*Respondents/Affected Public:* Private Sector, State, Local and Tribal Governments.

*Total Estimated Number of Annual Responses:* 2,894,005.

*Total Estimated Number of Annual Burden Hours:* 231,520.

*Abstract:* The Higher Education Act of 1965, as amended (HEA), established the Federal Family Education Loan (FFEL) Program under Title IV, Part B, Section 493C [20 U.S.C. 1098e] of the HEA authorizes income based repayment for Part B borrowers who have a partial financial hardship. The regulations in 34 CFR 682.215(e)(2) require notifications to borrowers from the loan holders once a borrower establishes a partial financial hardship and is placed in an income based repayment (IBR) plan by the loan holder. The regulations identify information the loan holder must

provide to the borrower to continue to participate in an IBR plan. This is a request for extension of the current information collection 1845–0114.

Dated: June 18, 2015.

**Kate Mullan,**

*Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.*

[FR Doc. 2015–15353 Filed 6–22–15; 8:45 am]

**BILLING CODE 4000–01–P**

## DEPARTMENT OF ENERGY

### Bonneville Power Administration

#### Agency Information Collection Activities: Proposed Collection; Comment Request; Landowner Release for Poles Removed From BPA Transmission System

**AGENCY:** Bonneville Power Administration (BPA), Department of Energy.

**ACTION:** Proposed information collection and request for comments.

**SUMMARY:** BPA is seeking comments on a proposed submission to the Office of Management and Budget (OMB) for clearance of a collection of information under the Paperwork Reduction Act of 1995. BPA collects information from landowners or other members of the public who accept treated wood utility transmission poles. These poles are removed from the transmission system when they are no longer of use to BPA. The information collected will document and facilitate transfer of the poles, which minimizes BPA's environmental liability. At the time of information collection, BPA also provides the recipients with consumer information regarding treated wood and use restrictions required by the U.S. Environmental Protection Agency (EPA).

**DATES:** Comments must be received on or before August 24, 2015.

**ADDRESSES:** Written comments may be submitted by mail to Christopher M. Frost, CGC–7, Bonneville Power Administration, 905 NE. 11th Avenue, Portland, Oregon 97232, or by email at [IGLM@bpa.gov](mailto:IGLM@bpa.gov).

**FOR FURTHER INFORMATION CONTACT:** Additional information may be requested from Christopher M. Frost at the mailing address above or by email at [IGLM@bpa.gov](mailto:IGLM@bpa.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Abstract

A recent internal audit of PRA compliance determined that this

existing collection does not have an OMB number. BPA collects information from landowners or other members of the public who accept treated wood utility transmission poles. These poles are removed from the transmission system when they are no longer of use to BPA. The information collected will document and facilitate transfer of the poles, which minimizes BPA's environmental liability. At the time of information collection, BPA also provides the recipients with consumer information regarding treated wood and use restrictions required by the U.S. Environmental Protection Agency (EPA). The relevant form, Form BPA F 4300.07d, collects the following information: Intended use for poles (fence post, retaining wall, or landscaping), acknowledgement of receipt of consumer information sheet, acknowledgement of use limitations, acknowledgement of wood treatment type (creosote, pentachlorophenol, copper naphthanate, or other as specified), and name and contact information. No third party notification or public disclosure burden is associated with this collection.

##### II. Request for Comments

BPA requests that you send your comments to the location listed in the **ADDRESSES** section above. Your comments should address:

(a) The necessity of the information collection for the proper performance of BPA's functions, including whether the information will have practical utility;

(b) The accuracy of our estimate of the burden (hours and costs) of the collection of information;

(c) Ways we could enhance the quality, utility, and clarity of the information to be collected; and

(d) Ways we could minimize the burden of the collection of information, such as through the use of automated collection techniques or other forms of information technology.

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. Comments may be made available to the public, including your address, phone number, and email address. You may request that we withhold your personally identifiable information, but we cannot guarantee that we will be able to do so.

##### III. Data

*OMB Control Number:* New.  
*Information Collection Request Title:* Landowner Release for Poles Removed from BPA Transmission System.

*Type of Request:* New.  
*Respondents:* Landowners and other members of the public accepting poles.  
*Annual Estimated Number of Respondents:* 120–150.  
*Annual Estimated Number of Total Responses:* 120–150.  
*Average Minutes per Response:* 5.  
*Annual Estimated Number of Burden Hours:* 12.5.  
*Annual Estimated Reporting and Recordkeeping Cost Burden:* \$0.

Issued in Portland, Oregon, on June 12, 2015.

**Christopher M. Frost,**  
*Agency Records Officer, FOIA/Privacy Officer, Governance and Internal Controls.*  
 [FR Doc. 2015–15377 Filed 6–22–15; 8:45 am]  
**BILLING CODE 6450–01–P**

## DEPARTMENT OF ENERGY

### Bonneville Power Administration

#### Agency Information Collection Activities: Proposed Collection; Comment Request; Badge Replacement Request Form

**AGENCY:** Bonneville Power Administration (BPA), Department of Energy.

**ACTION:** Proposed information collection and request for comments.

**SUMMARY:** BPA is seeking comments on a proposed submission to the Office of Management and Budget (OMB) for clearance of a collection of information under the Paperwork Reduction Act of 1995. BPA proposes to collect information on lost, stolen, or damaged badges that control access to BPA facilities. The information collected will help BPA control access to BPA facilities and track identification badges issued under the authority of BPA's Personnel Security office.

**DATES:** Comments must be received on or before August 24, 2015.

**ADDRESSES:** Written comments may be submitted by mail to Christopher M. Frost, CGC–7, Bonneville Power Administration, 905 NE 11th Avenue, Portland, Oregon 97232, or by email at [IGLM@bpa.gov](mailto:IGLM@bpa.gov).

**FOR FURTHER INFORMATION CONTACT:** Additional information may be requested from Christopher M. Frost at the mailing address above or by email at [IGLM@bpa.gov](mailto:IGLM@bpa.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Abstract

A recent internal audit of PRA compliance determined that this existing collection does not have an OMB number. BPA is seeking approval

for an information collection on lost, stolen, or damaged badges that control access to BPA facilities. This information collection helps BPA control access to BPA facilities and track identification badges issued by BPA's Personnel Security office. The relevant form, Form BPA F 5632.27e, will collect the following information: type of badge (standard, smart card, proximity access), date of report, date lost, stolen or damaged, name and work phone number of reporting contractor or federal employee, and a brief description of either the type of damage or the incident resulting in loss. No third party notification or public disclosure burden is associated with this collection.

##### II. Request for Comments

BPA requests that you send your comments to the location listed in the **ADDRESSES** section above. Your comments should address:

- The necessity of the information collection for the proper performance of BPA's functions, including whether the information will have practical utility;
- The accuracy of our estimate of the burden (hours and costs) of the collection of the information;
- Ways we could enhance the quality, utility and clarity of the information to be collected; and
- Ways we could minimize the burden of the collection of the information, such as through the use of automated collection techniques or other forms of information technology.

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. Comments may be made available to the public, including your address, phone number, and email address. You may request that we withhold your personally identifiable information, but we cannot guarantee that we will be able to do so.

##### III. Data

*OMB Control Number:* New  
*Information Collection Request Title:* Badge Replacement Request Form  
*Type of Request:* New  
*Respondents:* BPA employees and contractors seeking replacement ID badges.

*Annual Estimated Number of Respondents:* 75  
*Annual Estimated Number of Total Responses:* 75  
*Average Minutes per Response:* 10  
*Annual Estimated Number of Burden Hours:* 12.5  
*Annual Estimated Reporting and Recordkeeping Cost Burden:* \$0

Issued in Portland, Oregon, on June 12, 2015.

**Christopher M. Frost,**  
*Chief Records Officer, FOIA/Privacy Officer, Governance and Internal Controls.*

[FR Doc. 2015–15370 Filed 6–22–15; 8:45 am]

**BILLING CODE 6450–01–P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. OR15–27–000]

#### NORCO Pipe Line Company, LLC; Notice of Petition for Declaratory Order

Take notice that on June 1, 2015, pursuant to Rule 207(a)(2) of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 385.207(a)(2) (2014), NORCO Pipe Line Company, LLC (NORCO) filed a petition for a declaratory order seeking a declaratory order approving the overall tariff and rate structure for a new interstate common carrier pipeline to receive reformulated regular gasoline blendstock and ultra-low sulfur diesel at Hammond, Indiana and transport such products to either Argo or Des Plaines, Illinois, all 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 "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the Web site that enables subscribers to

receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

*Comment Date:* 5:00 p.m. Eastern time on July 2, 2015.

Dated: June 9, 2015.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2015-15290 Filed 6-22-15; 8:45 am]

**BILLING CODE 6717-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

#### Combined Notice of Filings #1

Take notice that the Commission received the following electric rate filings:

*Docket Numbers:* ER10-2211-004.

*Applicants:* Vandolah Power Company, L.L.C.

*Description:* Supplement to December 24, 2014 Triennial Compliance Filing of Vandolah Power Company, L.L.C.

*Filed Date:* 06/08/2015.

*Accession Number:* 20150608-5264.

*Comment Date:* 5 p.m. ET 6/29/15.

*Docket Numbers:* ER10-2231-004;

ER10-1511-004; ER10-1714-004.

*Applicants:* Kentucky Utilities Company, LG&E Energy Marketing Inc., PPL EnergyPlus LLC, Louisville Gas and Electric Company.

*Description:* Fourth Supplement to June 30, 2014 Triennial Market Power Update of the PPL Southeast Companies.

*Filed Date:* 06/05/2015.

*Accession Number:* 20150605-5244.

*Comment Date:* 5 p.m. ET 6/26/15.

*Docket Numbers:* ER10-2265-005; ER12-21-016; ER11-2211-005; ER11-2209-005; ER11-2210-005; ER11-2207-005; ER11-2206-005; ER13-1150-003; ER13-1151-003; ER10-2783-011; ER10-2784-011 ; ER11-2855-016 ; ER10-2791-011; ER10-2333-004; ER10-2792-011; ER14-1818-005; ER12-1238-004; ER10-2260-003; ER10-2261-003; ER10-2337-006; ER14-1668-002; ER14-1669-002 ; ER14-1674-002; ER14-1670-002; ER14-1671-002; ER14-1675-002; ER14-1673-002; ER14-1676-002; ER14-1677-002; ER14-1678-002; ER14-1679-002; ER14-1672-002; ER10-2795-011; ER10-2798-011; ER10-1575-009; ER10-2339-007; ER10-2338-007; ER10-2340-007; ER12-1239-004; ER10-2336-004; ER10-2335-004; ER10-2799-011;

ER10-2801-011; ER10-2385-005; ER11-3727-011; ER10-2262-002; ER12-2413-009; ER11-2062-014; ER10-2346-006; ER10-2812-010; ER10-1291-015; ER10-2843-009; ER11-2508-013; ER11-2863-008; ER11-4307-014; ER10-2347-004; ER10-2348-004; ER12-1711-011; ER10-2350-004; ER10-2846-011; ER12-261-013.

*Applicants:* NRG Power Marketing LLC, Agua Caliente Solar, LLC, Alta Wind I, LLC, Alta Wind II, LLC, Alta Wind III, LLC, Alta Wind IV, LLC, Alta Wind V, LLC, Alta Wind X, LLC, Alta Wind XI, LLC, Arthur Kill Power LLC, Astoria Gas Turbine Power LLC, Avenal Park LLC, Bayou Cove Peaking Power, LLC, Bendwind, LLC, Big Cajun I Peaking Power LLC, Boston Energy Trading and Marketing LLC, Broken Bow Wind, LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, CL Power Sales Eight, L.L.C., Community Wind North 1 LLC, Community Wind North 2 LLC, Community Wind North 3 LLC, Community Wind North 5 LLC, Community Wind North 6 LLC, Community Wind North 7 LLC, Community Wind North 8 LLC, Community Wind North 9 LLC, Community Wind North 10 LLC, Community Wind North 11 LLC, Community Wind North 13 LLC, Community Wind North 15 LLC, Conemaugh Power LLC, Connecticut Jet Power LLC, Cottonwood Energy Company LP, CP Power Sales Seventeen, L.L.C., CP Power Sales Nineteen, L.L.C., CP Power Sales Twenty, L.L.C., Crofton Bluffs Wind, LLC, DeGreeff DP, LLC, DeGreeffpa, LLC, Devon Power LLC, Dunkirk Power LLC, Elkhorn Ridge Wind, LLC, El Segundo Energy Center LLC, El Segundo Power, LLC, Energy Alternatives Wholesale, LLC, Energy Plus Holdings LLC, Forward WindPower LLC, GenConn Devon LLC, GenConn Energy LLC, GenConn Middletown LLC, GenOn Energy Management, LLC, GenOn Mid-Atlantic, LLC, Green Mountain Energy Company, Groen Wind, LLC, High Lonesome Mesa, LLC, High Plains Ranch II, LLC, Hillcrest Wind, LLC, Huntley Power LLC, Independence Energy Group LLC.

*Description:* Notice of Non-Material Change in Status of NRG MBR Sellers [Part 1].

*Filed Date:* 6/8/15.

*Accession Number:* 20150608-5265.

*Comments Due:* 5 p.m. ET 6/29/15.

*Docket Numbers:* ER11-2777-003.

*Applicants:* Midcontinent Independent System Operator, Inc., Ameren Illinois Company.

*Description:* Offer of Settlement [including Pro Forma sheets] of Ameren

Services Company on behalf of Ameren Illinois Company, et al.

*Filed Date:* 06/08/2015.

*Accession Number:* 20150608-5258.

*Comment Date:* 5 p.m. ET 6/29/15.

*Docket Numbers:* ER13-104-007.

*Applicants:* Florida Power & Light Company.

*Description:* Compliance filing per 35: FPL Order No. 1000 Further Regional Compliance Filings to be effective 1/1/2015.

*Filed Date:* 6/9/15.

*Accession Number:* 20150609-5070.

*Comments Due:* 5 p.m. ET 6/29/15.

*Docket Numbers:* ER14-1934-004; ER14-1935-004.

*Applicants:* Rising Tree Wind Farm LLC, Rising Tree Wind Farm II LLC.

*Description:* Notice of Non-Material Change in Status of Rising Tree Wind Farm LLC, et al.

*Filed Date:* 6/9/15.

*Accession Number:* 20150609-5080.

*Comments Due:* 5 p.m. ET 6/30/15.

*Docket Numbers:* ER15-1542-001.

*Applicants:* Midcontinent Independent System Operator, Inc.

*Description:* Compliance filing per 35: 2015-06-09 SA 2779 Compliance ATC-Wisconsin Electric CFA to be effective N/A.

*Filed Date:* 6/9/15.

*Accession Number:* 20150609-5027.

*Comments Due:* 5 p.m. ET 6/30/15.

Take notice that the Commission received the following electric reliability filings.

*Docket Numbers:* RD15-5-000.

*Applicants:* North American Electric Reliability Corporation.

*Description:* Petition of the North American Electric Reliability Corporation for Approval of Proposed Reliability Standards PRC-004-5 and PRC-010-2.

*Filed Date:* 06/08/2015.

*Accession Number:* 20150608-5260.

*Comment Date:* 5 p.m. ET 7/9/15.

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 9, 2015.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2015-15289 Filed 6-22-15; 8:45 am]

BILLING CODE 6717-01-P

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Project No. 4093-036]

#### Bynum Hydro Company, PK Ventures I Limited Partnership; Notice of Application for Transfer of License and Soliciting Comments, Motions to Intervene, and Protests

On January 16, 2015, Commission staff directed PK Ventures I Limited Partnership (PK Ventures) to file documentation of project ownership and an application to transfer the license for the Bynum Project No. 4093 from Bynum Hydro Company, the licensee of record, to PK Ventures, the owner of the project facilities. On February 18, 2015, PK Ventures filed a response, including among other things, documentation of its ownership of the project and a copy of an earlier filing with the Commission in which it seeks to transfer the license from Bynum Hydro to it. The project is located on the Haw River in Chatham County, North Carolina.

Contact: Mr. Robert L. Rose, PK Ventures I Limited Partnership, P.O. Box 35236, Sarasota, FL 34242; Phone: (941) 312-0303; Email: [tampapc@outlook.com](mailto:tampapc@outlook.com).

FERC Contact: Patricia W. Gillis, (202) 502-8735.

Deadline for filing comments, motions to intervene, and protests: 30 days from the date that the Commission issues this notice. The Commission strongly encourages electronic filing. Please file motions to intervene, comments, and protests using the Commission's eFiling system at <http://www.ferc.gov/docs-filing/efiling.asp>. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at <http://www.ferc.gov/docs-filing/ecomment.asp>. You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), (866) 208-3676 (toll free), or (202) 502-8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal

Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426. The first page of any filing should include docket number P-4093-036.

Dated: June 9, 2015.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2015-15291 Filed 6-22-15; 8:45 am]

BILLING CODE 6717-01-P

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2012-0401; FRL-9929-55-OAR]

#### Proposed Information Collection Request; Comment Request; Regulation of Fuels and Fuel Additives: RFS Pathways II, and Technical Amendments to the RFS Standards and E15 Misfueling Mitigation Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

**SUMMARY:** The Environmental Protection Agency (EPA) is planning to submit an information collection request (ICR), "Regulation of Fuels and Fuel Additives: RFS Pathways II, and Technical Amendments to the RFS Standards and E15 Misfueling Mitigation Requirement" (EPA ICR No. 2520.01., OMB Control No. 2060-NEW to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). Before doing so, EPA is soliciting public comments on specific aspects of the proposed information collection as described below. This is a request for approval of a new collection. 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 OMB control number.

**DATES:** Comments must be submitted on or before August 24, 2015.

**ADDRESSES:** Submit your comments, referencing Docket ID No. EPA-HQ-OAR-2012-0401, online using [www.regulations.gov](http://www.regulations.gov) (our preferred method), or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential

Business Information (CBI) or other information whose disclosure is restricted by statute.

**FOR FURTHER INFORMATION CONTACT:** Geanetta Heard, Fuels Compliance Center, 6406J, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: 202-343-9017; fax number: 202-565-2085; email address: [heard.geanetta@epa.gov](mailto:heard.geanetta@epa.gov).

#### SUPPLEMENTARY INFORMATION:

Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at [www.regulations.gov](http://www.regulations.gov) or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The telephone number for the Docket Center is 202-566-1744. For additional information about EPA's public docket, visit <http://www.epa.gov/dockets>.

Pursuant to section 3506(c)(2)(A) of the PRA, EPA is soliciting comments and information to enable it to: (i) 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; (ii) 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; (iii) enhance the quality, utility, and clarity of the information to be collected; and (iv) 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. EPA will consider the comments received and amend the ICR as appropriate. The final ICR package will then be submitted to OMB for review and approval. At that time, EPA will issue another **Federal Register** notice to announce the submission of the ICR to OMB and the opportunity to submit additional comments to OMB.

**Abstract:** In the final rule, EPA finalized the renewable fuels standard (RFS) program regulations at 40 CFR part 80, subpart M. We believe these provisions will facilitate the introduction of new renewable fuels as well as improve implementation of the program. These provisions includes various changes related to biogas including changes to the revised compressed natural gas (CNG)/liquefied

natural gas (LNG) pathway and amendments to various associated registration, recordkeeping, and reporting provisions. The final regulation includes a lifecycle greenhouse gas emissions analysis for renewable electricity, renewable diesel and naphtha produced from landfill biogas. Adding these new pathways will enhance the ability of the biofuels industry to supply advanced biofuels, including cellulosic biofuels, which greatly reduce the greenhouse gas emissions (GHG) compared to the petroleum-based fuels they replace. It also addresses “nameplate capacity” issues for certain production facilities that do not claim exemption from the 20 percent GHG reduction threshold. In the accompanying final rule for this ICR, EPA addressed issues related to crop residue and corn kernel fiber and finalized an approach to determining the volume of cellulosic Renewable Identification Numbers (RIN’s) produced from various cellulosic feedstocks. We also included a lifecycle analysis of advanced butanol and discussed the potential to allow for commingling of compliant products at the retail facility level as long as the environmental performance of the fuels would not be detrimental. Several other amendments to the RFS2 program were included.

In the final rule, EPA also amended various changes to the E15 (gasoline containing up to 15 volume percent ethanol) mis-fueling mitigation regulations (MMR) at 40 CFR part 80, subpart N. Among the E15 changes finalized were technical corrections and amendments to sections dealing with labeling, E15 surveys, product transfer documents, and prohibited acts. Technical amendments and corrections for this regulations had no bearings on the industry estimates.

Lastly, EPA finalized changes to the survey requirements associated with the ultra-low sulfur diesel (ULSD) program. This change is not addressed here because there are fewer than nine respondents.

*Form Numbers: 2*

RFS1700–RFS2 Renewable Fuel Producers—Cellulosic Converted Fraction—5900–362

RFS1300–RFS2 Renewable Fuel Producers Using Crop Residue as a Feedstock Report—5900–262

*Respondents/affected entities:*

Producers of renewable fuels, Producers of renewable electricity, Importers of renewable fuels, Feedstock producers from waste treatment plants, Feedstock producers from landfills, Parties who own RIN’s.

*Respondent’s obligation to respond:* Mandatory.

*Estimated number of respondents:* 60 (total).

*Frequency of response:* Quarterly, annually, on occasion.

*Total estimated burden:* 8,889 hours (per year). Burden is defined at 5 CFR 1320.03(b).

*Total estimated cost:* \$1,081,415 (per year), includes \$0 annualized capital or operation & maintenance costs.

*Changes in Estimates* EPA estimates yearly 60 respondents and 8,889 burden hours which will cost industry \$1,081,415. This is a new collection with no industry cost for comparison.

Dated: June 15, 2015.

**Byron Bunker,**

*Director, Compliance Division, Office of Transportation and Air Quality, Office of Air and Radiation.*

[FR Doc. 2015–15467 Filed 6–22–15; 8:45 am]

**BILLING CODE 6560–50–P**

## ENVIRONMENTAL PROTECTION AGENCY

[FRL–9929–53–OGC]

### Proposed Consent Decree, Clean Air Act Citizen Suit

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of proposed consent decree; request for public comment.

**SUMMARY:** In accordance with section 113(g) of the Clean Air Act, as amended (“CAA” or the “Act”), notice is hereby given of a proposed consent decree to address a lawsuit filed by the Environmental Integrity Project: *Environmental Integrity Project v. McCarthy*, No. 1:14-cv-2106 (RC) (D. D.C.). On December 12, 2014, Plaintiff filed a complaint alleging that Gina McCarthy, in her official capacity as Administrator of the United States Environmental Protection Agency (“EPA”), failed to perform a non-discretionary duty to grant or deny within 60 days two petitions submitted by the Environmental Integrity Project on May 19, 2014, requesting that EPA object to two CAA Title V permits issued by the Texas Commission on Environmental Quality (“TCEQ”) to the Shell Chemical Company and the Shell Oil Company authorizing the operation of the Deer Park Chemical Plant and the Deer Park Refinery, respectively, located in Harris County, Texas. The proposed consent decree would establish a deadline of August 21, 2015, for EPA to take such action.

**DATES:** Written comments on the proposed consent decree must be received by July 23, 2015.

**ADDRESSES:** Submit your comments, identified by Docket ID number EPA–HQ–OGC–2015–0364, online at [www.regulations.gov](http://www.regulations.gov) (EPA’s preferred method); by email to [oei.docket@epa.gov](mailto:oei.docket@epa.gov); by mail to EPA Docket Center, Environmental Protection Agency, Mailcode: 2822T, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; or by hand delivery or courier to EPA Docket Center, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC, between 8:30 a.m. and 4:30 p.m. Monday through Friday, excluding legal holidays. Comments on a disk or CD–ROM should be formatted in Word or ASCII file, avoiding the use of special characters and any form of encryption, and may be mailed to the mailing address above.

**FOR FURTHER INFORMATION CONTACT:**

Richard H. Vetter, Air and Radiation Law Office, Office of General Counsel, U.S. Environmental Protection Agency, c/o US/EPA/OAQPS/SPPD/IO D205–01, Research Triangle Park, North Carolina 27711; telephone: (919) 541–2127; fax number (919) 541–4991; email address: [vetter.rick@epa.gov](mailto:vetter.rick@epa.gov).

**SUPPLEMENTARY INFORMATION:**

#### I. Additional Information About the Proposed Consent Decree

The proposed consent decree would resolve a lawsuit filed by the Environmental Integrity Project seeking to compel the Administrator to take actions under CAA section 505(b)(2). Under the terms of the proposed consent decree, EPA would agree to sign its response granting or denying the petitions filed by the Environmental Integrity Project regarding Shell Chemical Company’s Deer Park Chemical Plant and Shell Oil Company’s Deer Park Refinery, both located in Harris County, Texas, pursuant to section 505(b)(2) of the CAA, on or before August 21, 2015.

Under the terms of the proposed consent decree, EPA would expeditiously deliver notice of EPA’s response to the Office of the Federal Register for review and publication following signature of such response. In addition, the proposed consent decree outlines the procedure for the Plaintiffs to request costs of litigation, including attorney fees.

For a period of thirty (30) days following the date of publication of this notice, EPA will accept written comments relating to the proposed consent decree from persons who are not named as parties or intervenors to

the litigation in question. EPA or the Department of Justice may withdraw or withhold consent to the proposed consent decree if the comments disclose facts or considerations that indicate that such consent is inappropriate, improper, inadequate, or inconsistent with the requirements of the Act. Unless EPA or the Department of Justice determines that consent to this consent decree should be withdrawn, the terms of the consent decree will be affirmed.

## II. Additional Information About Commenting on the Proposed Consent Decree

### A. How can I get a copy of the consent decree?

The official public docket for this action (identified by Docket ID No. EPA-HQ-OGC-2015-0364) contains a copy of the proposed consent decree. The official public docket is available for public viewing at the Office of Environmental Information (OEI) Docket in the EPA Docket Center, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The EPA Docket Center 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 OEI Docket is (202) 566-1752.

An electronic version of the public docket is available through [www.regulations.gov](http://www.regulations.gov). You may use [www.regulations.gov](http://www.regulations.gov) to submit or view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Once in the system, key in the appropriate docket identification number then select "search."

It is important to note that EPA's policy is that public comments, whether submitted electronically or in paper, will be made available for public viewing online at [www.regulations.gov](http://www.regulations.gov) without change, unless the comment contains copyrighted material, CBI, or other information whose disclosure is restricted by statute. Information claimed as CBI and other information whose disclosure is restricted by statute is not included in the official public docket or in the electronic public docket. EPA's policy is that copyrighted material, including copyrighted material contained in a public comment, will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. Although not all docket materials may be available

electronically, you may still access any of the publicly available docket materials through the EPA Docket Center.

### B. How and to whom do I submit comments?

You may submit comments as provided in the **ADDRESSES** section. Please ensure that your comments are submitted within the specified comment period. Comments received after the close of the comment period will be marked "late." EPA is not required to consider these late comments.

If you submit an electronic comment, EPA recommends that you include your name, mailing address, and an email address or other contact information in the body of your comment and with any disk or CD ROM you submit. This ensures that you can be identified as the submitter of the comment and allows EPA to contact you in case EPA cannot read your comment due to technical difficulties or needs further information on the substance of your comment. Any identifying or contact information provided in the body of a comment will be included as part of the comment that is placed in the official public docket, and made available in EPA's electronic public docket. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Use of the [www.regulations.gov](http://www.regulations.gov) Web site to submit comments to EPA electronically is EPA's preferred method for receiving comments. The electronic public docket system is an "anonymous access" system, which means EPA will not know your identity, email address, or other contact information unless you provide it in the body of your comment. In contrast to EPA's electronic public docket, EPA's electronic mail (email) system is not an "anonymous access" system. If you send an email comment directly to the Docket without going through [www.regulations.gov](http://www.regulations.gov), your email address is automatically captured and included as part of the comment that is placed in the official public docket, and made available in EPA's electronic public docket.

Dated: June 15, 2015.

**Lorie J. Schmidt,**

*Associate General Counsel.*

[FR Doc. 2015-15460 Filed 6-22-15; 8:45 am]

**BILLING CODE 6560-50-P**

## FEDERAL COMMUNICATIONS COMMISSION

### Public Safety and Homeland Security Bureau; Federal Advisory Committee Act; Task Force on Optimal Public Safety Answering Point Architecture

**AGENCY:** Federal Communications Commission.

**ACTION:** Notice of public meeting.

**SUMMARY:** In accordance with the Federal Advisory Committee Act (FACA), this notice advises interested persons that the Federal Communications Commission's (FCC) Task Force on Optimal Public Safety Answering Point (PSAP) Architecture (Task Force) will hold its third meeting.

**DATES:** July 27, 2015.

**ADDRESSES:** Federal Communications Commission, Room TW-C305 (Commission Meeting Room), 445 12th Street SW., Washington, DC 20554.

**FOR FURTHER INFORMATION CONTACT:** Timothy May, Federal Communications Commission, Public Safety and Homeland Security Bureau, 202-418-1463, email: [timothy.may@fcc.gov](mailto:timothy.may@fcc.gov).

**SUPPLEMENTARY INFORMATION:** The meeting will be held on July 27, 2015, from 1:00 p.m. to 4:00 p.m. in the Commission Meeting Room of the FCC, Room TW-305, 445 12th Street SW., Washington, DC 20554. The Task Force is a Federal Advisory Committee that studies and will report findings and recommendations on PSAP structure and architecture to determine whether additional consolidation of PSAP infrastructure and architecture improvements would promote greater efficiency of operations, safety of life, and cost containment, while retaining needed integration with local first responder dispatch and support. On December 2, 2014, pursuant to the FACA, the Commission established the Task Force charter for a period of two years, through December 2, 2016. At this meeting, the Task Force will vote on the recommendations and report of Working Group 3, "Optimal Approach to Next-Generation 911 Resource Allocation for PSAPs."

Members of the general public may attend the meeting. The FCC will attempt to accommodate as many attendees as possible; however, admittance will be limited to seating availability. The Commission will provide audio and/or video coverage of the meeting over the Internet from the FCC's Web page at <http://www.fcc.gov/live>.

Open captioning will be provided for this event. Other reasonable

accommodations for people with disabilities are available upon request. Requests for such accommodations should be submitted via email to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or by calling the Consumer & Governmental Affairs at (202) 418-0432 (TTY). Such requests should include a detailed description of the accommodation requested. In addition, please include a way the FCC may contact you if it needs more information. Please allow at least five days' advance notice; last minute requests will be accepted, but may be impossible to fill.

Federal Communications Commission.

**Marlene H. Dortch,**  
*Secretary.*

[FR Doc. 2015-15373 Filed 6-22-15; 8:45 am]

**BILLING CODE 6712-01-P**

## FEDERAL DEPOSIT INSURANCE CORPORATION

### Notice to All Interested Parties of the Termination of the Receivership of 10406, Community Capital Bank, Jonesboro, GA

*Notice is hereby given* that the Federal Deposit Insurance Corporation ("FDIC") as Receiver for Community Capital Bank, Jonesboro, GA ("the Receiver") intends to terminate its receivership for said institution. The FDIC was appointed receiver of Community Capital Bank on October 21, 2011. The liquidation of the receivership assets has been completed. To the extent permitted by available funds and in accordance with law, the Receiver will be making a final dividend payment to proven creditors.

Based upon the foregoing, the Receiver has determined that the continued existence of the receivership will serve no useful purpose. Consequently, notice is given that the receivership shall be terminated, to be effective no sooner than thirty days after the date of this Notice. If any person wishes to comment concerning the termination of the receivership, such comment must be made in writing and sent within thirty days of the date of this Notice to: Federal Deposit Insurance Corporation, Division of Resolutions and Receiverships, Attention: Receivership Oversight Department 32.1, 1601 Bryan Street, Dallas, TX 75201.

No comments concerning the termination of this receivership will be considered which are not sent within this time frame.

Dated: June 18, 2015.

Federal Deposit Insurance Corporation

**Robert E. Feldman,**  
*Executive Secretary.*

[FR Doc. 2015-15354 Filed 6-22-15; 8:45 am]

**BILLING CODE 6714-01-P**

## FEDERAL ELECTION COMMISSION

### Sunshine Act Meetings

**Federal Register Citation of Previous Announcement: 80 FR 33265, June 11, 2015**

**PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING:** Tuesday June 16, 2015 at 10:00 a.m. and Thursday, June 18, 2015 at the conclusion of the open meeting.

**PLACE:** 999 E Street NW., Washington, DC.

**STATUS:** This meeting will be closed to the public.

**CHANGES IN THE MEETING:** This meeting will be continued at 10:00 a.m. on Tuesday, June 23, 2015.

**CONTACT PERSON FOR MORE INFORMATION:** Judith Ingram, Press Officer, Telephone: (202) 694-1220.

**Shelley E. Garr,**

*Deputy Secretary of the Commission.*

[FR Doc. 2015-15517 Filed 6-19-15; 4:15 pm]

**BILLING CODE 6715-01-P**

## FEDERAL ELECTION COMMISSION

### Sunshine Act Meetings

**FEDERAL REGISTER NOTICE OF PREVIOUS ANNOUNCEMENT:** 80 FR 34157, June 15, 2015.

**PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING:** Thursday, June 18, 2015 at 10:00 a.m.

**CHANGES IN THE MEETING:**

This item was also discussed:

**MOTION TO AUTHORIZE THE PUBLICATION OF, AND EXPENSES FOR, A FORTY YEAR REPORT**

**CONTACT PERSON FOR MORE INFORMATION:** Judith Ingram, Press Officer, Telephone: (202) 694-1220.

Individuals who plan to attend and require special assistance, such as sign language interpretation or other reasonable accommodations, should contact Shawn Woodhead Werth, Secretary and Clerk, at (202) 694-1040, at least 72 hours prior to the meeting date.

**Shawn Woodhead Werth,**

*Secretary and Clerk of the Commission.*

[FR Doc. 2015-15445 Filed 6-19-15; 11:15 am]

**BILLING CODE 6715-01-P**

## FEDERAL RESERVE SYSTEM

### Proposed Agency Information Collection Activities; Comment Request

**AGENCY:** Board of Governors of the Federal Reserve System.

**SUMMARY:** On June 15, 1984, the Office of Management and Budget (OMB) delegated to the Board of Governors of the Federal Reserve System (Board) its approval authority under the Paperwork Reduction Act (PRA), to approve of and assign OMB numbers to collection of information requests and requirements conducted or sponsored by the Board. Board-approved collections of information are incorporated into the official OMB inventory of currently approved collections of information. Copies of the PRA Submission, supporting statements and approved collection of information instruments are placed into OMB's public docket files. The Federal Reserve may not conduct or sponsor, and the respondent is not required to respond to, an information collection that has been extended, revised, or implemented on or after October 1, 1995, unless it displays a currently valid OMB number.

**DATES:** Comments must be submitted on or before August 24, 2015.

**ADDRESSES:** You may submit comments, identified by *FR 4027* or *FR 4029*, by any of the following methods:

- Agency Web site: <http://www.federalreserve.gov>. Follow the instructions for submitting comments at <http://www.federalreserve.gov/apps/foia/proposedregs.aspx>.

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Email: [regs.comments@federalreserve.gov](mailto:regs.comments@federalreserve.gov). Include OMB number in the subject line of the message.

- FAX: (202) 452-3819 or (202) 452-3102.

- Mail: Robert deV. Frierson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW., Washington, DC 20551.

All public comments are available from the Board's Web site at <http://www.federalreserve.gov/apps/foia/proposedregs.aspx> as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper form in Room 3515, 1801 K Street (between 18th and 19th Streets NW) Washington, DC 20006 between 9:00 a.m. and 5:00 p.m. on weekdays.

Additionally, commenters may send a copy of their comments to the OMB Desk Officer—Shagufta Ahmed—Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Room 10235, 725 17th Street NW., Washington, DC 20503 or by fax to (202) 395-6974.

**FOR FURTHER INFORMATION CONTACT:** A copy of the PRA OMB submission, including the proposed reporting form and instructions, supporting statement, and other documentation will be placed into OMB's public docket files, once approved. These documents will also be made available on the Federal Reserve Board's public Web site at: <http://www.federalreserve.gov/apps/reportforms/review.aspx> or may be requested from the agency clearance officer, whose name appears below.

Federal Reserve Board Clearance Officer—Nuha Elmaghrabi—Office of the Chief Data Officer, Board of Governors of the Federal Reserve System, Washington, DC 20551, (202) 452-3829. Telecommunications Device for the Deaf (TDD) users may contact (202) 263-4869, Board of Governors of the Federal Reserve System, Washington, DC 20551.

**SUPPLEMENTARY INFORMATION:**

**Request for Comment on Information Collection Proposals**

The following information collections, which are being handled under this delegated authority, have received initial Board approval and are hereby published for comment. At the end of the comment period, the proposed information collections, along with an analysis of comments and recommendations received, will be submitted to the Board for final approval under OMB delegated authority. Comments are invited on the following:

- a. Whether the proposed collection of information is necessary for the proper performance of the Federal Reserve's functions; including whether the information has practical utility;
- b. The accuracy of the Federal Reserve's estimate of the burden of the proposed information collection, including the validity of the methodology and assumptions used;
- c. Ways to enhance the quality, utility, and clarity of the information to be collected;
- d. Ways to minimize the burden of information collection 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.

**Proposal To Approve Under OMB Delegated Authority the Extension for Three Years, Without Revision, of the Following Reports**

1. *Report title:* Recordkeeping Requirements Associated with the Guidance on Sound Incentive Compensation Policies.

*Agency form number:* FR 4027.

*OMB control number:* 100-0327.

*Frequency:* On occasion.

*Reporters:* State member banks, U.S. bank holding companies, savings and loan holding companies, Edge Act and agreement corporations, and the U.S. operations of foreign banks with a branch, agency, or commercial lending company in the United States.

*Estimated annual reporting hours:*

One-time implementation: Large institutions—2,400 hours and small institutions—400 hours; Ongoing maintenance—228,400 hours.

*Estimated average hours per response:*

One-time implementation: Large institutions—480 hours and small institutions—80 hours; Ongoing maintenance—40 hours.

*Number of respondents:* One-time implementation: Large institutions—5 respondents and small institutions—5 respondents; Ongoing maintenance—5,710 respondents.

*General description of report:* This information collection is authorized pursuant to sections 9, 11(a), 11(i), 25, and 25A of the Federal Reserve Act (12 U.S.C. 248(a), 248(i), 324, 602, and 625), section 5 of the Bank Holding Company Act (12 U.S.C. 1844), section 10(b)(2) of the Home Owners' Loan Act (12 U.S.C. 1467a(b)(2)), and section 7(c) of the International Banking Act (12 U.S.C. 3105(c)). Because the recordkeeping requirements are contained within guidance (and not a statute or regulation) they are voluntary. Because the records will be maintained by each banking institution, the Freedom of Information Act (FOIA) would only be implicated if the Board's examiners retained a copy of the records as part of an examination or supervision of the banking institution. To the extent the Board collects this information during the course of an examination or supervision of a banking institution, the information is considered confidential under exemption 8 of the FOIA (5 U.S.C. 552(b)(8)). In addition, the information may also be kept confidential under exemption 4 of the FOIA which protects commercial or financial information obtained from a person that is privileged or confidential (5 U.S.C. 552(b)(4)).

*Abstract:* Incentive compensation practices in the financial services industry were one of many factors contributing to the financial crisis that began in 2007. Banking organizations too often rewarded employees for increasing the firm's short-term revenue or profit without adequate recognition of the risks the employees' activities posed for the firm. More importantly, problematic compensation practices were not limited to the most senior executives at financial firms. Compensation practices can encourage employees at various levels of a banking organization, either individually or as a group, to undertake imprudent risks that can significantly and adversely affect the risk profile of the firm.

The Sound Incentive Compensation Policies (the Guidance) was developed to help protect the safety and soundness of banking organizations and promote the prompt improvement of incentive compensation practices throughout the banking industry. In addition, the guidance is consistent with the Principles for Sound Compensation Practices adopted by the Financial Stability Board (FSB) in April 2009, as well as the Implementation Standards for those principles issued by the FSB in September 2009.

*Compatibility With Effective Controls and Risk Management*

Principle 2 of the Guidance states that a banking organization should have strong controls governing its process for designing, implementing, and monitoring incentive compensation arrangements. An organization's policies and procedures should:

- Identify and describe the role(s) of the personnel, business units, and control units authorized to be involved in the design, implementation, and monitoring of incentive compensation arrangements;
- identify the source of significant risk-related inputs into these processes and establish appropriate controls governing the development and approval of these inputs to help ensure their integrity; and
- identify the individual(s) and control unit(s) whose approval is necessary for the establishment of new incentive compensation arrangements or modification of existing arrangements. Banking organizations also should create and maintain sufficient documentation to permit an audit of the organization's processes for establishing, modifying, and monitoring incentive compensation arrangements.

The Guidance also states that a banking organization should conduct regular internal reviews to ensure that

its processes for achieving and maintaining balanced incentive compensation arrangements are consistently followed. Such reviews should be conducted by audit, compliance, or other personnel in a manner consistent with the organization's overall framework for compliance monitoring. An organization's internal audit department also should separately conduct regular audits of the organization's compliance with its established policies and controls relating to incentive compensation arrangements. The results should be reported to appropriate levels of management and, where appropriate, the organization's board of directors.

#### *Strong Corporate Governance*

Principle 3 of the Guidance states that the board of directors should review and approve the overall goals and purposes of the firm's incentive compensation system. The board of directors should provide clear direction to management to ensure that its policies and procedures are carried out in a manner that achieves balance and is consistent with safety and soundness.

The board of directors should approve and document any material exceptions or adjustments to the incentive compensation arrangements established for senior executives and should carefully consider and monitor the effects of any approved exceptions or adjustments on the balance of the arrangement, the risk-taking incentives of the senior executive, and the safety and soundness of the organization.

The board of directors should receive and review, on an annual or more frequent basis, an assessment by management, with appropriate input from risk management personnel, of the effectiveness of the design and operation of the organization's incentive compensation system in providing risk taking incentives that are consistent with the organization's safety and soundness. These reports should include an evaluation of whether or how incentive compensation practices may be encouraging excessive risk taking. These reviews and reports should be appropriately scoped to reflect the size and complexity of the banking organization's activities and the prevalence and scope of its incentive compensation arrangements. In addition, at banking organizations that are significant users of incentive compensation arrangements, the board should receive periodic reports that review incentive compensation awards and payments relative to risk outcomes on a backward-looking basis to determine whether the organization's

incentive compensation arrangements may be promoting excessive risk-taking.

*2. Report title:* Interagency Guidance on Managing Compliance and Reputation Risks for Reverse Mortgage Products.

*Agency form number:* FR 4029.

*OMB control number:* 7100-0330.

*Frequency:* On occasion.

*Reporters:* State member banks that originate proprietary and Home Equity Conversion Program (HECM) reverse mortgages.

*Estimated annual reporting hours:* Implementation of policies and procedures, 680 hours; Review and maintenance of policies and procedures, 136 hours.

*Estimated average hours per response:* Implementation of policies and procedures, 40 hours; Review and maintenance of policies and procedures, 8 hours.

*Number of respondents:* Implementation of policies and procedures, 17 respondents; Review and maintenance of policies and procedures, 17 respondents.

*General description of report:* Previously, the Board's Legal Division determined that the Board was authorized to issue this guidance pursuant to its authority under section 18(f) of the Federal Trade Commission Act, which authorized the Board to prescribe regulations regarding unfair or deceptive acts or practice by banks (15 U.S.C. 57a(f)) and section 105 of the Truth in Lending Act, which authorized the Board to prescribe regulations to carry out the purposes of the Truth in Lending Act (TILA) (15 U.S.C. 1604). However, under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) much of the Board's authority under these laws was transferred to the Consumer Financial Protection Bureau. Nonetheless, we continue to believe that the Board has the authority to issue this guidance pursuant to its authority under section 39 of the Federal Deposit Insurance Act (FDI Act), which generally authorizes the Board to establish safety and soundness standards for depository institutions supervised by the Board (12 U.S.C. 1381p-1(a)). Financial institutions' obligation under this guidance is voluntary. Because the documentation required by the guidance is maintained by each institution, the Freedom of Information Act (FOIA) would only be implicated if the Board's examiners retained a copy of this information as part of an examination or supervision of a bank. However, records obtained as a part of an examination or supervision of a bank are exempt from disclosure under FOIA exemption (b)(8),

for examination material (5 U.S.C. 552(b)(8)). In addition, the information may also be kept confidential under exemption 4 of the FOIA which protects commercial or financial information obtained from a person that is privileged or confidential (5 U.S.C. 552(b)(4)).

*Abstract:* Reverse mortgages are home-secured loans typically offered to elderly consumers. Financial institutions currently provide two types of reverse mortgage products: The lenders' own proprietary reverse mortgage products and reverse mortgages insured by the Department of Housing and Urban Development's Federal Housing Administration (FHA). Reverse mortgage loans insured by the FHA are made pursuant to the guidelines and rules established by HUD's HECM program. HECM loans and proprietary reverse mortgages are also subject to the rules that implement consumer protection laws such as the Real Estate Settlement Procedures Act (RESPA) and TILA.

In August 2010, the Federal Financial Institutions Examination Council, on behalf of its member agencies,<sup>1</sup> published a **Federal Register** notice adopting supervisory guidance titled "Reverse Mortgage Products: Guidance for Managing Compliance and Reputation Risks."<sup>2</sup> The guidance is designed to help financial institutions with risk management and assist financial institutions' efforts to ensure that their reverse mortgage lending practices adequately address consumer compliance and reputation risks.

The guidance describes reporting, recordkeeping, and disclosures for both proprietary and HECM reverse mortgages. A number of these disclosures are "usual and customary" business practices for proprietary and HECM reverse mortgages, and these would not meet the PRA's definition of "paperwork." Other included disclosure requirements are currently mandated by RESPA or TILA for all reverse mortgage loans and information collections required by HUD's rules for HECM loans.<sup>3</sup> Discussion of these requirements in the guidance is also not considered additional paperwork burden imposed by the guidance.

Proprietary reverse mortgage products, however, are not subject to HUD's rules for HECM loans. To the extent that the interagency guidance applies HECM requirements to

<sup>1</sup> The Board, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

<sup>2</sup> 75 FR 50801.

<sup>3</sup> OMB Control No. 2502-0524.

proprietary loans, this would meet the PRA's definition of paperwork burden.

There are also additional provisions in the guidance that apply to both proprietary and HECM reverse mortgages that do not meet the "usual and customary" standard, are not covered by already approved information collections and, therefore, likewise meet the PRA's definition of paperwork burden.

#### *Proprietary Reverse Mortgages*

Financial institutions offering proprietary reverse mortgages are encouraged under the guidance to follow or adopt relevant HECM requirements for mandatory counseling, disclosures, affordable origination fees, restrictions on cross-selling of ancillary products, and reliable appraisals.

#### *Proprietary and HECM Reverse Mortgages*

Financial institutions offering either proprietary or HECM reverse mortgages are encouraged to develop clear and balanced product descriptions and make them available to consumers shopping for a mortgage. They should set forth a description of how disbursements can be received and include timely information to supplement disclosures mandated by TILA and other disclosures. Promotional materials and product descriptions should include information about the costs, terms, features, and risks of reverse mortgage products.

Financial institutions should adopt policies and procedures that prohibit directing a consumer to a particular counseling agency or contacting a counselor on the consumer's behalf. They should adopt clear written policies and establish internal controls specifying that neither the lender nor any broker will require the borrower to purchase any other product from the lender in order to obtain the mortgage. Policies should be clear so that originators do not have an inappropriate incentive to sell other products that appear linked to the granting of a mortgage. Legal and compliance reviews should include oversight of compensation programs so that lending personnel are not improperly encouraged to direct consumers to particular products.

Financial institutions making, purchasing, or servicing reverse mortgages through a third party should conduct due diligence and establish criteria for third-party relationships and compensation. They should set requirements for agreements and establish systems to monitor compliance with the agreement and applicable laws

and regulations. They should also take corrective action if a third party fails to comply. Third-party relationships should be structured in a way that does not conflict with RESPA.

Board of Governors of the Federal Reserve System, June 18, 2015.

**Robert deV. Frierson,**  
*Secretary of the Board.*

[FR Doc. 2015-15412 Filed 6-22-15; 8:45 am]

**BILLING CODE 6210-01-P**

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## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Food and Drug Administration

[Docket No. FDA-2011-N-0481]

#### **Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; New Animal Drugs for Investigational Uses**

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice.

**SUMMARY:** The Food and Drug Administration (FDA) is announcing that a proposed collection of information has been submitted to the Office of Management and Budget (OMB) for review and clearance under the Paperwork Reduction Act of 1995.

**DATES:** Fax written comments on the collection of information by July 23, 2015.

**ADDRESSES:** To ensure that comments on the information collection are received, OMB recommends that written comments be faxed to the Office of Information and Regulatory Affairs, OMB, Attn: FDA Desk Officer, FAX: 202-395-7285, or emailed to [oira\\_submission@omb.eop.gov](mailto:oira_submission@omb.eop.gov). All comments should be identified with the OMB control number 0910-0117. Also include the FDA docket number found in brackets in the heading of this document.

**FOR FURTHER INFORMATION CONTACT:** FDA PRA Staff, Office of Operations, Food and Drug Administration, 8455 Colesville Rd., COLE-14526, Silver Spring, MD 20993-0002, [PRAStaff@fda.hhs.gov](mailto:PRAStaff@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** In compliance with 44 U.S.C. 3507, FDA has submitted the following proposed collection of information to OMB for review and clearance.

#### **New Animal Drugs for Investigational Uses—21 CFR Part 511**

#### **OMB Control Number 0910-0117—Extension**

FDA has the authority under the Federal Food, Drug, and Cosmetic Act (the FD&C Act) to approve new animal drugs. Section 512(j) of the FD&C Act (21 U.S.C. 360b(j)) authorizes FDA to issue regulations relating to the investigational use of new animal drugs. The regulations setting forth the conditions for investigational use of new animal drugs have been codified at part 511. If the new animal drug is only for tests in vitro or in laboratory research animals, the person distributing the new animal drug must maintain records showing the name and post office address of the expert or expert organization to whom it is shipped and the date, quantity, and batch or code mark of each shipment and delivery for a period of 2 years after such shipment or delivery. Before shipping a new animal drug for clinical investigations in animals, a sponsor must submit to FDA a Notice of Claimed Investigational Exemption (NCIE). The NCIE must contain, among other things, the following specific information: (1) Identity of the new animal drug, (2) labeling, (3) statement of compliance of any non-clinical laboratory studies with good laboratory practices, (4) name and address of each clinical investigator, (5) the approximate number of animals to be treated or amount of new animal drug(s) to be shipped, and (6) information regarding the use of edible tissues from investigational animals. Part 511 also requires that records be established and maintained to document the distribution and use of the investigational new animal drug to assure that its use is safe, and that the distribution is controlled to prevent potential abuse. The Agency uses these required records under its Bioresearch Monitoring Program to monitor the validity of the studies submitted to FDA to support new animal drug approval and to assure that proper use of the drug is maintained by the investigator.

Investigational new animal drugs are used primarily by drug industry firms, academic institutions, and the government. Investigators may include individuals from these entities, as well as research firms and members of the medical professions. Respondents to this collection of information are the persons who use new animal drugs for investigational purposes.

In the **Federal Register** of April 2, 2015 (80 FR 17758), FDA published a 60-day notice requesting public comment on the proposed collection of



information. Two comments were solicited and are therefore not addressed. FDA estimates the burden of this information collection as follows:

TABLE 1—ESTIMATED ANNUAL REPORTING BURDEN <sup>1</sup>

21 CFR section	Number of respondents	Number of responses per respondent	Total annual responses	Average burden per response	Total hours
511.1(b)(4) .....	263	5.30	1,395	1	1,395
511.1(b)(5) .....	263	.26	69	8	552
511.1(b)(6) .....	263	.01	2	1	2
511.1(b)(8)(ii) .....	263	.06	15	2	30
511.1(b)(9) .....	263	.06	15	8	120
Total .....					2,099

<sup>1</sup> There are no capital costs or operating and maintenance costs associated with this collection of information.

TABLE 2—ESTIMATED ANNUAL RECORDKEEPING BURDEN <sup>1</sup>

21 CFR section	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping	Total hours
511.1(a)(3) .....	263	2.07	545	1	545
511.1(b)(3) .....	263	5.30	1,395	1	1,395
511.1(b)(7)(ii) .....	263	5.30	1,395	3.5	4,882.5
511.1(b)(8)(i) .....	263	5.30	1,395	3.5	4,882.5
Total .....					11,705

<sup>1</sup> There are no capital costs or operating and maintenance costs associated with this collection of information.

The estimate of the time required for reporting requirements, record preparation, and maintenance for this collection of information is based on informal Agency communication with industry. Based on the number of sponsors subject to animal drug user fees, FDA estimates that there are 263 respondents. We use this estimate consistently throughout the table and calculate the “annual frequency per respondent” by dividing the total annual responses by number of respondents. Additional information needed to make a final calculation of the total burden hours (*i.e.*, the number of respondents, the number of recordkeepers, the number of NCIEs received, etc.) is derived from Agency records.

Dated: June 17, 2015.

**Leslie Kux,**

Associate Commissioner for Policy.

[FR Doc. 2015-15320 Filed 6-22-15; 8:45 am]

BILLING CODE 4164-01-P

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Food and Drug Administration**

[Docket No. FDA-2012-N-0253]

**Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; Postmarketing Adverse Drug Experience Reporting and Recordkeeping Biological Products**

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice.

**SUMMARY:** The Food and Drug Administration (FDA) is announcing that a proposed collection of information has been submitted to the Office of Management and Budget (OMB) for review and clearance under the Paperwork Reduction Act of 1995.

**DATES:** Fax written comments on the collection of information by July 22, 2015.

**ADDRESSES:** To ensure that comments on the information collection are received, OMB recommends that written comments be faxed to the Office of Information and Regulatory Affairs, OMB, Attn: FDA Desk Officer, FAX: 202-395-7285, or emailed to [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov). All

comments should be identified with the OMB control number 0910-0230. Also include the FDA docket number found in brackets in the heading of this document.

**FOR FURTHER INFORMATION CONTACT:** FDA PRA Staff, Office of Operations, Food and Drug Administration, 8455 Colesville Rd., COLE-14526, Silver Spring, MD 20993-0002, [PRASStaff@fda.hhs.gov](mailto:PRASStaff@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** In compliance with 44 U.S.C. 3507, FDA has submitted the following proposed collection of information to OMB for review and clearance.

**Postmarketing Adverse Drug Experience Reporting**

OMB Control Number 0910-0230—(Extension)

Sections 201, 502, 505, and 701 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321, 352, 355, and 371) require that marketed drugs be safe and effective. In order to know whether drugs that are not safe and effective are on the market, FDA must be promptly informed of adverse experiences associated with the use of marketed drugs. In order to help ensure this, FDA issued regulations at §§ 310.305 and 314.80 (21 CFR 310.305 and 314.80) to impose reporting and recordkeeping requirements on the drug industry that



would enable FDA to take the action necessary to protect the public health from adverse drug experiences.

All applicants who have received marketing approval of drug products are required to report to FDA serious, unexpected adverse drug experiences (“15-day Alert reports”), as well as follow up reports (§ 314.80(c)(1)). This includes reports of all foreign or domestic adverse experiences as well as those based on information from applicable scientific literature and certain reports from postmarketing studies. Section 314.80(c)(1)(iii) pertains to such reports submitted by non-applicants.

Under § 314.80(c)(2), applicants must provide periodic reports of adverse drug experiences. A periodic report includes, for the reporting interval, reports of serious, expected adverse drug experiences and all nonserious adverse drug experiences and an index of these reports, a narrative summary and analysis of adverse drug experiences, an analysis of the 15-day Alert reports submitted during the reporting interval, and a history of actions taken because

of adverse drug experiences. Under § 314.80(i), applicants must keep for 10 years records of all adverse drug experience reports known to the applicant.

For marketed prescription drug products without approved new drug applications or abbreviated new drug applications, manufacturers, packers, and distributors are required to report to FDA serious, unexpected adverse drug experiences as well as follow-up reports (§ 310.305(c)). Section 310.305(c)(5) pertains to the submission of follow-up reports to reports forwarded to the manufacturers, packers, and distributors by FDA. Under § 310.305(f), each manufacturer, packer, and distributor shall maintain for 10 years records of all adverse drug experiences required to be reported.

The primary purpose of FDA’s adverse drug experience reporting system is to enable identification of signals for potentially serious safety problems with marketed drugs. Although premarket testing discloses a general safety profile of a new drug’s comparatively common adverse effects,

the larger and more diverse patient populations exposed to the marketed drug provide the opportunity to collect information on rare, latent, and long-term effects. Signals are obtained from a variety of sources, including reports from patients, treating physicians, foreign regulatory agencies, and clinical investigators. Information derived from the adverse drug experience reporting system contributes directly to increased public health protection because the information enables FDA to make important changes to the product’s labeling (such as adding a new warning), decisions about risk evaluation and mitigation strategies or the need for postmarket studies or clinical trials, and when necessary, to initiate removal of a drug from the market.

In the **Federal Register** of March 12, 2015 (80 FR 13009), FDA published a 60-day notice requesting public comment on the proposed collection of information. No comments were received.

FDA estimates the burden of this collection of information as follows:

TABLE 1—ESTIMATED ANNUAL REPORTING BURDEN<sup>1 2</sup>

21 CFR section	No. of respondents	No. of responses per respondent	Total annual responses	Average burden per response	Total hours
310.305(c)(5) .....	3	1	3	1	3
314.80(c)(1)(iii) .....	5	1	5	1	5
314.80(c)(2) .....	724	19.33	13,996	60	839,760
Total .....					839,768

<sup>1</sup> The reporting burden for § 310.305(c)(1), (c)(2), and (c)(3), and § 314.80(c)(1)(i) and (c)(1)(ii) is covered under OMB Control No. 0910–0291.

<sup>2</sup> The capital costs or operating and maintenance costs associated with this collection of information are approximately \$25,000 annually.

TABLE 2—ESTIMATED ANNUAL RECORDKEEPING BURDEN<sup>1 2</sup>

21 CFR section	No. of recordkeepers	No. of records per recordkeeper	Total annual records	Average burden per recordkeeping	Total hours
310.305(f) .....	25	1	25	16	400
314.80(i) .....	724	508	367,959	16	5,887,344
Total .....					5,887,744

<sup>1</sup> There are no capital costs or operating costs associated with this collection of information.

<sup>2</sup> There are maintenance costs of approximately \$22,000 annually.

Dated: June 17, 2015.

**Leslie Kux,**

*Associate Commissioner for Policy.*

[FR Doc. 2015–15319 Filed 6–22–15; 8:45 am]

**BILLING CODE 4164–01–P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Food and Drug Administration**

[Docket No. FDA-2015-N-0002]

**Determination That ABILIFY (Aripiprazole) Solution Was Not Withdrawn From Sale for Reasons of Safety or Effectiveness**

**AGENCY:** Food and Drug Administration, HHS.

**ACTION:** Notice.

**SUMMARY:** The Food and Drug Administration (FDA or Agency) has determined that the drug product listed in this document was not withdrawn from sale for reasons of safety or effectiveness. This determination means that FDA will not begin procedures to withdraw approval of abbreviated new drug applications (ANDAs) that refer to this drug product, and it will allow FDA to continue to approve ANDAs that refer to the product as long as they meet relevant legal and regulatory requirements.

**FOR FURTHER INFORMATION CONTACT:** Stacy Kane, Center for Drug Evaluation and Research, Food and Drug

Administration, 10903 New Hampshire Ave., Bldg. 51, Rm. 6207, Silver Spring, MD 20993-0002, 301-796-8363, [Stacy.Kane@fda.hhs.gov](mailto:Stacy.Kane@fda.hhs.gov).

**SUPPLEMENTARY INFORMATION:** In 1984, Congress enacted the Drug Price Competition and Patent Term Restoration Act of 1984 (Pub. L. 98-417) (the 1984 amendments), which authorized the approval of duplicate versions of drug products approved under an ANDA procedure. ANDA applicants must, with certain exceptions, show that the drug for which they are seeking approval contains the same active ingredient in the same strength and dosage form as the “listed drug,” which is a version of the drug that was previously approved. ANDA applicants do not have to repeat the extensive clinical testing otherwise necessary to gain approval of a new drug application (NDA).

The 1984 amendments include what is now section 505(j)(7) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355(j)(7)), which requires FDA to publish a list of all approved drugs. FDA publishes this list as part of the “Approved Drug Products With Therapeutic Equivalence Evaluations,”

which is generally known as the “Orange Book.” Under FDA regulations, a drug is removed from the list if the Agency withdraws or suspends approval of the drug’s NDA or ANDA for reasons of safety or effectiveness or if FDA determines that the listed drug was withdrawn from sale for reasons of safety or effectiveness (21 CFR 314.162).

Under § 314.161(a) (21 CFR 314.161(a)), the Agency must determine whether a listed drug was withdrawn from sale for reasons of safety or effectiveness: (1) Before an ANDA that refers to that listed drug may be approved, (2) whenever a listed drug is voluntarily withdrawn from sale and ANDAs that refer to the listed drug have been approved, and (3) when a person petitions for such a determination under 21 CFR 10.25(a) and 10.30. Section 314.161(d) provides that if FDA determines that a listed drug was withdrawn from sale for safety or effectiveness reasons, the Agency will initiate proceedings that could result in the withdrawal of approval of the ANDAs that refer to the listed drug.

FDA has become aware that the drug product listed in the table is no longer being marketed.

Application No.	Drug	Applicant
NDA 021713 .....	ABILIFY (aripiprazole) Solution; Oral, 1 milligram/1 milliliter.	Otsuka Pharmaceutical Development and Commercialization Inc., 2440 Research Blvd., Rockville, MD 20850.

FDA has reviewed its records and, under § 314.161, has determined that the drug product listed in this document was not withdrawn from sale for reasons of safety or effectiveness. Accordingly, the Agency will continue to list the drug product listed in this document in the “Discontinued Drug Product List” section of the Orange Book. The “Discontinued Drug Product List” identifies, among other items, drug products that have been discontinued from marketing for reasons other than safety or effectiveness.

Approved ANDAs that refer to the NDA listed in this document are unaffected by the discontinued marketing of the products subject to that NDA. Additional ANDAs that refer to this product may also be approved by the Agency if they comply with relevant legal and regulatory requirements. If FDA determines that labeling for this drug product should be revised to meet current standards, the Agency will advise ANDA applicants to submit such labeling.

Dated: June 16, 2015.

**Leslie Kux,**  
Associate Commissioner for Policy.  
[FR Doc. 2015-15327 Filed 6-22-15; 8:45 am]  
**BILLING CODE 4164-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Health Resources and Services Administration**

**Centers for Disease Control and Prevention (CDC)/Health Resources and Services Administration (HRSA) Advisory Committee on HIV, Viral Hepatitis and Sexually Transmitted Diseases (STD) Prevention and Treatment; Notice of Meeting**

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463), notice is hereby given of the following meeting:

**Name:** CDC/HRSA Advisory Committee on HIV, Viral Hepatitis and STD Prevention and Treatment (CHACHSPT).

**Date and Time:** July 28, 2015, 3:00 p.m.–4:00 p.m.

**Place:** This meeting is accessible via audio conference call and Adobe Connect Pro.

**Status:** This meeting is open to the public. The virtual meeting is available via teleconference line and Adobe Connect Pro Meeting and will accommodate approximately 100 people. Join the meeting by:

1. (Audio Portion) Calling the Toll-free Phone Number 1-800-369-3340 and providing the Public Participant Pass Code 8527572; and

2. (Visual Portion) Connecting to the Advisory Committee Adobe Connect Pro Meeting using the following URL: [https://hrsa.connectsolutions.com/cdc-hrsa\\_AC/](https://hrsa.connectsolutions.com/cdc-hrsa_AC/). (Copy and paste the above link into your browser if it does not work directly). Participants should call and connect 15 minutes prior to the meeting in order for logistics to be set up. Call (301) 443-9684 or send an email to [sgordon@hrsa.gov](mailto:sgordon@hrsa.gov) if you have any questions, or send an email to [CWilliams2@hrsa.gov](mailto:CWilliams2@hrsa.gov) if you are having trouble connecting to the meeting site.

*Purpose:* This Committee is charged with advising the Director, CDC, and the Acting Administrator, HRSA, regarding activities related to prevention and control of HIV/AIDS, Viral Hepatitis and other STDs, the support of health care services to persons living with HIV/AIDS, and the education of health professionals and the public about HIV/AIDS, Viral Hepatitis, and other STDs.

*Agenda:* Agenda items include: (1) Discuss and vote on the "Resolution to express CHACHSPT's recognition on the 25th Anniversary of the Ryan White CARE Act"; and (2) hear the orientation session and discuss the purpose and role of the CHACHSPT. Agenda items are subject to change as priorities dictate.

**FOR FURTHER INFORMATION CONTACT:**

Shelley B. Gordon, Senior Public Health Analyst, Health Resources and Services Administration, HIV/AIDS Bureau, Division of Policy and Data, 5600 Fishers Lane, Room 7C-26, Rockville, Maryland 20857, telephone (301) 443-9684, fax (301) 443-3343, or email [sgordon@hrsa.gov](mailto:sgordon@hrsa.gov).

**Jackie Painter,**

*Director, Division of the Executive Secretariat.*

[FR Doc. 2015-15283 Filed 6-22-15; 8:45 am]

**BILLING CODE 4165-15-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Announcement of Revision to the Department of Health and Human Services Guidance on Procedures for the Provision of Marijuana for Medical Research as Published on May 21, 1999.**

**AGENCY:** Office of the Secretary, Office of the Assistant Secretary for Health, Department of Health and Human Services.

**ACTION:** Notice.

**SUMMARY:** Announcement of the elimination of the Public Health Service (PHS) review of non-federally funded research protocols involving marijuana and the utilization of the existing Food and Drug Administration (FDA) Investigational New Drug (IND) process for drug development.

**DATES:** Effective June 2015.

**ADDRESSES:** Not applicable.

**FOR FURTHER INFORMATION CONTACT:**

Christine Cichetti, Office of the Assistant Secretary for Health, U.S. Department of Health and Human Services; telephone (202) 619-0242; email: [Christine.Cichetti@samhsa.hhs.gov](mailto:Christine.Cichetti@samhsa.hhs.gov).

**SUPPLEMENTARY INFORMATION:** On May 21, 1999, the PHS review process was established in response to enhanced interest by the biomedical research community in determining the potential therapeutic benefits of marijuana. The original notice of policy change can be found at <http://grants.nih.gov/grants/guide/notice-files/not99-091.html>. The PHS review process, which includes a committee review of study protocols, helped create a pathway for non-federally funded researchers to conduct these studies. In order to further facilitate research, HHS recently re-evaluated the PHS review procedures to identify opportunities for increased efficiency. The Office of the Assistant Secretary for Health (OASH), in consultation with the National Institutes of Health (NIH) and FDA, determined that the PHS review overlaps in several important ways with FDA's IND process and is no longer necessary to support the conduct of scientifically-sound studies into the potential therapeutic uses of marijuana. The PHS review committee considers the following: Research quality; incorporation of elements of good clinical and laboratory research practices; emphasis on adequate and well-controlled clinical studies; and development of dosage forms of marijuana that would be an alternative to smoked marijuana. The FDA's IND review process considers similar research characteristics: Adherence to good clinical and laboratory practices; whether pivotal clinical trials to support the marketing of proposed drug products are adequate and well-controlled; and the therapeutic benefits and risks to study subjects, favoring dosage forms that would provide measured and consistent dosing to patients as well as reduced exposure to potentially harmful constituents. Therefore, while not identical, the two processes have similar goals (e.g., guiding research on drug development and assuring appropriate treatment of human subjects), share similar criteria for protocol reviews, and possess similar capacity to engage with federal experts for consultation. Based on these considerations, and in order to streamline the application and approval processes for cannabis research, the committee that conducts the PHS review shall be eliminated. Below are instructions for researchers interested in the acquisition of cannabis for medical research. Complete guidance can be found on the NIH/National Institute on Drug Abuse (NIDA) Web site: (<http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program>).

**Background**

Under the 1961 international *Single Convention on Narcotic Drugs* (amended in 1972), cannabis is designated a Schedule I substance, and participating countries are required to restrict production, manufacture, possession, and distribution of marijuana except for medical and scientific purposes. The Drug Enforcement Administration (DEA) regulates the cultivation of marijuana for research purposes through licensing requirements and establishment of annual aggregate production quotas under the authority of the 1970 Controlled Substances Act (CSA), which implements the Single Convention.

Marijuana for use in research can be obtained through the NIDA Drug Supply Program. All applicants must fulfill the following criteria:

*For non-NIH funded human research projects:*

1. Demonstrate scientific validity and ethical soundness through review by the FDA's IND process. Research protocols will undergo a scientific review which assures the safety and rights of subjects and the scientific quality of the clinical investigations, and assesses the likelihood that investigations will yield data capable of meeting the statutory standards for drug marketing approval; and
2. Possess a DEA registration for marijuana, a Schedule I controlled substance under the CSA.

*For NIH-funded projects:*

1. Demonstrate scientific validity and ethical soundness through the NIH grant review process which consists of three steps: (1) The NIH peer review system, which assesses the scientific and technical merit of all grant applications; (2) the National Advisory Council of the funding institute, comprising eminent scientists as well as public members; and (3) the funding institute's Director, who makes the final funding decision on the merit of an application, based on peer review, public health significance, and institute priorities. To find studies approved through the NIH review process go to: <http://projectreporter.nih.gov/reporter.cfm>;
2. Have an active-status IND application on file with the FDA (for human research only), which has been evaluated by FDA and found safe to proceed. For additional information go to: <http://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/InvestigationalNewDrugINDApplication/default.htm>; and

3. Possess a DEA registration for marijuana, a Schedule I controlled substance under the CSA.

Once the above steps have been completed, investigators should contact the NIDA Drug Supply Program to place an order for marijuana with specific characteristics with regard to concentrations of delta-9-tetrahydrocannabinol (THC), cannabidiol (CBD), and other cannabinoids. The program official will verify that the application is complete (with all the above-mentioned steps fulfilled), and forward the order on to the contractor responsible for shipping the marijuana. While not required in all cases, it is recommended that researchers contact the NIDA Drug Supply Program early in the planning of a study to obtain information on specific strains of marijuana available so that this information can be included in the protocol and IND (<http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program>).

Dated: June 17, 2015.

**Karen B. DeSalvo,**

*Acting Assistant Secretary for Health.*

[FR Doc. 2015-15479 Filed 6-22-15; 8:45 am]

**BILLING CODE 4150-28-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Eunice Kennedy Shriver National Institute of Child Health and Human Development; Notice of Closed Meeting

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 meeting.

The meeting will be closed to the public in accordance with the provisions set forth in section 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:* National Institute of Child Health and Human Development Special Emphasis Panel; CHRCDA/K12.

*Date:* July 21, 2015.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Doubletree Hotel Bethesda, (Formerly Holiday Inn Select), 8120 Wisconsin Avenue, Bethesda, MD 20814.

*Contact Person:* Rita Anand, Ph.D., Scientific Review Officer, Scientific Review Branch, Eunice Kennedy Shriver National Institute of Child Health And Human Development, NIH, 6100 Executive Boulevard, Room 5B01, Bethesda, MD 20892-9304, (301) 496-1487, [anandr@mail.nih.gov](mailto:anandr@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research; 93.865, Research for Mothers and Children; 93.929, Center for Medical Rehabilitation Research; 93.209, Contraception and Infertility Loan Repayment Program, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Michelle Trout,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15301 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Center For Complementary & Integrative Health; Notice of Closed Meeting

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 meeting.

The meeting 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 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:* National Center for Complementary and Integrative Health Special Emphasis Panel Clinical Research.

*Date:* July 16, 2015.

*Time:* 12:00 p.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Democracy Two, Suite 401, 6707 Democracy Boulevard, Bethesda, MD 20892 (Virtual Meeting).

*Contact Person:* Hungyi Shau, Ph.D., Scientific Review Officer, National Center for Complementary and Integrative Health, National Institutes of Health, 6707 Democracy Boulevard, Suite 401, Bethesda, MD 20892, Phone: 301-402-1030, [Hungyi.Shau@nih.gov](mailto:Hungyi.Shau@nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.213, Research and Training in Complementary and Alternative Medicine, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Michelle Trout,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15303 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Environmental Health Sciences; 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 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:* National Institute of Environmental Health Sciences Special Emphasis Panel—NIEHS Outstanding New Environmental Scientist Review Meeting.

*Date:* July 16, 2015.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Hilton Garden Inn Durham Southpoint, 7007 Fayetteville Road, Durham, NC 27713.

*Contact Person:* Janice B. Allen, Ph.D., Scientific Review Officer, Scientific Review Branch, Division of Extramural Research and Training, Nat. Institute of Environmental Health Science, P.O. Box 12233, MD EC-30/Room 3170 B, Research Triangle Park, NC 27709, 919/541-7556.

*Name of Committee:* National Institute of Environmental Health Sciences Special Emphasis Panel—Review of Conferences in Environmental Health.

*Date:* July 16, 2015.

*Time:* 12:00 p.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* NIEHS/National Institutes of Health, Keystone Building, 530 Davis Drive, Research Triangle Park, NC 27709, (Telephone Conference Call).

*Contact Person:* Sally Eckert-Tilotta, Ph.D., Scientific Review Officer, Nat. Institute of Environmental Health Sciences, Office of Program Operations, Scientific Review Branch, P.O. Box 12233, Research Triangle Park, NC 27709, (919) 541-1446, [eckertt1@niehs.nih.gov](mailto:eckertt1@niehs.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.115, Biometry and Risk

Estimation—Health Risks from Environmental Exposures; 93.142, NIEHS Hazardous Waste Worker Health and Safety Training; 93.143, NIEHS Superfund Hazardous Substances—Basic Research and Education; 93.894, Resources and Manpower Development in the Environmental Health Sciences; 93.113, Biological Response to Environmental Health Hazards; 93.114, Applied Toxicological Research and Testing, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Carolyn Baum,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015–15305 Filed 6–22–15; 8:45 am]

**BILLING CODE 4140–01–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Heart, Lung, and Blood 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 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:* National Heart, Lung, and Blood Institute Special Emphasis Panel—Heart, Lung, and Blood—Atherosclerosis.

*Date:* July 10, 2015.

*Time:* 11:00 a.m. to 2:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6701 Rockledge Drive, Room 7198, Bethesda, MD 20892 (Telephone Conference Call).

*Contact Person:* Kristin Goltry, Ph.D. Scientific Review Officer, Office of Scientific Review/DERA, National Heart, Lung, and Blood Institute, 6701 Rockledge Drive, Room 7198, Bethesda, MD 20892, 301–435–0297, [goltrykl@mail.nih.gov](mailto:goltrykl@mail.nih.gov).

*Name of Committee:* National Heart, Lung, and Blood Institute Special Emphasis Panel—Onsite Tools and Technologies for Heart, Lung, and Blood Clinical Research Point-of-Care.

*Date:* July 13, 2015.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Bethesda Marriott Suites, 6711 Democracy Boulevard, Bethesda, MD 20817.

*Contact Person:* Kristin Goltry, Ph.D. Scientific Review Officer, Office of Scientific Review/DERA, National Heart, Lung, and Blood Institute, 6701 Rockledge Drive, Room 7198, Bethesda, MD 20892, 301–435–0297, [goltrykl@mail.nih.gov](mailto:goltrykl@mail.nih.gov).

*Name of Committee:* National Heart, Lung, and Blood Institute Special Emphasis Panel—Vascular Dysfunction in Severe Malaria.

*Date:* July 14, 2015.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* The Embassy Row Hotel, 2015 Massachusetts Avenue NW., Washington, DC 20036.

*Contact Person:* Susan Wohler Sunnarborg, Ph.D. Scientific Review Officer, Office of Scientific Review/DERA, National Heart, Lung, and Blood Institute, 6701 Rockledge Drive, Room 7182, Bethesda, MD 20892, [sunnarborgsw@nhlbi.nih.gov](mailto:sunnarborgsw@nhlbi.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.233, National Center for Sleep Disorders Research; 93.837, Heart and Vascular Diseases Research; 93.838, Lung Diseases Research; 93.839, Blood Diseases and Resources Research, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Michelle Trout,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015–15302 Filed 6–22–15; 8:45 am]

**BILLING CODE 4140–01–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Center for Scientific Review; Notice of Closed Meeting

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 meeting.

The meeting 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 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, Member Conflict: Neurobiology of Sensory, Perception and Cognition.

*Date:* June 25, 2015.

*Time:* 10:00 a.m. to 7:00 p.m.

*Agenda:* To review and evaluate grant applications

*Place:* National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

*Contact Person:* Wei-Qin Zhao, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5181 MSC 7846, Bethesda, MD 20892–7846, 301–435–1236, [zhaow@csr.nih.gov](mailto:zhaow@csr.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.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: June 17, 2015.

**David Clary,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015–15307 Filed 6–22–15; 8:45 am]

**BILLING CODE 4140–01–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Eunice Kennedy Shriver National Institute of Child Health and Human Development; Notice of Closed Meeting

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 meeting.

The meeting will be closed to the public in accordance with the provisions set forth in section 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:* National Institute of Child Health and Human Development Special Emphasis Panel.

*Date:* August 13, 2015.

*Time:* 2:00 p.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6100 Executive Boulevard, Rockville, MD 20852, (Telephone Conference Call).

*Contact Person:* Sherry L. Dupere, Ph.D., Chief, Scientific Review Branch, Scientific Review Branch, Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, 6100 Executive Boulevard, Room 5B01, Bethesda, MD 20892–9304, (301) 451–3415, [duperes@mail.nih.gov](mailto:duperes@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research; 93.865, Research for Mothers and Children; 93.929, Center for Medical Rehabilitation Research; 93.209, Contraception and Infertility Loan Repayment Program, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Michelle Trout,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15300 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

**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 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 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; Topics in Drug Discovery and Mechanisms of Antimicrobial Resistance.

*Date:* July 17, 2015.

*Time:* 8:00 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* InterContinental Chicago Hotel, 505 North Michigan Avenue, Chicago, IL 60611.

*Contact Person:* Guangyong Ji, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3211, MSC 7808, Bethesda, MD 20892, 301-435-1146, [jig@csr.nih.gov](mailto:jig@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Member Conflict: Pain and Chemosensory Mechanisms.

*Date:* July 22-23, 2015.

*Time:* 8:00 a.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:* John Bishop, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5182, MSC 7844, Bethesda, MD 20892, (301) 408-9664, [bishopj@csr.nih.gov](mailto:bishopj@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; RFA-RM-14-009: 4D Nucleome Imaging Tools.

*Date:* July 22, 2015.

*Time:* 8:00 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Embassy Suites at the Chevy Chase Pavilion, 4300 Military Road, NW, Washington, DC 20015.

*Contact Person:* Maria DeBernardi, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6158, MSC 7892, Bethesda, MD 20892, 301-435-1355, [debernardima@csr.nih.gov](mailto:debernardima@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Member Conflict: Alcohol and Heavy Metals.

*Date:* July 22-23, 2015.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

*Contact Person:* Michael Selmanoff, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5164, MSC 7844, Bethesda, MD 20892, 301-435-1119, [selmanom@csr.nih.gov](mailto:selmanom@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Cell Biology Member Conflicts.

*Date:* July 22, 2015.

*Time:* 11:00 a.m. to 3:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

*Contact Person:* Wallace Ip, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5128, MSC 7840, Bethesda, MD 20892, 301-435-1191, [ipws@mail.nih.gov](mailto:ipws@mail.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; PAR13-345: Development of Appropriate Pediatric Formulations and Pediatric Drug Delivery Systems.

*Date:* July 22, 2015.

*Time:* 11:00 a.m. to 1:00 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:* Kristin Kramer, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5205, MSC 7846, Bethesda, MD 20892, (301) 437-0911, [kramerkm@csr.nih.gov](mailto:kramerkm@csr.nih.gov)

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; PAR 12-251: Behavioral Science Track Award for Rapid Transition Review.

*Date:* July 22, 2015.

*Time:* 11:00 a.m. to 12:00 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:* Andrea B. Kelly, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3182, MSC 7770, Bethesda, MD 20892, (301) 455-1761, [kellya2@csr.nih.gov](mailto:kellya2@csr.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393-93.396, 93.837-93.844, 93.846-93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Melanie J. Gray,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15298 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**National Institutes of Health**

**National Institute on Aging; Notice of Closed Meeting**

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 meeting.

The meeting 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 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:* National Institute on Aging Special Emphasis Panel; The Midlife Study.

*Date:* July 27, 2015.

*Time:* 11:00 a.m. to 2:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institute on Aging, Gateway Building, Suite 2C212, 7201 Wisconsin Avenue, Bethesda, MD 20892, (Telephone Conference Call).

*Contact Person:* Kimberly Firth, Ph.D., National Institutes of Health, National Institute on Aging, Gateway Building, 7201 Wisconsin Avenue, Suite 2C212, Bethesda, MD 20892, 301-402-7702, [firthkm@mail.nih.gov](mailto:firthkm@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.866, Aging Research, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Melanie J. Gray,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15309 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Neurological Disorders and Stroke; 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 meeting. The meeting 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 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:* National Institute of Neurological Disorders and Stroke Special, Emphasis Panel; Review of Blood Brain Barrier Application.

*Date:* July 21, 2015.

*Time:* 9:00 a.m. to 12:30 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Neuroscience Center, 6001 Executive Boulevard, Rockville, MD 20852 (Telephone Conference Call).

*Contact Person:* Natalia Strunnikova, Ph.D., Scientific Review Officer, Scientific Review Branch, Division of Extramural Research, NINDS/NIH/DHHS/Neuroscience Center, 6001 Executive Boulevard, Suite 3208, MSC 9529, Bethesda, MD 20892, 301-496-3755, [strunnikovan@ninds.nih.gov](mailto:strunnikovan@ninds.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.853, Clinical Research Related to Neurological Disorders; 93.854, Biological Basis Research in the Neurosciences, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Carolyn Baum,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15306 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## 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 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:* National Cancer Institute Special Emphasis Panel; Omnibus-SEP 15 Genetic Mouse Models, Molecular Mechanisms of Therapy.

*Date:* July 14-15, 2015.

*Time:* 11:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Cancer Institute Shady Grove, 9609 Medical Center Drive, Rooms 2E030/1E030, Rockville, MD 20850, (Telephone Conference Call).

*Contact Person:* Nicholas J. Kenney, Ph.D., Scientific Review Officer, Research Technology and Contract Review Branch, Division of Extramural Activities, National Cancer Institute, NIH, 9609 Medical Center Drive, Room 7W246, Rockville, MD 20850, 240-276-6374 [nicholas.kenney@nih.gov](mailto:nicholas.kenney@nih.gov).

*Name of Committee:* National Cancer Institute Special Emphasis Panel; Advanced Development of Technologies for Cancer Research (R33).

*Date:* July 22, 2015.

*Time:* 11:00 a.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Cancer Institute Shady Grove, 9609 Medical Center Drive, Room 2W914, Rockville, MD 20850, (Telephone Conference Call).

*Contact Person:* Jeffrey E. DeClue, Ph.D., Scientific Review Officer, Research Technology and Contract Review Branch, Division of Extramural Activities, National Cancer Institute, NIH, 9609 Medical Center Drive, Room 7W238, Bethesda, MD 20892-9750, 240-276-6371, [decluej@mail.nih.gov](mailto:decluej@mail.nih.gov).

*Name of Committee:* National Cancer Institute Special Emphasis Panel; Physical Sciences Oncology Projects.

*Date:* July 28-29, 2015.

*Time:* 6:00 p.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Doubletree Hotel Bethesda, (Formerly Holiday Inn Select), 8120 Wisconsin Avenue Bethesda, MD 20814.

*Contact Person:* Gerald G. Lovinger, Ph.D., Scientific Review Officer, Research and Technology and Contract Review Branch, Division of Extramural Activities, National Cancer Institute, NIH, 9609 Medical Center Drive, Room 7W266, Rockville, MD 20850, 240-276-6385, [lovingeg@mail.nih.gov](mailto:lovingeg@mail.nih.gov).

*Name of Committee:* National Cancer Institute Special Emphasis Panel; Innovative Molecular Analysis Technologies for Cancer Research (R21).

*Date:* August 4, 2015.

*Time:* 7:30 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Bethesda North Marriott Hotel & Conference Center, 5701 Marinelli Road, Room Forest Glen, Bethesda, MD 20852.

*Contact Person:* Jeffrey E. DeClue, Ph.D., Scientific Review Officer, Research Technology and Contract Review Branch, Division of Extramural Activities, National Cancer Institute, NIH, 9609 Medical Center Drive, Room 7W238, Bethesda, MD 20892-9750, 240-276-6371, [decluej@mail.nih.gov](mailto:decluej@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, HHS)

Dated: June 17, 2015.

**Melanie J. Gray,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15310 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### Prospective Grant of Start-up Exclusive Evaluation Option License: A Novel HIV-1 Entry Inhibitor

**AGENCY:** National Institutes of Health, HHS.

**ACTION:** Notice.

**SUMMARY:** This is notice, in accordance with 35 U.S.C. 209 and 37 CFR part 404, that the National Institutes of Health, Department of Health and Human Services, is contemplating the grant of a start-up exclusive evaluation option license agreement to practice the inventions embodied in U.S. Provisional Patent Application No. 61/791,885 (NIH Ref. No. E-033-2013/0-US-01), filed March 15, 2013; International PCT Application No. PCT/US2014/024120 (NIH Ref. No. E-033-2013/1-PCT-01), filed March 12, 2014; all entitled, "Stabilized Single Human CD4 Domains and Fusion Proteins;" and all



continuing applications and foreign counterparts to Absino Co., Ltd, a company having a place of business in Beijing, China.

The patent rights in these inventions have (a) been assigned to the United States of America, as represented by the Secretary, Department of Health and Human Services who has delegated authority for the licensing of inventions to the National Institutes of Health or (b) been exclusively licensed to the National Institutes of Health.

The prospective start-up exclusive evaluation option license territory may be China, the U.S., and Europe, and the field of use may be limited to the development of bispecific multivalent human immunodeficiency virus type 1 (HIV-1) neutralizing fusion proteins as HIV entry inhibitors for the treatment of HIV infections.

Upon the expiration or termination of the start-up exclusive evaluation option license, Absino Co., Ltd will have the exclusive right to execute an exclusive commercialization license which will supersede and replace the start-up exclusive evaluation option license with no greater field of use and territory than granted in the start-up exclusive evaluation option license.

**DATES:** Only written comments and/or applications for a license which are received by the NIH Office of Technology Transfer on or before July 8, 2015 will be considered.

**ADDRESSES:** Requests for copies of the patent application, inquiries, comments, and other materials relating to the contemplated start-up exclusive evaluation option license should be directed to: Sally Hu, Ph.D., M.B.A., Senior Licensing and Patenting Manager, Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804; Telephone: (301) 435-5606; Facsimile: (301) 402-0220; Email: [hus@mail.nih.gov](mailto:hus@mail.nih.gov).

**SUPPLEMENTARY INFORMATION:** The subject technology is HIV-1 entry inhibitors that can neutralize many subtypes of HIV-1 isolates including clade A-E and tropism R5 and X4 (using either CCR5 or CXCR4 co-receptor for entry). These entry inhibitors are fusion proteins and have a potency about 10-fold higher than that of the broadly neutralizing antibody VRC01 that is in Phase I clinical trial, or 50-fold higher than that of the FDA approved HIV entry inhibitor Fuzeon. Therefore, these fusion proteins are promising drug candidates for HIV/AIDS prevention and treatment.

The prospective start-up exclusive evaluation option license will be royalty

bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR part 404. The prospective start-up exclusive evaluation option license may be granted unless within fifteen (15) days from the date of this published notice, the NIH receives written evidence and argument that establishes that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR part 404.

Applications for a license in the field of use filed in response to this notice will be treated as objections to the grant of the contemplated start-up exclusive evaluation option license. Comments and objections submitted to this notice will not be made available for public inspection and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

Dated: June 16, 2015.

**Richard U. Rodriguez,**

*Acting Director, Office of Technology Transfer, National Institutes of Health.*

[FR Doc. 2015-15334 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Library of Medicine; Notice of Closed Meeting

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 meeting.

The meeting 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 the discussions could disclose confidential trade secrets or commercial property such as patentable materials, 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 Library of Medicine Special Emphasis Panel; Conflicts R01/R21/R13.

*Date:* July 30, 2015.

*Time:* 12:00 p.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Library of Medicine, 6705 Rockledge Drive, Suite 301, Bethesda, MD 20817, (Telephone Conference Call).

*Contact Person:* Zoe E. Huang, MD., Scientific Review Officer, Extramural Programs, National Library of Medicine, NIH, 6705 Rockledge Drive, Suite 301, Bethesda,

MD 20892-7968, 301-594-4937, [huangz@mail.nih.gov](mailto:huangz@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program No. 93.879, Medical Library Assistance, National Institutes of Health, HHS)

Dated: June 17, 2015.

**Michelle Trout,**

*Program Analyst, Office of the Federal Advisory Committee Policy.*

[FR Doc. 2015-15299 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## 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 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 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; Fellowships: Endocrinology, Metabolism, Nutrition and Reproductive Sciences.

*Date:* July 14, 2015.

*Time:* 8:00 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).

*Contact Person:* Dianne Hardy, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6175, MSC 7892, Bethesda, MD 20892, 301-435-1154, [dianne.hardy@nih.gov](mailto:dianne.hardy@nih.gov).

*Name of Committee:* AIDS and Related Research Integrated Review Group; NeuroAIDS and other End-Organ Diseases Study Section.

*Date:* July 23, 2015.

*Time:* 8:00 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Hyatt Regency Bethesda, One Bethesda Metro Center, 7400 Wisconsin Avenue, Bethesda, MD 20814.

*Contact Person:* Eduardo A Montalvo, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5108,



MSC 7852, Bethesda, MD 20892, (301) 435-1168, [montalve@csr.nih.gov](mailto:montalve@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; PAR-13-327: Innovative Molecular Analysis Technology Development for Cancer Research and Clinical Care.

*Date:* July 23, 2015.

*Time:* 8:00 a.m. to 6:00 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:* Zhang-Zhi Hu, MD, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6186, MSC 7804, Bethesda, MD 20892, (301) 594-2414, [huzhuang@csr.nih.gov](mailto:huzhuang@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Musculoskeletal Rehabilitation.

*Date:* July 23, 2015.

*Time:* 2:00 p.m. to 5:00 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:* Rajiv Kumar, Ph.D., Chief, MOSS IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4216, MSC 7802, Bethesda, MD 20892, 301-435-1212, [kumarra@csr.nih.gov](mailto:kumarra@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; FOA: RM15-002 Exploratory Technologies.

*Date:* July 24, 2015.

*Time:* 8:00 a.m. to 6:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* The Embassy Row Hotel, 2015 Massachusetts Avenue NW., Washington, DC 20036.

*Contact Person:* Robert C. Elliott, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3130, MSC 7850, Bethesda, MD 20892, 301-435-3009, [elliottro@csr.nih.gov](mailto:elliottro@csr.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Clinical Neuroscience and Neurodegeneration.

*Date:* July 24, 2015.

*Time:* 8:30 a.m. to 5:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892.

*Contact Person:* Alessandra C Rovescalli, Ph.D., Scientific Review Officer, National Institutes of Health, Center for Scientific Review, 6701 Rockledge Drive, Rm 5205 MSC7846, Bethesda, MD 20892, (301) 435-1021, [rovescaa@mail.nih.gov](mailto:rovescaa@mail.nih.gov).

*Name of Committee:* Center for Scientific Review Special Emphasis Panel; Member Conflict: Topics in Bacterial Pathogenesis and Host Interactions.

*Date:* July 24, 2015.

*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.

*Contact Person:* Soheyla Saadi, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3211, MSC 7808, Bethesda, MD 20892, 301-435-0903, [saadisoh@csr.nih.gov](mailto:saadisoh@csr.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393-93.396, 93.837-93.844, 93.846-93.878, 93.892, 93.893, National Institutes of Health, HHS)

*Dated:* June 17, 2015.

**David Clary,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15308 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Center For Complementary & Integrative Health; Notice of Closed Meeting

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 meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552(b)(4) and 552(b)(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:* National Center for Complementary and Integrative Health Special Emphasis Panel; NCCIH Complex Trials.

*Date:* July 13, 2015.

*Time:* 1:00 p.m. to 4:00 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* National Institutes of Health, Democracy 2, Suite 401, 6707 Democracy Boulevard, Bethesda, MD 20892 (Telephone Conference Call).

*Contact Person:* Hungyi Shau, Ph.D., Scientific Review Officer, National Center for Complementary and Integrative Health, National Institutes of Health, 6707 Democracy Boulevard, Suite 401, Bethesda, MD 20892, 301-402-1030, [Hungyi.Shau@nih.gov](mailto:Hungyi.Shau@nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.213, Research and Training in Complementary and Alternative Medicine, National Institutes of Health, HHS)

*Dated:* June 17, 2015.

**Michelle Trout,**

*Program Analyst, Office of Federal Advisory Committee Policy.*

[FR Doc. 2015-15304 Filed 6-22-15; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HOMELAND SECURITY

### Federal Emergency Management Agency

[Internal Agency Docket No. FEMA-4223-DR; Docket ID FEMA-2015-0002]

#### Texas; Amendment No. 1 to Notice of a Major Disaster Declaration

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Texas (FEMA-4223-DR), dated May 29, 2015, and related determinations.

**DATES:** *Effective Date:* June 5, 2015.

**FOR FURTHER INFORMATION CONTACT:** Dean Webster, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-2833.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Texas is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of May 29, 2015.

Bastrop, Blanco, Caldwell, Denton, Eastland, Fort Bend, Guadalupe, Henderson, Hidalgo, Johnson, Milam, Montague, Rusk, Smith, Travis, Wichita, Williamson, and Wise Counties for Individual Assistance.

Gaines and Navarro Counties for Individual Assistance (already designated for Public Assistance).

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2015-15345 Filed 6-22-15; 8:45 am]

**BILLING CODE 9111-23-P**

## DEPARTMENT OF HOMELAND SECURITY

### Federal Emergency Management Agency

[Internal Agency Docket No. FEMA-4222-DR; Docket ID FEMA-2015-0002]

#### Oklahoma; Amendment No. 5 to Notice of a Major Disaster Declaration

**AGENCY:** Federal Emergency Management Agency, DHS.

**ACTION:** Notice.

**SUMMARY:** This notice amends the notice of a major disaster declaration for the State of Oklahoma (FEMA-4222-DR), dated May 26, 2015, and related determinations.

**DATES:** *Effective Date:* June 9, 2015.

**FOR FURTHER INFORMATION CONTACT:** Dean Webster, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-2833.

**SUPPLEMENTARY INFORMATION:** The notice of a major disaster declaration for the State of Oklahoma is hereby amended to include the following areas among those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of May 26, 2015.

Canadian, Carter, Choctaw, Coal, Love, Murray, and Okmulgee Counties for Public Assistance.

Le Flore and Pottawatomie Counties for Public Assistance (already designated for Individual Assistance). The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance

(Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

**W. Craig Fugate,**

*Administrator, Federal Emergency Management Agency.*

[FR Doc. 2015-15342 Filed 6-22-15; 8:45 am]

**BILLING CODE 9111-23-P**

## DEPARTMENT OF HOMELAND SECURITY

### United States Immigration and Customs Enforcement

#### Agency Information Collection Activities: Extension, With Change, of an Existing Information Collection; Comment Request

**ACTION:** 30-Day Notice of Information Collection for Review; I-312/I-312A; Designation of Attorney in Fact/Revocation of Attorney In Fact; OMB Control No. 1653-0041.

The Department of Homeland Security, U.S. Immigration and Customs Enforcement (ICE), is submitting the following information collection request for review and clearance in accordance with the Paperwork Reduction Act of 1995. The information collection is published in the **Federal Register** to obtain comments from the public and affected agencies. The information collection was previously published in the **Federal Register** on April 3, 2015, Vol. 80 No. 18244 allowing for a 60 day comment period. No comments were received on this information collection. The purpose of this notice is to allow an additional 30 days for public comments.

Written comments and suggestions regarding items contained in this notice, and especially with regard to the estimated public burden and associated response time, should be directed to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the OMB Desk Officer for U.S. Immigration and Customs Enforcement, Department of Homeland Security, and sent via electronic mail to [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov) or faxed to (202) 395-5806.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information 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 agency, including whether the information will have practical utility;

(2) 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;

(3) Enhance the quality, utility, and clarity of the information to be collected; 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, with change, of an existing information collection.

(2) *Title of the Form/Collection:* Designation of Attorney in Fact/Revocation of Attorney in Fact.

(3) *Agency form number, if any, and the applicable component of the Department of Homeland Security sponsoring the collection:* (I-312/I-312A); U.S. Immigration and Customs Enforcement.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: State, Local, or Tribal Government. Section 103.6, the Immigration and Nationality Act (INA), provides for the posting of surety or cash bonds. All bonds posted in immigration cases shall be executed on Form I-352, Immigration Bond, and secured with some form of collateral by an Obligor. In the case of a cash bond, the Obligor will deposit with U.S. Immigration and Customs Enforcement (ICE) the face value of the bond. The Obligor can designate a third party as an Attorney in Fact to accept on their behalf the return of the collateral security deposited to secure the surety bond upon cancellation of the bond or performance of the Obligor. The Form I-312, Designation of Attorney in Fact, is the instrument used by the Obligor to officially designate their Attorney In Fact. Upon receipt of a properly executed Form I-312, ICE Financial Operations will remit to the Attorney in Fact the principal and interest on the security deposit in the event of a bond cancellation, or the interest on the security deposit in the event of a bond breach. Immigration bonds might remain in place for years, and Obligors might choose to appoint a new Attorney In Fact as circumstances change. To ensure that ICE Financial Operations properly executes its fiduciary duties to the Obligor under the Form I-352 bond

contract, and exercises due diligence in ensuring that remittances are made to the proper person, ICE proposes to use Form I-312A as the document by which the Obligor could expressly indicate that a previously valid Form I-312 Attorney In Fact designation had been revoked.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* 12,500 responses at 30 minutes (.50 hours) per response.

(6) *An estimate of the total public burden (in hours) associated with the collection:* 6,250 annual burden hours.

Dated: June 18, 2015.

**Scott Elmore,**

*Program Manager, Forms Management Office, Office of the Chief Information Officer, U.S. Immigration and Customs Enforcement, Department of Homeland Security.*

[FR Doc. 2015-15385 Filed 6-22-15; 8:45 am]

BILLING CODE 9111-28-P

## DEPARTMENT OF HOMELAND SECURITY

### United States Immigration and Customs Enforcement

#### Agency Information Collection Activities: Extension, With Changes, of an Existing Information Collection; Comment Request

**ACTION:** 30-Day notice of information collection; File No. I-352, Immigration Bond; OMB Control No. 1653-0022.

The Department of Homeland Security, U.S. Immigration and Customs Enforcement (ICE), is submitting the following information collection request for review and clearance in accordance with the Paperwork Reduction Act of 1995. The information collection is published in the **Federal Register** to obtain comments from the public and affected agencies. The information collection was previously published in the **Federal Register** on March 30, 2015, Vol. 80 No. 16688 allowing for a 60 day comment period. No comments were received on this information collection. The purpose of this notice is to allow an additional 30 days for public comments.

Written comments and suggestions regarding items contained in this notice, and especially with regard to the estimated public burden and associated response time should be directed to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the OMB Desk Officer for U.S. Immigration and Customs Enforcement, Department of Homeland Security, and

sent via electronic mail to [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov) or faxed to (202) 395-5806.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information 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 agency, including whether the information will have practical utility;

(2) 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;

(3) Enhance the quality, utility, and clarity of the information to be collected; 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, with changes, of an existing information collection.

(2) *Title of the Form/Collection:* Immigration Bond.

(3) *Agency form number, if any and the applicable component of the Department of Homeland Security sponsoring the collection:* I-352, U.S. Immigration and Customs Enforcement.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* **Primary:** Individual or Households; Business or other for-profit. The data collected on this collection instrument is used by ICE to ensure that the person or company posting the bond is aware of the duties and responsibilities associated with the bond. The collection instrument serves the purpose of instruction in the completion of the form, together with an explanation of the terms and conditions of the bond. Sureties have the capability of accessing, completing and submitting a bond electronically through ICE's eBonds system which encompasses the I-352, while individuals are still required to complete the bond form manually.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* 25,000 Responses at 30 minutes (.50 hours) per response.

(6) *An estimate of the total public burden (in hours) associated with the collection:* 12,500 Annual burden hours.

Dated: June 16, 2015.

**Scott Elmore,**

*Forms Management, U.S. Immigration and Customs Enforcement, Department of Homeland Security.*

[FR Doc. 2015-15282 Filed 6-22-15; 8:45 am]

BILLING CODE 9111-28-P

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

[FWS-R4-ES-2015-N114;  
FXES11120400000-156-FF04EF2000]

#### Endangered and Threatened Wildlife and Plants; Receipt of Application for Incidental Take Permit Renewal; Availability of Low-Effect Habitat Conservation Plan and Associated Documents; Charlotte County, FL

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of availability; request for comment/information.

**SUMMARY:** We, the Fish and Wildlife Service (Service), announce the availability of an incidental take permit (ITP) renewal application and a Habitat Conservation Plan (HCP). TAVCOR, LLC (applicant) requests renewal of ITP TE207151-1 under the Endangered Species Act of 1973, as amended (Act). The applicant anticipates taking about 1.91 acres of feeding, breeding, and sheltering habitat used by the Florida scrub-jay (*Aphelocoma coerulescens*) (scrub-jay) incidental to land preparation and construction in Charlotte County, Florida. The applicant's HCP describes proposed minimization measures and completed mitigation measures to address the effects of development on the covered species.

**DATES:** We must receive your written comments on the ITP application and HCP on or before July 23, 2015.

**ADDRESSES:** See the **SUPPLEMENTARY INFORMATION** section below for information on how to submit your comments on the ITP application and HCP. You may obtain a copy of the ITP application and HCP by writing the South Florida Ecological Services Office, Attn: Permit number TE207151-2, U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, FL 32960-3559. In addition, we will make the ITP application and HCP available for public inspection by appointment during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Ms. Elizabeth Landrum, South Florida Ecological Services Office (see **ADDRESSES**); telephone: 772-469-4304.

**SUPPLEMENTARY INFORMATION:**

**Submitting Comments**

If you wish to comment on the ITP application or HCP, you may submit comments by any one of the following methods:

*Email:* Elizabeth\_Landrum@fws.gov. Use "Attn: Permit number TE207151-2" as your message subject line.

*Fax:* Elizabeth Landrum, 772-562-4288, Attn.: Permit number "TE207151-2."

*U.S. mail:* Elizabeth Landrum, South Florida Ecological Services Field Office, Attn: Permit number "TE207151-2," U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, FL 32960-3559.

*In-person drop-off:* You may drop off comments or request information during regular business hours at the above office address.

**Public Availability of Comments**

Before including your address, phone number, email address, or other personal identifying information in your comments, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can request in your comments that your personal identifying information be withheld from public review, we cannot guarantee that we will be able to do so.

**Applicant's Proposed Project**

We received an application from the applicant for renewal of an incidental take permit. The applicant requests a 5-year renewal of an ITP under section 10(a)(1)(B) of the Act (16 U.S.C. 1531 *et seq.*). If we approve the renewal, the applicant anticipates taking a total of approximately 1.91 acres of scrub-jay breeding, feeding, and sheltering habitat, incidental to land preparation and construction in Section 9, Township 40S, Range 23E, Charlotte County, Florida. The applicant currently has neither a time frame for development, nor a specific site plan; however, development of this parcel would likely include construction of one or more structures, a parking area, and installation of associated utilities.

The applicant proposes to minimize impacts to scrub-jays by: (1) Using scrub oaks and other native plants in post-construction landscaping; (2) avoiding land clearing activities during the scrub-jay nesting season (March 1 to June 30); (3) avoiding planting trees that will be

30 feet in height or more when mature because they can be used as perches by predatory birds; and (4) refraining from keeping or feeding free-roaming cats. Mitigation for unavoidable impacts has been accomplished by the donation of 4.3 acres of suitable habitat to Charlotte County for scrub-jay conservation. The Service listed the scrub-jay as threatened in 1987 (June 3, 1987; 52 FR 20715), effective July 6, 1987.

**Our Preliminary Determination**

The Service has made a preliminary determination that the applicant's project, including the mitigation measures, will individually and cumulatively have a minor or negligible effect on the species covered in the HCP. Therefore, renewal of the ITP is a "low-effect" action and qualifies as a categorical exclusion under the National Environmental Policy Act (NEPA) (40 CFR 1506.6), as provided by the Department of the Interior Manual (516 DM 2 Appendix 1 and 516 DM 6 Appendix 1). We base our preliminary determination that issuance of the ITP qualifies as a low-effect action on the following three criteria: (1) Implementation of the project would result in minor or negligible effects on federally listed, proposed, and candidate species and their habitats; (2) Implementation of the project would result in minor or negligible effects on other environmental values or resources; and (3) Impacts of the project, considered together with the impacts of other past, present, and reasonably foreseeable similarly situated projects, would not result, over time, in cumulative effects to environmental values or resources that would be considered significant. This preliminary determination may be revised based on our review of public comments that we receive in response to this notice.

**Next Steps**

The Service will evaluate the HCP and comments submitted thereon to determine whether the application meets the requirements of section 10(a) of the Act. The Service will also evaluate whether issuance of the section 10(a)(1)(B) ITP complies with section 7 of the Act by conducting an intra-Service section 7 consultation. The results of this consultation, in combination with the above findings, will be used in the final analysis to determine whether or not to renew the ITP. If it is determined that the requirements of the Act are met, the ITP will be renewed.

**Authority:** We provide this notice under Section 10 of the Endangered Species Act (16

U.S.C. 1531 *et seq.*) and NEPA regulations (40 CFR 1506.6).

Dated: June 16, 2015.

**Roxanna Hinzman,**

*Field Supervisor, South Florida Ecological Services Office.*

[FR Doc. 2015-15387 Filed 6-22-15; 8:45 am]

**BILLING CODE 4310-55-P**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**[FWS-R4-R-2015-N125; FXRS1263040000-156-FF04R08000]**

**Proposed Information Collection; National Wildlife Refuge Visitor Check-In Permit and Use Report**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice; request for comments.

**SUMMARY:** We (U.S. Fish and Wildlife Service) will ask the Office of Management and Budget (OMB) to approve the information collection (IC) described below. As required by the Paperwork Reduction Act of 1995 and as part of our continuing efforts to reduce paperwork and respondent burden, we invite the general public and other Federal agencies to take this opportunity to comment on this IC. This IC is scheduled to expire on December 31, 2015. We may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

**DATES:** To ensure that we are able to consider your comments on this IC, we must receive them by August 24, 2015.

**ADDRESSES:** Send your comments on the IC to the Information Collection Clearance Officer, U.S. Fish and Wildlife Service, MS BPHC, 5275 Leesburg Pike, Falls Church, VA 22041-3803 (mail); or [hope\\_grey@fws.gov](mailto:hope_grey@fws.gov) (email). Please include "1018-0153" in the subject line of your comments.

**FOR FURTHER INFORMATION CONTACT:** To request additional information about this IC, contact Hope Grey at [hope\\_grey@fws.gov](mailto:hope_grey@fws.gov) (email) or 703-358-2482 (telephone).

**SUPPLEMENTARY INFORMATION:**

*I. Abstract.* The National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997, and the Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4) govern the administration and uses of national wildlife refuges and wetland management districts. We are

authorized to allow public uses on lands of the National Wildlife Refuge System, including hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, and other visitor uses, when we find that the activities are compatible and appropriate with the purpose or purposes for which the refuges were established.

We collect information on hunters and anglers and other visitors to help us protect refuge resources and administer and evaluate the success of visitor programs. Because of high demand and limited resources, we often provide visitor opportunities by permit, based on dates, locations, or type of public use. We may not allow all opportunities on all refuges, and harvest information differs for each refuge. We use FWS Form 3-2405 (Self-Clearing Check-In Permit) to collect this information. Not all refuges will use the form, and some refuges may collect the information in a nonform format. We collect:

- Information on the visitor (name, address, and contact information). We use this information to identify the visitor or driver/passengers of a vehicle while on the refuge. Having this information readily available is critical in a search and rescue situation. We do not maintain or record this information.

- Information on whether or not hunters/anglers were successful (number and type of harvest/caught).
- Purpose of visit (hunting, fishing, wildlife observation, wildlife photography, auto touring, birding, hiking, boating/canoeing, visitor center, special event, environmental education class, volunteering, other recreation).
- Date of visit.

The above information is a vital tool in meeting refuge objectives and maintaining quality visitor experiences. It will help us:

- Administer and monitor visitor programs and facilities on refuges.
- Distribute visitor permits to ensure safety of visitors.
- Ensure a quality visitor experience.
- Minimize resource disturbance, manage healthy game populations, and ensure the protection of fish and wildlife species.
- Assist in Statewide wildlife management and enforcement and develop reliable estimates of the number of all game fish and wildlife.
- Determine facility and program needs and budgets.

## II. Data

OMB Control Number: 1018-0153.  
Title: National Wildlife Refuge Visitor Check-In Permit and Use Report.  
Service Form Number: 3-2405.

*Type of Request:* Extension of a currently approved collection.

*Description of Respondents:* Individuals who visit national wildlife refuges.

*Respondent's Obligation:* Required to obtain or retain a benefit.

*Frequency of Collection:* On occasion.

*Estimated Annual Number of Respondents:* 650,000.

*Estimated Annual Number of Responses:* 650,000.

*Estimated Completion Time per Response:* 5 minutes.

*Estimated Total Annual Burden Hours:* 54,167.

## III. Comments

We invite comments concerning this information collection on:

- Whether or not the collection of information is necessary, including whether or not the information will have practical utility;
- The accuracy of our estimate of the burden for this collection of information;
- Ways to enhance the quality, utility, and clarity of the information to be collected; and
- Ways to minimize the burden of the collection of information on respondents.

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this IC. 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.

Dated: June 17, 2015.

**Tina A. Campbell,**

*Chief, Division of Policy, Performance, and Management Programs, U.S. Fish and Wildlife Service.*

[FR Doc. 2015-15329 Filed 6-22-15; 8:45 am]

**BILLING CODE 4310-55-P**

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

[FWS-R1-ES-2015-N116;  
FXES11130100000-156-FF01E00000]

### Endangered Species; Recovery Permit Application

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of availability; request for comments.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, invite the public to comment on the following application for a recovery permit to conduct activities with the purpose of enhancing the survival of an endangered species. The Endangered Species Act of 1973, as amended (Act), prohibits certain activities with endangered species unless a Federal permit allows such activity. The Act also requires that we invite public comment before issuing such permits.

**DATES:** To ensure consideration, please send your written comments by July 23, 2015.

**ADDRESSES:** Program Manager, Restoration and Endangered Species Classification, Ecological Services, U.S. Fish and Wildlife Service, Pacific Regional Office, 911 NE 11th Avenue, Portland, OR 97232-4181. Please refer to the permit number for the application when submitting comments.

**FOR FURTHER INFORMATION CONTACT:** Colleen Henson, Fish and Wildlife Biologist, at the above address, or by telephone (503-231-6131) or fax (503-231-6243).

### SUPPLEMENTARY INFORMATION:

#### Background

The Act (16 U.S.C. 1531 *et seq.*) prohibits certain activities with respect to endangered and threatened species unless a Federal permit allows such activity. Along with our implementing regulations in the Code of Federal Regulations (CFR) at 50 CFR 17, the Act provides for certain permits, and requires that we invite public comment before issuing these permits for endangered species.

A permit granted by us under section 10(a)(1)(A) of the Act authorizes the permittee to conduct activities (including take or interstate commerce) with respect to U.S. endangered or threatened species for scientific purposes or enhancement of propagation or survival. Our regulations implementing section 10(a)(1)(A) of the Act for these permits are found at 50 CFR 17.22 for endangered wildlife species, 50 CFR 17.32 for threatened wildlife species, 50 CFR 17.62 for endangered plant species, and 50 CFR 17.72 for threatened plant species.

### Application Available for Review and Comment

We invite local, State, and Federal agencies and the public to comment on the following application. Please refer to the permit number for the application when submitting comments.

Documents and other information submitted with this application are available for review by request from the Program Manager for Restoration and Endangered Species Classification at the address listed in the **ADDRESSES** section of this notice, subject to the requirements of the Privacy Act (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552).

**Permit Number: TE-67121B**

*Applicant:* Pacific Rim Conservation, Honolulu, Hawaii.

The applicant requests a new permit to take (survey, monitor, capture, handle, weigh, measure, collect bio-samples, band, translocate, captive propagate, and release) Hawaiian dark-rumped petrel chicks (*Pterodroma phaeopygia sandwichensis*) in Hawaii, in conjunction with establishing a new breeding colony, for the purpose of enhancing the species' survival.

**Public Availability of Comments**

All comments and materials we receive in response to this request will be available for public inspection, by appointment, during normal business hours at the address listed in the **ADDRESSES** section.

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.

**Authority**

We provide this notice under section 10 of the Act (16 U.S.C. 1531 *et seq.*).

Dated: June 15, 2015.

**Jason Holm,**  
*Regional Director, Pacific Region, U.S. Fish and Wildlife Service.*

[FR Doc. 2015-15396 Filed 6-22-15; 8:45 am]

**BILLING CODE 4310-55-P**

**DEPARTMENT OF THE INTERIOR**

**Office of the Secretary**

**[156D0102DM DS62200000  
DLSN00000.000000 DX.62201]**

**Proposed Renewal of Information Collection: OMB Control Number 1090-0009, Donor Certification Form**

**AGENCY:** Office of the Secretary, Office of Financial Management, Interior.

**ACTION:** Notice and request for comments.

**SUMMARY:** In compliance with the Paperwork Reduction Act of 1995, the Office of Financial Management, Office of the Secretary, Department of the Interior announces the proposed extension of a public information collection and seeks public comments on the provisions thereof.

**DATES:** Consideration will be given to all comments received by August 24, 2015.

**ADDRESSES:** Send your written comments to Paul Batlan, Office of Financial Management, 1849 C St. NW., MS 2557 MIB, Washington, DC 20240, or email him at *Paul\_Batlan@ios.doi.gov*. Individuals providing comments should reference the "Donor Certification Form, OMB Control Number 1090-0009".

**FOR FURTHER INFORMATION CONTACT:** To request a copy of the information collection request, any explanatory information and related forms, see the contact information provided in the **ADDRESSES** section above.

**SUPPLEMENTARY INFORMATION:**

**I. Abstract**

This notice is for renewal of information collection.

The Office of Management and Budget (OMB) regulations at 5 CFR part 1320, which implement the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.*, require that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities (see 5 CFR 1320.8 (d)).

This notice identifies an information collection activity that the Office of Financial Management will submit to OMB for approval for the Department and its bureaus to continue to collect information from proposed donors relative to their relationship(s) with the Department. The Department and its individual bureaus have gift acceptance authorities. In support of the variety of donation authorities in the Department and increasing numbers of donations, it is the policy of the Department to ask those proposing to donate gifts valued at \$25,000 or more to provide information regarding their relationship with the Department. The purpose of this policy is to ensure that the acceptance of a gift does not create legal or ethical issues for the Department, its bureaus, or potential donors. The information will be gathered through the use of a form that collects information relevant to the acceptability of the proposed donation in conformance with the Department's donations policy. The form is completed and certified by the prospective donor then submitted to the Department or its bureau for review. Having the donor certify his or her interactions with the Department gives the staff vetting the proposed donation basic information to be verified, resulting in a more efficient and timely donation review process.

Information collected	Reason for collection
Name, and indication whether executing in individual capacity, or on behalf of an organization.	To identify the donor, and whether the donor is acting individually or on behalf of an organization.
Declaration whether the donor is involved with litigation or controversy with the Department.	To assist the Department in determining whether there are any issues associated with the proffer of the gift that need to be more closely examined.
Declaration whether the donor is engaged in any financial or business relationship with the Department.	To assist the Department in determining whether there are any issues associated with the proffer of the gift that need to be more closely examined.
Declaration whether the donor has been debarred, excluded or disqualified from the non-procurement common rule, or otherwise declared ineligible from doing business with any Federal agency.	To assist the Department in determining whether there are any issues associated with the proffer of the gift that need to be more closely examined.
Declaration as to whether the donation is expected to be involved with marketing or advertising.	To assist the Department in determining whether there are any issues associated with the proffer of the gift that need to be more closely examined.
Declaration whether the donor is seeking to attach conditions to the donation.	To assist the Department in determining whether there are any issues associated with the proffer of the gift that need to be more closely examined.

Information collected	Reason for collection
Declaration whether this proposed donation is or is not part of a series of donations to the Department.	To assist the Department in determining the scope and context of the donation, and to assist in determining whether there are any issues associated with the proffer of the gift that need to be more closely examined.
Signature, Printed Name, Date, Organization, Email address, City, State, Zip, and daytime or work phone number.	To establish the contact information of the potential donor, and have the certifier sign the certification form.

**II. Data**

(1) *Title:* Donor Certification Form.  
*OMB Control Number:* 1090-0009.  
*Current Expiration Date:* September 30, 2015.  
*Type of Review:* Information Collection Renewal.  
*Affected Entities:* Individuals or households, Businesses, Not-for-profit institutions, Tribal governments.  
*Estimated annual number of respondents:* 250.  
*Frequency of responses:* Once per prospective donation.  
 (2) *Annual reporting and recordkeeping burden:*  
*Total annual reporting per response:* 20 minutes.  
*Total number of estimated responses:* 250.  
*Total annual reporting:* 84 hours.  
 (3) *Description of the need and use of the information:* This information will provide Department staff with the basis for beginning the evaluation as to whether the Department will accept the proposed donation. The authorized employee will receive the donor certification form with the proposed donation. The employee will then review the totality of circumstances surrounding the proposed donation to determine whether the Department can accept the donation and maintain its integrity, impartiality, and public confidence.

**III. Request for Comments**

The Departments invite comments on:  
 (a) Whether the collection of information is necessary for the proper performance of the functions of the agencies, including whether the information will have practical utility;  
 (b) The accuracy of the agencies' estimate of the burden of the collection of information and the validity of the methodology and 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 appropriate automated, electronic, mechanical, or other collection techniques or other forms of information technology.  
 "Burden" means the total time, effort, and 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 use technology and systems for the purposes 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, and to complete and review the collection of information; and to transmit or otherwise disclose the information.

All written comments, with names and addresses, will be available for public inspection. If you wish us to withhold your personal information, you must prominently state at the beginning of your comment what personal information you want us to withhold. We will honor your request to the extent allowable by law. If you wish to view any comments received, you may do so by using the contact information in the **ADDRESSES** section above. A valid picture identification is required for entry into the Department of the Interior.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

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.

**Douglas A. Glenn,**

*Deputy Chief Financial Officer and Director, Office of Financial Management, Department of the Interior.*

[FR Doc. 2015-15350 Filed 6-22-15; 8:45 am]

**BILLING CODE 4334-63-P**

**DEPARTMENT OF THE INTERIOR**

**National Park Service**

[NPS-MWR-OZAR-17614;PPMWMWROW2/PPM00UP05.YP0000]

**Notice of Availability of a Record of Decision on the Final General Management Plan/Environmental Impact Statement, Ozark National Scenic Riverway, Missouri**

**AGENCY:** National Park Service, Interior.  
**ACTION:** Notice of availability.

**SUMMARY:** The National Park Service (NPS) announces the availability of the Record of Decision (ROD) for the Final General Management Plan/Environmental Impact Statement (GMP/EIS), Ozark National Scenic Riverways (Riverways), Missouri.

**ADDRESSES:** Copies of the ROD are available by request by writing to Superintendent, Ozark National Scenic Riverways, 404 Watercross Drive, P.O. Box 490, Van Buren, Missouri 63965. The document is also available on the internet at the NPS Planning, Environment, and Public Comment Web site at: <http://www.park.planning.nps.gov/>.

**FOR FURTHER INFORMATION CONTACT:** Superintendent Bill Black at the address above, or by telephone at 573-323-4236.

**SUPPLEMENTARY INFORMATION:** On January 22, 2015, the Acting Regional Director for the Midwest Region signed the ROD for the Final GMP/EIS, thereby approving it. As soon as practicable, the Riverways will begin the implementation of the selected alternative B (the preferred alternative) as described in the final GMP/EIS. Alternative B will enhance opportunities for visitors to discover and learn about the natural wonders and Ozark heritage of the National Riverways, while maintaining a mix of traditional recreational and commercial activities. Emphasis will be placed on increasing opportunities for visitor education and connections to natural resources and cultural landscapes.

This alternative focuses on providing a balance of diverse recreational opportunities and visitor experiences



along with increasing visitor education and appreciation of natural and cultural resources of the park unit. This alternative will provide a comprehensive Riverways-wide approach to resource and visitor use management. Specific management zones detailing acceptable resource conditions, visitor experience and use levels, and appropriate activities and development will be applied to Riverways' lands consistent with this concept.

A mix of private and guided traditional recreational activities like boating, floating, and horseback riding will occur under this alternative. Additional trails and a small learning center at a rehabilitated Powder Mill will be developed to better orient and inform visitors. Natural resources will be restored to more natural conditions, while maintaining greater opportunities for visitor access. Most of the Big Spring Wilderness Study Area will be recommended for wilderness designation.

The selected action and three other alternatives were analyzed in the draft and final GMP/EIS. The full range of foreseeable environmental consequences was assessed. Among the alternatives the NPS considered, the selected action best achieves a high standard of natural and cultural resource protection with improved opportunities for visitors in the park. The NPS selected alternative B as its preferred alternative following an evaluation of the effectiveness of each alternative in meeting the stated objectives of the general management plan, and the environmental benefits and adverse impacts for each alternative. This alternative provides the best combination of strategies to protect the park unit's unique natural and cultural resources and visitor experience, while improving the park unit's operational effectiveness and sustainability. It also provides other advantages to the Riverways, regional communities, partners, and stakeholders.

In addition, selection of the preferred alternative, as reflected by the analysis contained in the final GMP/EIS, will not result in the impairment of park resources and will allow the National Park Service to conserve National Riverways' resources and provide for their enjoyment by visitors.

Dated: January 22, 2015.

**Patricia S. Trap,**

*Acting Regional Director, Midwest Region.*

**Editor's note:** This document was received for publication by the Office of the **Federal Register** on June 18, 2015.

[FR Doc. 2015-15417 Filed 6-22-15; 8:45 am]

**BILLING CODE 4310-MA-P**

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## DEPARTMENT OF THE INTERIOR

### National Park Service

**[NPS-MWR-CUVA-17695; PPMWROW2/PMP00UP05.YP0000]**

#### **Notice of Availability of a Record of Decision for the White-Tailed Deer Management Plan, Environmental Impact Statement, Cuyahoga Valley National Park, Ohio**

**AGENCY:** National Park Service, Interior.

**ACTION:** Notice of Availability.

**SUMMARY:** The National Park Service (NPS) announces the availability of the Record of Decision (ROD) for the White-Tailed Deer Management Plan/Environmental Impact Statement (plan/EIS), Cuyahoga Valley National Park (Park), Ohio.

**ADDRESSES:** Copies of the ROD are available by request by writing to the Chief of the Resource Management Division, Lisa Petit, Cuyahoga Valley National Park, 15610 Vaughn Road, Brecksville, Ohio 44141, telephone (440) 546-5970. The document is also available on the internet at the NPS Planning, Environment, and Public Comment Web site at: <http://www.parkplanning.nps.gov/>.

**FOR FURTHER INFORMATION CONTACT:** Chief of the Resource Management Division, Lisa Petit at the address or telephone number above.

**SUPPLEMENTARY INFORMATION:** We have issued a ROD for the final plan/EIS; on February 13, 2015, the Acting Regional Director for the Midwest Region approved the ROD. The plan/EIS analyzed four alternatives, including a no-action alternative. The full range of foreseeable environmental consequences was assessed, and appropriate mitigating measures were identified.

The NPS decision is to implement alternative D (hereinafter referred to as the "selected action"), which was identified as the NPS preferred alternative in the final plan/EIS. The selected action will utilize an adaptive management strategy. Under the selected action, the NPS will continue current park deer management actions including: Research, monitoring, and

data management; protection of restoration plantings; education and coordination; and enforcement of the existing wildlife feeding ban. In addition, the NPS will incorporate a combination of lethal and nonlethal actions to address high deer density. Lethal actions (including sharpshooting, with very limited capture/euthanasia if necessary) will be taken initially to reduce deer densities quickly. It is anticipated that in years one through four, 335 deer will be removed by sharpshooting (in addition to small numbers of deer removed by capture and euthanasia) to meet the deer density goal. Population maintenance will follow the initial reduction, and could be conducted by nonsurgical reproductive control methods, if an acceptable agent is available, or by sharpshooting. Both maintenance methods are included in the selected action to maintain maximum flexibility for future management. All actions will be carried out by NPS personnel or authorized agents.

The Record of Decision includes a summary of the purpose and need for action, identifies the selected action and all alternatives considered by the NPS, a listing of measures to minimize environmental harm, details about the monitoring program that will inform implementation of the selected action, the basis for the decision, and a description of the environmentally preferable alternative.

Dated: February 13, 2015.

**Patricia S. Trap,**

*Acting Regional Director, Midwest Region.*

**Editor's Note:** This document was received for publication by the Office of Federal Register on June 18, 2015.

[FR Doc. 2015-15477 Filed 6-22-15; 8:45 am]

**BILLING CODE 4310-MA-P**

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## INTERNATIONAL TRADE COMMISSION

### **Notice of Receipt of Complaint; Solicitation of Comments Relating to the Public Interest**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has received a complaint entitled *Certain Resealable Packages with Slider Devices, DN 3072*; the Commission is soliciting comments on any public interest issues raised by the complaint or complainant's filing under section 210.8(b) of the Commission's



Rules of Practice and Procedure (19 CFR 210.8(b)).

**FOR FURTHER INFORMATION CONTACT:** Lisa R. Barton, Secretary to the Commission, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 205-2000. The public version of the complaint can be accessed on the Commission's Electronic Document Information System (EDIS) at EDIS,<sup>1</sup> and will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 205-2000.

General information concerning the Commission may also be obtained by accessing its Internet server at United States International Trade Commission (USITC) at USITC.<sup>2</sup> The public record for this investigation may be viewed on the Commission's Electronic Document Information System (EDIS) at EDIS.<sup>3</sup> Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission has received a complaint and a submission pursuant to section 210.8(b) of the Commission's Rules of Practice and Procedure filed on behalf of Reynolds Presto Products Inc. on June 17, 2015. The complaint alleges violations of section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain resealable packages with slider devices. The complaint names as respondents Interplast Group, Ltd. of Livingston, NJ and Minigrip, LLC of Alpharetta, GA. The complainant requests that the Commission issue a permanent general exclusion order, cease and desist orders, and a bond upon respondents' alleged infringing articles during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j).

Proposed respondents, other interested parties, and members of the public are invited to file comments, not to exceed five (5) pages in length, inclusive of attachments, on any public interest issues raised by the complaint or section 210.8(b) filing. Comments should address whether issuance of the

relief specifically requested by the complainant in this investigation would affect the public health and welfare in the United States, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, or United States consumers.

In particular, the Commission is interested in comments that:

- (i) Explain how the articles potentially subject to the requested remedial orders are used in the United States;
- (ii) identify any public health, safety, or welfare concerns in the United States relating to the requested remedial orders;
- (iii) identify like or directly competitive articles that complainant, its licensees, or third parties make in the United States which could replace the subject articles if they were to be excluded;
- (iv) indicate whether complainant, complainant's licensees, and/or third party suppliers have the capacity to replace the volume of articles potentially subject to the requested exclusion order and/or a cease and desist order within a commercially reasonable time; and
- (v) explain how the requested remedial orders would impact United States consumers.

Written submissions must be filed no later than by close of business, eight calendar days after the date of publication of this notice in the **Federal Register**. There will be further opportunities for comment on the public interest after the issuance of any final initial determination in this investigation.

Persons filing written submissions must file the original document electronically on or before the deadlines stated above and submit 8 true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 CFR 210.4(f)). Submissions should refer to the docket number ("Docket No. 3072") in a prominent place on the cover page and/or the first page. (See Handbook for Electronic Filing Procedures, Electronic Filing Procedures.<sup>4</sup>) Persons with questions regarding filing should contact the Secretary (202-205-2000).

Any person desiring to submit a document to the Commission in confidence must request confidential treatment. All such requests should be

directed to the Secretary to the Commission and must include a full statement of the reasons why the Commission should grant such treatment. See 19 CFR 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. All nonconfidential written submissions will be available for public inspection at the Office of the Secretary and on EDIS.<sup>5</sup>

This action is taken under the authority of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and of sections 201.10 and 210.8(c) of the Commission's Rules of Practice and Procedure (19 CFR 201.10, 210.8(c)).

Issued: June 18, 2015.

By order of the Commission.

**Lisa R. Barton,**

*Secretary to the Commission.*

[FR Doc. 2015-15368 Filed 6-22-15; 8:45 am]

**BILLING CODE 7020-02-P**

## DEPARTMENT OF JUSTICE

### Drug Enforcement Administration

[Docket No. DEA-392]

#### Importer of Controlled Substances Application: Midas Pharmaceuticals, Inc.

**ACTION:** Notice of application.

**DATES:** Registered bulk manufacturers of the affected basic class, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.34(a) on or before July 23, 2015. Such persons may also file a written request for a hearing on the application pursuant to 21 CFR 1301.43 on or before July 23, 2015.

**ADDRESSES:** Written comments should be sent to: Drug Enforcement Administration, Attention: DEA **Federal Register** Representative/ODXL, 8701 Morrisette Drive, Springfield, Virginia 22152. Request for hearings should be sent to: Drug Enforcement Administration, Attention: Hearing Clerk/LJ, 8701 Morrisette Drive, Springfield, Virginia 22152.

**SUPPLEMENTARY INFORMATION:** The Attorney General has delegated his 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,

<sup>1</sup> Electronic Document Information System (EDIS): <http://edis.usitc.gov>.

<sup>2</sup> United States International Trade Commission (USITC): <http://edis.usitc.gov>.

<sup>3</sup> Electronic Document Information System (EDIS): <http://edis.usitc.gov>.

<sup>4</sup> Handbook for Electronic Filing Procedures: [http://www.usitc.gov/secretary/fed\\_reg\\_notices/rules/handbook\\_on\\_electronic\\_filing.pdf](http://www.usitc.gov/secretary/fed_reg_notices/rules/handbook_on_electronic_filing.pdf).

<sup>5</sup> Electronic Document Information System (EDIS): <http://edis.usitc.gov>.

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 1301.34(a), this is notice that on January 12, 2015, Midas Pharmaceuticals, Inc., 300 Interpace Parkway, Suite 420, Parsippany, New Jersey 07054-1100 applied to be registered as an importer of remifentanyl (9739), a basic class of controlled substance listed in schedule II.

The company plans to import the listed controlled substance in order to bulk manufacture controlled substance in Active Pharmaceutical Ingredient (API) form. The company distributes the manufactured APIs in bulk to its customers.

Dated: June 12, 2015.

**Joseph T. Rannazzisi,**  
Deputy Assistant Administrator.

[FR Doc. 2015-15331 Filed 6-22-15; 8:45 am]

**BILLING CODE 4410-09-P**

**DEPARTMENT OF JUSTICE**

**Drug Enforcement Administration**

[Docket No. DEA-392]

**Importer of Controlled Substances  
Application: Wildlife Laboratories, 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 1301.34(a) on or before July 23, 2015. Such persons may also file a written request for a hearing on the application pursuant to 21 CFR 1301.43 on or before July 23, 2015.

**ADDRESSES:** Written comments should be sent to: Drug Enforcement Administration, Attention: DEA **Federal Register** Representative/ODXL, 8701 Morrisette Drive, Springfield, Virginia 22152. Request for hearings should be sent to: Drug Enforcement Administration, Attention: Hearing Clerk/LJ, 8701 Morrisette Drive, Springfield, Virginia 22152.

**SUPPLEMENTARY INFORMATION:** The Attorney General has delegated his 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 1301.34(a), this is notice that on February 19, 2015, Wildlife Laboratories, Inc., 1230 W. Ash Street, Suite D, Windsor, Colorado 80550 applied to be registered as an importer of the following basic classes of controlled substances:

Controlled substance	Schedule
Etorphine (except HCl) (9056) .....	I
Etorphine HCl (9059) .....	II

The company plans to import the listed controlled substances for sale to its customer.

Dated: June 12, 2015.

**Joseph T. Rannazzisi,**  
Deputy Assistant Administrator.

[FR Doc. 2015-15332 Filed 6-22-15; 8:45 am]

**BILLING CODE 4410-09-P**

**NATIONAL ARCHIVES AND RECORDS ADMINISTRATION**

[NARA-2015-039]

**Office of Presidential Libraries;  
Disposal of Presidential Records**

**AGENCY:** National Archives and Records Administration (NARA).

**ACTION:** Presidential Records Act notice of proposed disposal of Reagan and George H.W. Bush administration disaster recovery backup tapes; final agency action.

**SUMMARY:** NARA is issuing final notice that it intends to dispose of several collections of disaster recovery backup tapes from the Ronald Reagan (Reagan) and George H.W. Bush (GHW Bush) administrations under the provisions of 44 U.S.C. 2203(g)(3). NARA published notice in the **Federal Register** (February 6, 2015 (80 FR 6770)), proposing to dispose of these backup tapes. That initial notice contains a detailed description of the tapes, the reasons for

destruction, and a synopsis of the completed restoration projects.

NARA has determined that the backup tapes do not warrant further retention. All required backup restoration projects have taken place, NARA is preserving and permanently retaining the restored records, and we have identified no further need to preserve or maintain the backup tapes.

This notice constitutes a final agency action, as described in 44 U.S.C. 2203(g)(3), and NARA will dispose of the described backup tapes on or after the date below.

**DATES:** NARA will dispose of the backup tapes on or after August 24, 2015.

**FOR FURTHER INFORMATION CONTACT:**

Director of Presidential Libraries Susan K. Donius, by mail at National Archives and Records Administration, Suite 2200; 8601 Adelphi Road; College Park, Maryland 20740-6001, by telephone at (301) 837-3250, by fax at (301) 837-3199, or by email at [elizabeth.fidler@nara.gov](mailto:elizabeth.fidler@nara.gov).

**SUPPLEMENTARY INFORMATION: Public**

**comments:** NARA published a “Presidential Records Act notice of proposed disposal of Reagan and George H.W. Bush administration disaster recovery backup tapes; request for public comment” on February 6, 2015, in the **Federal Register** (80 FR 6770) for a 45-day comment period. NARA received one written comment, in which a concerned citizen suggested that NARA should retain the “documentation” so that it can be made available to the public.

NARA has considered the comment. As described in the notice of proposed disposal, NARA is retaining the recovered records from the backup tapes. All the Presidential and Federal records that were on the tapes have been restored, and NARA is permanently retaining those restored records. This is in line with the commenter’s suggestion and goal, so NARA believes no further action is necessary in response to the comment and is proceeding with destruction of the backup tapes as outlined in the proposal notice.

**NARA action**

NARA will dispose of 3,071 original disaster recovery backup tapes created during the Reagan and GHW Bush administrations, and subsequent preservation copies of those media (maintained for the Professional/Office Vision software (PROFS) system, the Sperry/VAX All-in-One system, and for systems operated by the White House Situation Support Staff (WHSSS) and the White House Situation Room

(WHSR)), on or after August 24, 2015, because NARA has determined that they lack sufficient administrative, historical, informational, or evidentiary value.

Dated: June 16, 2015.

**David S. Ferriero,**

*Archivist of the United States.*

[FR Doc. 2015-15333 Filed 6-22-15; 8:45 am]

**BILLING CODE 7515-01-P**

## NATIONAL SCIENCE FOUNDATION

### Agency Information Collection Activities: Comment Request

**AGENCY:** National Science Foundation.

**ACTION:** Submission for OMB Review; comment request.

**SUMMARY:** The National Science Foundation (NSF) has submitted the following information collection requirement to OMB for review and clearance under the Paperwork Reduction Act of 1995, *Public Law 104-13*. This is the second notice for public comment; the first was published in the **Federal Register** at 80 FR 16030 and no comments were received. NSF is forwarding the proposed renewal submission to the Office of Management and Budget (OMB) for clearance simultaneously with the publication of this second notice. The full submission may be found at: <http://www.reginfo.gov/public/do/PRAMain>.

**Comments:** Comments regarding this information collection are best assured of having their full effect if received within 30 days of this notification. Copies of the submission(s) may be obtained by calling 703-292-7556. Comments regarding (a) whether the collection of information is necessary for the proper performance of the functions of the NSF, including whether the information will have practical utility; (b) the accuracy of the NSF'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, including through the use of automated collection techniques or other forms of information technology; (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated or other forms of information technology should be addressed to: Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation, 725 7th Street NW., Room 10235, Washington, DC 20503, and to Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation,

4201 Wilson Boulevard, Suite 1265, Arlington, Virginia 22230 or send email to [splimpto@nsf.gov](mailto:splimpto@nsf.gov). Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339, which is accessible 24 hours a day, 7 days a week, 365 days a year (including federal holidays).

NSF 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.

#### SUPPLEMENTARY INFORMATION:

**Title of Collection:** Survey of Science and Engineering Research Facilities.

**OMB Control Number:** 3145-0101.

**Summary of Collection:** The National Science Foundation Survey of Science and Engineering Research Facilities is a Congressionally mandated (Pub. L. 99-159; NSF Act of 1950, as amended; America COMPETES Reauthorization Act of 2010), biennial survey that has been conducted since 1986. As required by law, the survey collects data on the amount, condition, and costs of the physical facilities used to conduct science and engineering research. Congress expected this survey to provide the data necessary to describe the status and needs of science and engineering research facilities. Data on computing and networking capacity, often termed "cyberinfrastructure" were collected from 2003 to 2013. These questions are being eliminated from future questionnaires based on a review by NSF that indicated the data did not provide clear and useful metrics for measuring cyberinfrastructure.

**Use of the Information:** Analysis of the Facilities Survey data will provide updated information on the status of scientific and engineering research facilities and capabilities. In order to provide consistency and comparability across national academic surveys, the data collection field of "agricultural sciences and natural sciences" will be divided into two fields: (1) Agricultural sciences and (2) natural resources and conservation. "Physical sciences, group 1: Atmospheric, earth, and geological sciences; meteorology; and oceanography" will be renamed "geosciences, atmospheric, and ocean sciences," and will include appropriate subfield examples. "Physical sciences, group 2: Astronomy, astrophysics, chemistry, materials sciences, and

physics" will be renamed "physical sciences," and will include appropriate subfield examples. "Health and clinical sciences" will be renamed "health sciences." Some subfield examples will be updated in the various major S&E fields. The survey information can be used by Federal policy makers, planners, and budget analysts in making policy decisions, as well as by institutional academic officials, the scientific/engineering establishment, and state agencies and legislatures that fund universities. Detailed statistical tables and a summary InfoBrief are available at <http://nsf.gov/statistics/srvyfacilities/>. Data reports can also be run from the NSF Integrated Science and Engineering Resources Data System (*WebCASPAR*).

**Expected Respondents:** The Facilities Survey is a census of institutions that performed at least \$1 million in separately budgeted science and engineering research and development in the previous fiscal year.

In the most recent FY 2013 Facilities Survey, a census of 588 academic institutions was conducted. The sampling frame used for the survey was the FY 2012 Higher Education Research and Development Survey conducted by the National Center for Science and Engineering Statistics. Data are collected through a Web-based interface, although institutions have the option of printing and completing a PDF that can be sent by mail.

**Estimate of Burden:** The Facilities Survey will be sent to approximately 600 academic institutions for the FY 2015 and FY 2017 data collection cycles. The completion time per academic institution is expected to average 19 hours, based on completion time estimates provided by all survey participants in the FY 2013 survey. This would result in an estimated burden of 11,210 hours per cycle.

**Comments:** As required by 5 *CFR* 1320.8(d), comments on the information collection activities as part of this study were solicited through publication of a 60-Day Notice in the **Federal Register** on March 23, 2015, at 80 FR 16030. We received no comments.

Dated: June 17, 2015.

**Suzanne H. Plimpton,**

*Reports Clearance Officer, National Science Foundation.*

[FR Doc. 2015-15352 Filed 6-22-15; 8:45 am]

**BILLING CODE 7555-01-P**

## NUCLEAR REGULATORY COMMISSION

[NRC–2015–0130]

### Information Collection; “Rules of General Applicability to Domestic Licensing of Byproduct Material”

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Renewal of existing information collection; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) invites public comment on the renewal of Office of Management and Budget (OMB) approval for an existing collection of information. The information collection is entitled, “Rules of General Applicability to Domestic Licensing of Byproduct Material.”

**DATES:** Submit comments by August 24, 2015. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

**ADDRESSES:** You may submit comments by any of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2015–0130. Address questions about NRC dockets to Carol Gallagher; telephone: 301–287–3422; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Mail comments to:* Tremaine Donnell, Office of Information Services, Mail Stop: T–5 F53, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

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:** Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

#### **SUPPLEMENTARY INFORMATION:**

#### **I. Obtaining Information and Submitting Comments**

##### *A. Obtaining Information*

Please refer to Docket ID NRC–2015–0130 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:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2015–0130.

- *NRC’s Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The supporting statement is available in ADAMS under Accession No. ML15099A079.

- *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.

- *NRC’s Clearance Officer:* A copy of the collection of information and related instructions may be obtained without charge by contacting NRC’s Clearance Officer, Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

##### *B. Submitting Comments*

Please include Docket ID NRC–2015–0130 in your comment submission.

The NRC cautions you not to include identifying or contact information in comment submissions that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into ADAMS, and 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 into ADAMS.

#### **II. Background**

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35), the NRC is requesting

public comment on its intention to request the OMB’s approval for the information collection summarized below.

1. *The title of the information collection:* 10 CFR part 30, “Rules of General Applicability to Domestic Licensing of Byproduct Material.”
2. *OMB approval number:* 3150–0017.
3. *Type of submission:* Extension.
4. *The form number, if applicable:* Not applicable.

5. *How often the collection is required or requested:* Required reports are collected and evaluated on a continuing basis as events occur. There is a one-time submittal of information to receive a license. Renewal applications are submitted every 10 years. Information submitted in previous applications may be referenced without being resubmitted. In addition, recordkeeping must be performed on an on-going basis.

6. *Who will be required or asked to respond:* All persons applying for or holding a license to manufacture, produce, transfer, receive, acquire, own, possess, or use radioactive byproduct material.

7. *The estimated number of annual responses:* 179,423 (22,044 NRC Licensee responses [1,212 reporting responses + 2,600 for recordkeeping + 18,232 third-party disclosures] and (157,379 Agreement State Licensee responses [13,790 reporting responses + 17,988 for recordkeeping + 125,601 third-party disclosures]).

8. *The estimated number of annual respondents:* 20,588 (2,600 NRC licensees and 17,988 Agreement State licensees).

9. *The estimated number of hours needed annually to comply with the information collection requirement or request:* 273,991 (NRC licensees 32,803 hours [15,318 hours for reporting + 15,615 hours for recordkeeping + 1,870 hours for third-party disclosures] and Agreement State licensees 241,188 hours [111,209 hours for reporting + 117,091 hours for recordkeeping + 12,888 hours for third-party disclosures]).

10. *Abstract:* Title 10 of the *Code of Federal Regulations* (10 CFR) part 30 establishes requirements that are applicable to all persons in the United States governing domestic licensing of radioactive byproduct material. The application, reporting and recordkeeping requirements are necessary to permit the NRC to make a determination whether the possession, use, and transfer of byproduct material is in conformance with the Commission’s regulations for protection of the public health and safety.

### III. Specific Requests for Comments

The NRC is seeking comments that address the following questions:

1. Is the proposed collection of information necessary for the NRC to properly perform its functions? Does the information have practical utility?
2. Is the estimate of the burden of the information collection accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?
4. How can the burden of the information collection on respondents be minimized, including the use of automated collection techniques or other forms of information technology?

Dated at Rockville, Maryland, this 18th day of June 2015.

For the Nuclear Regulatory Commission.

**Tremaine Donnell,**

*NRC Clearance Officer, Office of Information Services.*

[FR Doc. 2015-15389 Filed 6-22-15; 8:45 am]

BILLING CODE 7590-01-P

## NUCLEAR REGULATORY COMMISSION

[NRC-2015-0155]

### Biweekly Notice Applications and Amendments to Facility Operating Licenses and Combined Licenses Involving No Significant Hazards Considerations

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Biweekly notice.

**SUMMARY:** Pursuant to Section 189a. (2) of the Atomic Energy Act of 1954, as amended (the Act), the U.S. Nuclear Regulatory Commission (NRC) is publishing this regular biweekly notice. The Act requires the Commission to publish notice of any amendments issued, or proposed to be issued and grants the Commission the authority to issue and make immediately effective any amendment to an operating license or combined license, as applicable, upon a determination by the Commission that such amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person.

This biweekly notice includes all notices of amendments issued, or proposed to be issued from May 28, 2015, to June 10, 2015. The last biweekly notice was published on June 9, 2015.

**DATES:** Comments must be filed by July 23, 2015. A request for a hearing must be filed by August 24, 2015.

**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-2015-0155. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Mail comments to:* Cindy Bladey, Office of Administration, Mail Stop: OWFN-12-H08, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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:**

Janet Burkhardt, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-1384, email: [Janet.Burkhardt@nrc.gov](mailto:Janet.Burkhardt@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

#### I. Obtaining Information and Submitting Comments

##### A. Obtaining Information

Please refer to Docket ID NRC-2015-0155 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:

- *Federal rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0155.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in the **SUPPLEMENTARY INFORMATION** section.

- *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-2015-0155, facility name, unit number(s), application date, and subject 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 will post all comment submissions at <http://www.regulations.gov> as well as enter 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 into ADAMS.

#### II. Notice of Consideration of Issuance of Amendments to Facility Operating Licenses and Combined Licenses and Proposed No Significant Hazards Consideration Determination

The Commission has made a proposed determination that the following amendment requests involve no significant hazards consideration. Under the Commission's regulations in § 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. The basis for this proposed determination for each amendment request is shown below.

The Commission is seeking public comments on this proposed determination. 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 period provided that its final determination is that 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.

#### *A. 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 O1-F21, 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 by the above date, 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 identify 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 applicant 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.

If a hearing is requested, 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.

#### *B. 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 ten (10) days prior to the filing deadline, the participant should contact the Office of the Secretary by email at [hearing.docket@nrc.gov](mailto: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/getting-started.html>. System requirements for accessing the E-Submittal server are detailed in the NRC's "Guidance for Electronic Submission," which is available on the agency's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>. Participants may attempt to use other software not listed on the Web site, but should note that the NRC's E-Filing system does not support

unlisted software, and the NRC Meta System Help Desk will not be able to offer assistance in using unlisted software.

If a participant is electronically submitting a document to the NRC in accordance with the E-Filing rule, the participant must file the document using the NRC's online, Web-based submission form. In order to serve documents through the Electronic Information Exchange System, users will be required to install a Web browser plug-in from the NRC's Web site. Further information on the Web-based submission form, including the installation of the Web browser plug-in, is available on the NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>.

Once a participant has obtained a digital ID certificate and a docket has been created, the participant can then submit a request for hearing or petition for leave to intervene. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the documents are submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an email notice confirming receipt of the document. The E-Filing system also distributes an email notice that provides access to the document to the NRC's Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the documents on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request/petition 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>, by email to [MSHD.Resource@nrc.gov](mailto:MSHD.Resource@nrc.gov), or by a toll-free call at 1-866-672-7640. The NRC Meta System Help Desk is available between 8 a.m. and 8 p.m., Eastern

Time, Monday through Friday, excluding government holidays.

Participants who believe that they have a good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing requesting authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) First class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted an exemption request from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket which is available to the public at <http://ehd1.nrc.gov/ehd/>, unless excluded pursuant to an order of the Commission, or the presiding officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings, unless an NRC regulation or other law requires submission of such information. However, in some instances, a request to intervene will require including information on local residence in order to demonstrate a proximity assertion of interest in the proceeding. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

Petitions for leave to intervene must be filed no later than 60 days from the date of publication of this notice. 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).

For further details with respect to these license amendment applications, see the application for amendment which is available for public inspection in ADAMS and at the NRC's PDR. For additional direction on accessing information related to this document, see the "Obtaining Information and Submitting Comments" section of this document.

Duke Energy Carolinas, LLC, Docket Nos. 50-413 and 50-414, Catawba Nuclear Station, Units 1 and 2 (CNS), York County, South Carolina

*Date of amendment request:* April 30, 2015. A publicly-available version is in ADAMS under Accession No. ML15125A149.

*Description of amendment request:* The proposed amendments would modify the Emergency Action Levels for the CNS based on Nuclear Energy Institute (NEI) 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors."

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

These changes affect the CNS Emergency Plan and do not alter any of the requirements of the Operating License or the Technical Specifications. The proposed changes do not modify any plant equipment and do not impact any failure modes that could lead to an accident. Additionally, the proposed changes do not impact the consequence of any analyzed accident since the changes do not affect any equipment related to accident mitigation. Based on this discussion, the proposed amendment does not increase the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

These changes affect the CNS Emergency Plan and do not alter any of the requirements of the Operating License or the Technical Specifications. They do not modify any plant equipment and there is no impact on the capability of the existing equipment to perform their intended functions. No system setpoints are being modified and no changes are being made to the method in which plant



operations are conducted. No new failure modes are introduced by the proposed changes. The proposed amendment does not introduce accident initiators or malfunctions that would cause a new or different kind of accident.

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.

These changes affect the CNS Emergency Plan and do not alter any of the requirements of the Operating License or the Technical Specifications. The proposed changes do not affect any of the assumptions used in the accident analysis, not do they affect any operability requirements for equipment important to plant safety.

Therefore, the proposed changes will not result in a significant reduction in the margin of safety as defined in the bases for technical specifications covered in this license amendment request.

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 no significant hazards consideration.

*Attorney for licensee:* Lara S. Nichols, Associate General Counsel, Duke Energy Corporation, 526 South Church Street—EC07H, Charlotte, NC 28202.

*NRC Branch Chief:* Robert J. Pascarelli.

Duke Energy Carolinas, LLC, Docket Nos. 50–413 and 50–414, Catawba Nuclear Station, Units 1 and 2, York County, South Carolina; Docket Nos. 50–369 and 50–370, McGuire Nuclear Station, Units 1 and 2, Mecklenburg County, North Carolina; and Docket Nos. 50–269, 50–270, and 50–287, Oconee Nuclear Station, Units 1, 2, and 3, Oconee County, South Carolina

*Date of amendment request:* April 16, 2015. A publicly-available version is available at ADAMS Accession No. ML15119A224.

*Description of amendment request:* The amendment would modify Technical Specification (TS) requirements regarding steam generator tube inspections and reporting as described in Technical Specification Task Force (TSTF)-510, Revision 2, "Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection."

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards

consideration, which is presented below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change revises the Steam Generator (SG) Program to modify the frequency of verification of SG tube integrity and SG tube sample selection. A steam generator tube rupture (SGTR) event is one of the design basis accidents that are analyzed as part of a plant's licensing basis. The proposed SG tube inspection frequency and sample selection criteria will continue to ensure that the SG tubes are inspected such that the probability of [an] SGTR is not increased. The consequences of a SGTR are bounded by the conservative assumptions in the design basis accident analysis. The proposed change will not cause the consequences of [an] SGTR to exceed those assumptions.

Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes to the Steam Generator Program will not introduce any adverse changes to the plant design basis of postulated accidents resulting from potential tube degradation. The proposed change does not affect the design of the SGs or their method of operation. In addition, the proposed change does not impact any other plant system or component.

Therefore, it is concluded that this change 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.

The SG tubes in pressurized water reactors are an integral part of the reactor coolant pressure boundary and, as such, are relied upon to maintain the primary system's pressure and inventory. As part of the reactor coolant pressure boundary, the SG tubes are unique in that they are also relied upon as a heat transfer surface between the primary and secondary systems such that residual heat can be removed from the primary system. In addition, the SG tubes also isolate the radioactive fission products in the primary coolant from the secondary system. In summary, the safety function of [an] SG is maintained by ensuring the integrity of its tubes.

[SG] tube integrity is a function of the design, environment, and the physical condition of the tube. The proposed change does not affect tube design or operating environment. The proposed change will continue to require monitoring of the physical condition of the SG tubes such that there will not be a reduction in the margin of safety compared to the current requirements.

Therefore, it is concluded that the proposed change does not involve a significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Lara S. Nichols, Associate General Counsel, Duke Energy Corporation, 526 South Church Street—EC07H, Charlotte, NC 28202.

*NRC Branch Chief:* Robert J. Pascarelli.

Duke Energy Carolinas, LLC, Docket Nos. 50–369 and 50–370, McGuire Nuclear Station (MNS), Units 1 and 2, Mecklenburg County, North Carolina

*Date of amendment request:* May 7, 2015. A publicly-available version is in ADAMS under Accession No. ML15141A047.

*Description of amendment request:* The proposed amendments would modify the Emergency Action Levels for the MNS based on Nuclear Energy Institute (NEI) 99–01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors."

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

These changes affect the MNS Emergency Plan and do not alter any of the requirements of the Operating License or the Technical Specifications. The proposed changes do not modify any plant equipment and do not impact any failure modes that could lead to an accident. Additionally, the proposed changes do not impact the consequence of any analyzed accident since the changes do not affect any equipment related to accident mitigation. Based on this discussion, the proposed amendment does not increase the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

These changes affect the MNS Emergency Plan and do not any of the requirements of the Operating License or the Technical Specifications. They do not modify any plant equipment and there is no impact on the capability of the existing equipment to perform its intended functions. No system setpoints are being modified and no changes



are being made to the method in which plant operations are conducted. No new failure modes are introduced by the proposed changes. The proposed amendment does not introduce accident initiators or malfunctions that would cause a new or different kind of accident.

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.

These changes affect the MNS Emergency Plan and do not alter any of the requirements of the Operating License or the Technical Specifications. The proposed changes do not affect any of the assumptions used in the accident analysis, nor do they affect any operability requirements for equipment important to plant safety.

Therefore, the proposed changes will not result in a significant reduction in the margin of safety as defined in the bases for technical specifications covered in this license amendment request.

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 no significant hazards consideration.

*Attorney for licensee:* Lara S. Nichols, Associate General Counsel, Duke Energy Corporation, 526 South Church Street—EC07H, Charlotte, NC 28202.

*NRC Branch Chief:* Robert J. Pascarelli.

Entergy Operations, Inc., Docket Nos. 50–313 and 50–368, Arkansas Nuclear One, Unit Nos. 1 and 2, Pope County, Arkansas

*Date of amendment request:* May 20, 2015. A publicly-available version is in ADAMS under Accession No. ML15140A611.

*Description of amendment request:* The amendments would revise the full implementation date (Milestone 8) of the Arkansas Nuclear One, Units 1 and 2, Cyber Security Plan (CSP), and revise the associated Physical Protection license conditions for each Renewed Facility Operating License.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change to the CSP Implementation Schedule is administrative in nature. This change does not alter accident analysis assumptions, add any initiators, or affect the function of plant systems or the manner in which systems are operated, maintained, modified, tested, or inspected. The proposed change does not require any plant modifications which affect the performance capability of the structures, systems, and components relied upon to mitigate the consequences of postulated accidents and has no impact on the probability or consequences of an accident previously evaluated.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change to the CSP Implementation Schedule is administrative in nature. This proposed change does not alter accident analysis assumptions, add any initiators, or affect the function of plant systems or the manner in which systems are operated, maintained, modified, tested, or inspected. The proposed change does not require any plant modifications which affect the performance capability of the structures, systems, and components relied upon to mitigate the consequences of postulated accidents and does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

Plant safety margins are established through limiting conditions for operation, limiting safety system settings, and safety limits specified in the technical specifications. The proposed change to the CSP Implementation Schedule is administrative in nature. In addition, the milestone date delay for full implementation of the CSP has no substantive impact because other measures have been taken which provide adequate protection during this period of time. Because there is no change to established safety margins as a result of this change, the proposed change does not involve a significant reduction in a margin of safety.

Therefore, the proposed change does not involve a significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Joseph A. Aluise, Associate General Counsel—

Nuclear, Entergy Services, Inc., 639 Loyola Avenue, New Orleans, Louisiana 70113.

*NRC Branch Chief:* Michael T. Markley.

Southern Nuclear Operating Company, Inc., Docket Nos. 50–348 and 50–364, Joseph M. Farley Nuclear Plant, Units 1 and 2, Houston County, Alabama

*Date of amendment request:* May 12, 2015. A publicly-available version is in ADAMS under Accession No. ML15132A722.

*Description of amendment request:* The proposed change revises and adds Surveillance Requirements to verify that the system locations susceptible to gas accumulation are sufficiently filled with water and to provide allowances that permit performance of the verification. The licensee stated that the proposed amendment is consistent with Technical Specification Task Force (TSTF)-523, Revision 2, "Generic Letter 2008–01, Managing Gas Accumulation."

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change revises [and] adds Surveillance Requirements (SRs) that require verification that the Emergency Core Cooling System (ECCS), the Residual Heat Removal (RHR) System, and the Containment Spray (CS) System are not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. Gas accumulation in the subject systems is not an initiator of any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased. The proposed SRs ensure that the subject systems continue to be capable to perform their assumed safety function and are not rendered inoperable due to gas accumulation. Thus, the consequences of any accident previously evaluated are not significantly increased.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change revises [and] adds SRs that require verification that the ECCS, the RHR System, and the CS System are not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. The

proposed change does not involve a physical alteration of the plant (*i.e.*, no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the proposed change does not impose any new or different requirements that could initiate an accident. The proposed change does not alter assumptions made in the safety analysis and is consistent with the safety analysis assumptions.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?  
Response: No.

The proposed change revises [and] adds SRs that require verification that the ECCS, the RHR System, and the CS System are not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. The proposed change adds new requirements to manage gas accumulation in order to ensure the subject systems are capable of performing their assumed safety functions. The proposed SRs are more comprehensive than the current SRs and will ensure that the assumptions of the safety analysis are protected. The proposed change does not adversely affect any current plant safety margins or the reliability of the equipment assumed in the safety analysis.

Therefore, there are no changes being made to any safety analysis assumptions, safety limits or limiting safety system settings that would adversely affect plant safety as a result of the proposed change.

Therefore, the proposed change does not involve a significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Leigh D. Perry, SVP & General Counsel of Operations and Nuclear, Southern Nuclear Operating Company, 40 Iverness Center Parkway, Birmingham, AL 35201.

*NRC Branch Chief:* Robert J. Pascarelli.

Southern Nuclear Operating Company, Inc., Docket No. 50-424, Vogtle Electric Generating Plant, Unit 1 (VEGP), Burke County, Georgia

*Date of amendment request:* June 4, 2015. A publicly-available version is in ADAMS under Accession No. ML15155B593.

*Description of amendment request:* The licensee proposes to modify the VEGP Technical Specifications to provide a one-time change to Limiting Condition for Operation (LCO) 3.5.2, "ECCS [Emergency Core Cooling

System]—Operating." This LCO requires that two ECCS trains be OPERABLE in Modes 1, 2, or 3. An ECCS train consists of a centrifugal charging system, a safety injection (SI) system, and a residual heat removal (RHR) system. Condition 3.5.2.A requires that, if one of the required trains is inoperable, and that 100 percent of the ECCS flow equivalent to a single OPERABLE ECCS train is available, then the inoperable train must be restored to OPERABLE status in 72 hours. Otherwise, the reactor must be taken to Mode 3 in 6 hours and to Mode 4 in 12 hours.

The proposed amendment revises the Completion Time (CT) for Condition 3.5.2.A from 72 hours to 7 days to allow for replacement of the train 1A RHR pump motor. This change will be applicable only one time on VEGP prior to the Cycle 19 shutdown.

*Basis for proposed no significant hazards consideration determination:*

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The emergency core cooling systems (ECCS), including the Residual Heat Removal system, are designed for the mitigation of design basis accidents or transients, such as a Loss of Coolant Accident (LOCA).

They are not designed, nor do they serve, for the prevention of those events. Consequently, the proposed amendment does not increase the probability of a previously evaluated accident occurring.

Should an accident occur during the period of time that the RHR pump is out of service, the remaining ECCS components would serve to provide the minimum amount of flow assumed in the accident analyses. Even assuming failure of a charging pump or an SI system on either of the trains, sufficient ECCS flow would still be provided to the reactor vessel to mitigate the consequences of the event. Furthermore, a risk informed analysis performed in support of this amendment request demonstrates that the consequences of an accident are not significantly increased. As such, the proposed change does not involve a significant increase in the probability or consequences of a previously evaluated accident.

Also, appropriate compensatory measures will be implemented during the time of the extended Completion Time for the RHR pumps. These actions are intended to decrease the chances of an initiating event occurring during the time of the extended CT and also to minimize the chances of losing any ECCS components.

For the above reasons, the proposed changes will not result in a significant

increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different accident from any accident previously evaluated?

Response: No.

Replacement of the 1A RHR pump motor for the extended Completion Time period does not introduce any new or unanalyzed modes of operation. The replacement of the pump motor does not involve any unanalyzed modifications to the design or operational limits of the RHR system. Therefore, no new failure modes or accident precursors are created due to the motor replacement during the extended Completion Time.

For the reasons noted above, the proposed change will not create the possibility of a new or different accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The margin of safety is related to the ability of the fission product barriers to perform their design functions during and following an accident situation. These barriers include the fuel cladding, the reactor coolant system, and the containment. The performance of these fission product barriers will not be significantly affected by the proposed change. The risk implications of this amendment request were evaluated and found to be acceptable.

During the extended Completion Time for the 1A RHR pump, the ECCS will remain capable of providing adequate flow to the reactor vessel to mitigate the consequences of a design basis event such as LOCA. Also, compensatory actions will be put in place to minimize the probability of an initiating event during the extended CT period as well as to minimize the chances of a loss of one of the remaining ECCSs. A risk informed analysis has also been performed which shows that the incremental plant risk has increased by an acceptable amount.

For the reasons noted above, there is no significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Jennifer M. Buettner, Associate General Counsel, Southern Nuclear Operating Company, 40 Iverness Center Parkway, Birmingham, AL 35201.

*NRC Branch Chief:* Robert J. Pascarelli.

Southern Nuclear Operating Company, Inc., Docket Nos. 50-424 and 50-425, Vogtle Electric Generating Plant, Units 1 and 2 (VEGP), Burke County, Georgia

*Date of amendment request:* May 6, 2015. A publicly-available version is in ADAMS under Accession No. ML15128A239.

*Description of amendment request:* The licensee proposes to modify the VEGP Technical Specifications to incorporate risk-informed requirements for selected Required Action end states. Specifically, the proposed change would permit a Required Action end state of Mode 4 rather than an end state of Mode 5. The licensee states that the proposed changes are consistent with Technical Specification Task Force (TSTF) Technical Change Traveler 432-A, Revision 1.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change modifies the end state (e.g., mode or other specified condition) which the Required Actions specify must be entered if compliance with the Limiting Conditions for Operation (LCO) is not restored. The requested Technical Specifications (TS) permit an end state of Mode 4 rather than an end state of Mode 5 contained in the current TS. In some cases, other Conditions and Required Actions are revised to implement the proposed change. Required Actions are not an initiator of any accident previously evaluated. Therefore, the proposed change does not affect the probability of any accident previously evaluated. The affected systems continue to be required to be operable by the TS and the Completion Times specified in the TS to restore equipment to operable status or take other remedial Actions remain unchanged.

WCAP-16294-NP-A, Rev. 1, "Risk-Informed Evaluation of Changes to [Technical Specification] Required Action Endstates for Westinghouse NSSS PWRs [nuclear steam supply system pressurized-water reactors]," demonstrates that the proposed change does not significantly increase the consequences of any accident previously evaluated. [WCAP-16294-NP-A, Rev. 1 is publicly available in ADAMS at Accession No. ML103430249.]

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change modifies the end state (e.g., mode or other specified condition) which the Required Actions specify must be entered if compliance with the LCO is not restored. In some cases, other Conditions and Required Actions are revised to implement the proposed change. The change does not involve a physical alteration of the plant (i.e., no new or different type of equipment will

be installed) or a change in the methods governing normal plant operation. In addition, the change does not impose any new requirements. The change does not alter assumptions made in the safety analysis.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change modifies the end state (e.g., mode or other specified condition) which the Required Actions specify must be entered if compliance with the LCO is not restored. In some cases, other Conditions and Required Actions are revised to implement the proposed change. Remaining within the Applicability of the LCO is acceptable because WCAP-16294-NP-A demonstrates that the plant risk in MODE 4 is similar to or lower than MODE 5. As a result, no margin of safety is significantly affected.

Therefore, the proposed changes do not involve a significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Jennifer M. Buettner, Associate General Counsel, Southern Nuclear Operating Company, 40 Inverness Center Parkway, Birmingham, AL 35201.

*NRC Branch Chief:* Robert J. Pascarella.

Southern Nuclear Operating Company, Inc., Docket Nos. 50-424 and 50-425, Vogtle Electric Generating Plant (VEGP), Units 1 and 2, Burke County, Georgia

*Date of amendment request:* May 12, 2015. A publicly-available version is in ADAMS under Accession No. ML15132A662.

*Description of amendment request:* The licensee proposes to adopt Technical Specification Task Force (TSTF) traveler TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation" (ADAMS Accession No. ML13053A075), which is an approved change to the standard technical specifications, into the VEGP, Units 1 and 2 technical specifications.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change revises or adds Surveillance Requirements (SRs) that require verification that the Emergency Core Cooling System (ECCS), the Residual Heat Removal (RHR) System, and the Containment Spray (CS) System are not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. Gas accumulation in the subject systems is not an initiator of any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased. The proposed SRs ensure that the subject systems continue to be capable to perform their assumed safety function and are not rendered inoperable due to gas accumulation. Thus, the consequences of any accident previously evaluated are not significantly increased.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change revises or adds SRs that require verification that the ECCS, the RHR System, and the CS System are not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. The proposed change does not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the proposed change does not impose any new or different requirements that could initiate an accident. The proposed change does not alter assumptions made in the safety analysis and is consistent with the safety analysis assumptions.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change revises or adds SRs that require verification that the ECCS, the RHR System, and the CS System are not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. The proposed change adds new requirements to manage gas accumulation in order to ensure the subject systems are capable of performing their assumed safety functions. The proposed SRs are more comprehensive than the current SRs and will ensure that the assumptions of the safety analysis are protected. The proposed change does not adversely affect any current plant safety margins or the reliability of the equipment assumed in the safety analysis.

Therefore, there are no changes being made to any safety analysis assumptions, safety limits or limiting safety system settings that would adversely affect plant safety as a result of the proposed change.

Therefore, the proposed change does not involve a significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Jennifer M. Buettner, Associate General Counsel, Southern Nuclear Operating Company, 40 Inverness Center Parkway, Birmingham, AL 35201.

*NRC Branch Chief:* Robert J. Pascarelli.

STP Nuclear Operating Company, Docket Nos. 50-498 and 50-499, South Texas Project, Units 1 and 2 (STP), Matagorda County, Texas

*Date of amendment request:* April 23, 2015. A publicly-available version is in ADAMS under Accession No. ML15121A818.

*Description of amendment request:* The amendment would modify the STP Technical Specification (TS) requirements regarding steam generator tube inspections and reporting based on Technical Specification Task Force (TSTF)-510-A, Revision 2, "Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection." The proposed change revises the TS Limiting Condition for Operation 3.4.5, "Steam Generator Tube Integrity"; Surveillance Requirement 4.4.5.2; Administrative Controls Specification 6.8.3.o, "Steam Generator Program"; and TS 6.9.1.7, Steam Generator Tube Inspection Report. The proposed changes address implementation of inspection periods and other administrative changes.

The NRC staff issued a Notice of Availability of models for plant-specific adoption of TSTF-510, Revision 2, in the **Federal Register** on October 27, 2011 (76 FR 66763), as part of the Consolidated Line Item Improvement Process (CLIIP). The notice referenced a model safety evaluation and model no significant hazards consideration determination published in the **Federal Register** on August 2, 2002 (67 FR 50475).

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or

consequences of an accident previously evaluated?

Response: No.

The proposed change revises the Steam Generator (SG) Program to modify the frequency of verification of SG tube integrity and SG tube sample selection. A steam generator tube rupture (SGTR) event is one of the design basis accidents that are analyzed as part of a plant's licensing basis. The proposed SG tube inspection frequency and sample selection criteria will continue to ensure that the SG tubes are inspected such that the probability of [an] SGTR is not increased. The consequences of [an] SGTR are bounded by the conservative assumptions in the design basis accident analysis. The proposed change will not cause the consequences of [an] SGTR to exceed those assumptions. The proposed change to reporting requirements and clarifications of the existing requirements have no [effect] on the probability or consequences of SGTR.

Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes to the Steam Generator Program will not introduce any adverse changes to the plant design basis or postulated accidents resulting from potential tube degradation. The proposed change does not affect the design of the SGs or their method of operation. In addition, the proposed change does not impact any other plant system or component.

Therefore, the proposed change does not create the possibility of a new or different type of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The SG tubes in pressurized water reactors are an integral part of the reactor coolant pressure boundary and, as such, are relied upon to maintain the primary system's pressure and inventory. As part of the reactor coolant pressure boundary, the SG tubes are unique in that they are also relied upon as a heat transfer surface between the primary and secondary systems such that residual heat can be removed from the primary system. In addition, the SG tubes also isolate the radioactive fission products in the primary coolant from the secondary system. In summary, the safety function of [an] SG is maintained by ensuring the integrity of its tubes.

Steam generator tube integrity is a function of the design, environment, and the physical condition of the tube. The proposed change does not affect tube design or operating environment. The proposed change will continue to require monitoring of the physical condition of the SG tubes such that there will not be a reduction in the margin of safety compared to the current requirements.

Therefore, it is concluded that the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the request for amendments involves no significant hazards consideration.

*Attorney for licensee:* Steve Frantz, Esq., Morgan, Lewis & Bockius, 1111 Pennsylvania Avenue NW., Washington, DC 20004.

*NRC Branch Chief:* Michael T. Markley.

Tennessee Valley Authority, Docket Nos. 50-259, 50-260, and 50-296, Browns Ferry Nuclear Plant, Units 1, 2, and 3, Limestone County, Alabama

*Date of amendment request:* March 9, 2015. A publicly-available version is in ADAMS under Accession No. ML15068A407.

*Description of amendment request:* The amendment would revise the Technical Specifications (TSs) definition of "Shutdown Margin" (SDM) to require calculation of the SDM at a reactor moderator temperature of 68 degrees Fahrenheit (°F) or a higher temperature that represents the most reactive state throughout the operating cycle. This change is needed to address new boiling water reactor (BWR) fuel designs, which may be more reactive at shutdown temperatures above 68 °F. This proposed change is in accordance with the industry Technical Specifications Task Force (TSTF) initiative identified as Change Traveler TSTF-535, Revision 0, "Revise Shutdown Margin Definition to Address Advanced Fuel Designs." The availability of this TS improvement was announced in the **Federal Register** published on February 26, 2013 (78 FR 13100), as part of NRC's Consolidated Line Item Improvement Process.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change revises the definition of SDM. SDM is not an initiator to any accident previously evaluated. Accordingly, the proposed change to the definition of SDM has no effect on the probability of any accident previously evaluated. SDM is an assumption in the analysis of some previously evaluated accidents and inadequate SDM could lead to an increase in consequences for those accidents. However, the proposed change revises the SDM

definition to ensure that the correct SDM is determined for all fuel types at all times during the fuel cycle. As a result, the proposed change does not adversely affect the consequences of any accident previously evaluated.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change revises the definition of SDM. The change does not involve a physical alteration of the plant (*i.e.*, no new or different type of equipment will be installed) or a change in the methods governing normal plant operations. The change does not alter assumptions made in the safety analysis regarding SDM.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

2. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change revises the definition of SDM. The change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The proposed change ensures that the SDM assumed in determining safety limits, limiting safety system settings, or limiting conditions for operation is correct for all BWR fuel types at all times during the fuel cycle.

Therefore, the proposed change does not involve a significant reduction in 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 no significant hazards consideration.

*Attorney for licensee:* General Counsel, Tennessee Valley Authority, 400 West Summit Hill Drive, 6A West Tower, Knoxville, TN 37902.

*NRC Branch Chief:* Shana R. Helton.

Virginia Electric and Power Company, Docket Nos. 50–280 and 50–281, Surry Power Station, Unit Nos. 1 and 2, Surry County, Virginia

*Date of amendment request:* January 14, 2015. A publicly-available version is in ADAMS under Accession No. ML15021A130.

*Description of amendment request:* The amendments would add a Technical Specification (TS) Surveillance Requirement (SR) [TS 4.11.C.5.d] to verify the Safety Injection (SI) System locations susceptible to gas accumulation are sufficiently filled with

water and to provide allowances, which permit performance of the verification.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change adds a Surveillance Requirement (SR) that requires verification that the SI System is not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. Gas accumulation in the SI System is not an initiator of any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased. The proposed SR ensures that the SI System continues to be capable of performing its assumed safety function and is not rendered inoperable due to gas accumulation. Thus, the consequences of any accident previously evaluated are not significantly increased.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change adds [an] SR that requires verification that the SI System is not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. The proposed change does not involve a physical alteration of the plant (*i.e.*, no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the proposed change does not impose any new or different requirements that could initiate an accident. The proposed change does not alter assumptions made in the safety analysis and is consistent with the safety analysis assumptions.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change adds [an] SR that requires verification that the SI System is not rendered inoperable due to accumulated gas and to provide allowances which permit performance of the revised verification. The proposed change adds a new requirement to manage gas accumulation to ensure the SI System is capable of performing its assumed safety functions. The proposed SR is comprehensive and will ensure that the assumptions of the safety analysis are protected. The proposed change does not adversely affect any current plant safety

margins or the reliability of the equipment assumed in the safety analysis. Therefore, there are no changes being made to any safety analysis assumptions, safety limits, or limiting safety system settings that would adversely affect plant safety as a result of the proposed change.

Therefore, the proposed change does not involve a significant reduction in a 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 no significant hazards consideration.

*Attorney for licensee:* Lillian M. Cuoco, Senior Counsel, Dominion Resources Services, Inc., 120 Tredegar St., RS–2, Richmond, VA 23219.

*NRC Branch Chief:* Robert J. Pascarelli.

### III. Previously Published Notice of Consideration of Issuance of Amendments to Facility Operating Licenses and Combined Licenses, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The following notice was previously published as a separate individual notice. The notice content was the same as above. It was published as an individual notice either because time did not allow the Commission to wait for this biweekly notice or because the action involved exigent circumstances. It is repeated here because the biweekly notice lists all amendments issued or proposed to be issued involving no significant hazards consideration.

For details, see the individual notice in the **Federal Register** on the day and page cited. This notice does not extend the notice period of the original notice.

*Tennessee Valley Authority, Docket No. 50–390, Watts Bar Nuclear Plant, Unit 1, Rhea County, Tennessee*

*Date of amendment request:* April 1, 2015, as supplemented by letter dated May 7, 2015. Publicly-available versions are in ADAMS under Accession Nos. ML15096A151 and ML15127A511, respectively.

*Brief description of amendment request:* The amendment would revise the approved Cyber Security Plan and license condition and clarify the demarcation point between digital components under NRC jurisdiction and those under the jurisdiction of the Federal Energy Regulatory Commission.

*Date of publication of individual notice in Federal Register:* June 1, 2015 (80 FR 31076).

*Expiration dates of individual notice:* July 1, 2015 (public comments); July 31, 2015 (hearing requests).

#### IV. Notice of Issuance of Amendments to Facility Operating Licenses and Combined Licenses

During the period since publication of the last biweekly notice, the Commission has issued the following amendments. The Commission has determined for each of these amendments that the application complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

A notice of consideration of issuance of amendment to facility operating license or combined license, as applicable, proposed no significant hazards consideration determination, and opportunity for a hearing in connection with these actions, was published in the **Federal Register** as indicated.

Unless otherwise indicated, the Commission has determined that these amendments satisfy the criteria for categorical exclusion in accordance with 10 CFR 51.22. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for these amendments. If the Commission has prepared an environmental assessment under the special circumstances provision in 10 CFR 51.22(b) and has made a determination based on that assessment, it is so indicated.

For further details with respect to the action see (1) the applications for amendment, (2) the amendment, and (3) the Commission's related letter, Safety Evaluation and/or Environmental Assessment as indicated. All of these items can be accessed as described in the "Obtaining Information and Submitting Comments" section of this document.

*Entergy Gulf States Louisiana, LLC, and Entergy Operations, Inc., Docket No. 50-458, River Bend Station, Unit 1, West Feliciana Parish, Louisiana*

*Date of amendment request:* July 29, 2013, as supplemented by letters dated September 23, 2014, January 12, and March 30, 2015.

*Brief description of amendment:* The amendment added a permanent exception to the River Bend Station, Unit 1 Technical Requirements Manual (TRM) Section 3.9.14, "Crane Travel—

Spent and New Fuel Storage, Transfer, and Upper Containment Fuel Pools," to allow for movement of fuel pool gates over fuel assemblies for maintenance. This exception will also be described by a revision to the Updated Safety Analysis Report (USAR) Section 9.1.2.2.2, "Fuel Building Fuel Storage," and Section 9.1.2.3.3, "Protection Features of Spent Fuel Storage Facilities."

*Date of issuance:* June 2, 2015.

*Effective date:* As of the date of issuance and shall be implemented 120 days from the date of issuance.

*Amendment No.:* 186. A publicly-available version is in ADAMS under Accession No. ML15117A575; documents related to this amendment are listed in the Safety Evaluation enclosed with the amendment.

*Facility Operating License No. NPF-47:* The amendment revised the TRM and the USAR.

*Date of initial notice in Federal Register:* December 10, 2013 (78 FR 74181). The supplements dated September 23, 2014, January 12, and March 30, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the **Federal Register**.

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated June 2, 2015.

No significant hazards consideration comments received: No.

*FirstEnergy Nuclear Operating Company, et al., Docket No. 50-440, Perry Nuclear Power Plant, Unit No. 1, Lake County, Ohio*

*Date of application for amendment:* January 9, 2015, as supplemented by letter dated May 6, 2015.

*Brief description of amendment:* The amendment revised the operating license to extend the completion date for full implementation of Perry Nuclear Power Plant Cyber Security Plan from the beginning of July 2015 to the end of December 2017.

*Date of issuance:* June 10, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 30 days.

*Amendment No.:* 167. A publicly-available version is in ADAMS under Accession No. ML15133A502; documents related to this amendment are listed in the Safety Evaluation enclosed with the amendment.

*Facility Operating License No. NPF-58:* The amendment revised the License.

*Date of initial notice in Federal Register:* April 7, 2015 (80 FR 18658). The supplemental letter dated May 6, 2015, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination.

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated June 10, 2015.

No significant hazards consideration comments received: No.

*Florida Power & Light Company, et al., Docket Nos. 50-335 and 50-389, St. Lucie Plant, Unit Nos. 1 and 2, St. Lucie County, Florida.*

*Date of application for amendment:* June 9, 2014, as supplemented by letter dated April 3, 2015.

*Brief description of amendment:* The amendments clarify the requirement for the Shift Technical Advisor (STA) in TS 6.2.2.e to allow the STA position be filled for each unit by a dedicated STA, an STA qualified Shift Supervisor, or an STA qualified Senior Reactor Operator. Additionally, the dedicated STA or the STA qualified Shift Supervisor can fill the STA position on both units.

*Date of issuance:* June 1, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 90 days of issuance.

*Amendment Nos.:* 221 and 171. A publicly-available version is in ADAMS under Accession No. ML14350A008; documents related to these amendments are listed in the Safety Evaluation enclosed with the amendments.

*Facility Operating License Nos. DPR-67 and NPF-16:* Amendments revised the license and technical specifications.

*Date of initial notice in Federal Register:* September 30, 2014 (79 FR 58818). The supplement dated April 3, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the **Federal Register**.

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated June 1, 2015.

No significant hazards consideration comments received: No.

*Florida Power & Light Company, et al., Docket Nos. 50-335 and 50-389, St. Lucie Plant, Unit Nos. 1 and 2, St. Lucie County, Florida.*

*Date of amendment request:* June 30, 2014, as supplemented by letter dated August 19, 2014.

*Brief description of amendments:* The amendments revised the completion



date for Milestone 8, full implementation, of the Cyber Security Plan from December 31, 2015, to December 17, 2017.

*Date of Issuance:* June 5, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 90 days of issuance.

*Amendment Nos.:* 222 and 172. A publicly-available version is in ADAMS under Accession No. ML15121A182; documents related to these amendments are listed in the Safety Evaluation enclosed with the amendments.

*Facility Operating License Nos. DPR-67 and NPF-16:* Amendments revised the Facility Operating Licenses and Technical Specifications.

*Date of initial notice in Federal Register:* November 4, 2014 (79 FR 65431).

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated June 5, 2015.

No significant hazards consideration comments received: No.

*Florida Power & Light Company, Docket Nos. 50-250 and 50-251, Turkey Point Nuclear Generating Unit Nos. 3 and 4, Miami-Dade County, Florida*

*Date of amendment requests:* June 28, 2012, as supplemented by letters dated September 19, 2012; March 18, April 16, and May 15, 2013; January 7, April 4, June 6, July 18, September 12, November 5, and December 2, 2014; and February 18, 2015.

*Brief description of amendments:* The amendments transition the Turkey Point Nuclear Generating Unit Nos. 3 and 4 fire protection program to a new risk-informed, performance-based alternative in accordance with 10 CFR 50.48(c), which incorporates by reference the National Fire Protection Association (NFPA) Standard 805 (NFPA 805), "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition. Copies of NFPA 805 may be purchased from the NFPA Customer Service Department, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101 and in PDF format through the NFPA Online Catalog (<http://www.nfpa.org>) or by calling 1-800-344-3555 or 617-770-3000. Copies are also available for inspection at the NRC Library, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland 20852-2738, and at the NRC PDR, One White Flint North, Room O1-F15, 11555 Rockville Pike, Rockville, Maryland 20852-2738.

*Date of issuance:* May 28, 2015.

*Effective date:* As of the date of issuance and shall be implemented as

described in the transition license conditions.

*Amendment Nos.:* 262 and 257. A publicly-available version is in ADAMS under Accession No. ML15061A237; documents related to these amendments are listed in the Safety Evaluation enclosed with the amendments.

*Renewed Facility Operating License Nos. DPR-31 and DPR-41:* Amendments revised the Renewed Facility Operating Licenses and Technical Specifications.

*Date of initial notice in Federal Register:* February 4, 2014 (79 FR 6648). The supplemental letters dated January 7, April 4, June 6, July 18, September 12, November 5, and December 2, 2014; and February 18, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the **Federal Register**.

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated May 28, 2015.

No significant hazards consideration comments received: No.

*Nebraska Public Power District, Docket No. 50-298, Cooper Nuclear Station (CNS), Nemaha County, Nebraska*

*Date of amendment request:* July 14, 2014.

*Brief description of amendment:* The amendment deleted CNS Technical Specification (TS) 5.5.3, "Post Accident Sampling," thereby eliminating the program requirements to have and maintain the post-accident sampling system. The changes are consistent with NRC-approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-413, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this TS improvement was announced in the **Federal Register** on March 20, 2002 (67 FR 13027), as part of the consolidated line item improvement process. CNS will continue to have the ability to obtain samples, utilizing PASS, following an accident.

*Date of issuance:* May 29, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 60 days of issuance.

*Amendment No.:* 250. A publicly-available version is in ADAMS under Accession No. ML15135A005; documents related to this amendment are listed in the Safety Evaluation enclosed with the amendment.

*Renewed Facility Operating License No. DPR-46:* Amendment revised the Facility Operating License and Technical Specifications.

*Date of initial notice in Federal Register:* September 30, 2014 (79 FR 58819).

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated May 29, 2015.

No significant hazards consideration comments received: No.

*Northern States Power Company—Minnesota, Docket No. 50-263, Monticello Nuclear Generating Plant (MNGP), Wright County, Minnesota*

*Date of amendment request:* July 15, 2013, as supplemented by letters dated January 31, 2014, March 12, 2014, April 29, 2014, May 9, 2014 (two letters), and November 11, 2014.

*Brief description of amendment:* The amendment revised the Technical Specifications (TSs) to reflect the use of fuel and safety analysis methods appropriate for the AREVA ATRIUM 10XM fuel bundle design. Specifically, the changes affect TS 2.1, "Safety Limits," to revise the reactor steam dome pressure safety limit value; TS 4.2.1, "Fuel Assemblies," to more accurately reflect the fuel assembly design feature as a "water channel" as opposed to a "water rod;" and TS 5.6.3, "Core Operating Limits Report (COLR)," to add AREVA safety analysis methods to the references list used in determining core operating limits in the COLR.

*Date of issuance:* June 5, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 120 days of issuance.

*Amendment No.:* 188. A publicly-available version is in ADAMS under Package Accession No. ML15072A143; documents related to this amendment are listed in the Safety Evaluation enclosed with the amendment.

*Renewed Facility Operating License No. DPR-22:* This amendment revised the Renewed Facility Operating License and the Technical Specifications.

*Date of initial notice in Federal Register:* September 9, 2014 (79 FR 53460). The supplemental letter dated November 11, 2014, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the **Federal Register**.

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated June 5, 2015.

No significant hazards consideration comments received: No.

*PPL Susquehanna, LLC, Docket Nos. 50-387 and 50-388, Susquehanna Steam Electric Station, Units 1 and 2, Luzerne County, Pennsylvania*

*Date of amendment request:* July 11, 2014, as supplemented by letters dated October 24, 2014, November 6, 2014, November 25, 2014, December 10, 2014, January 5, 2015, January 13, 2015, March 9, 2015, March 13, 2015, March 18, 2015, March 31, 2015, April 24, 2015, and May 1, 2015.

*Brief description of amendments:* By Order dated April 10, 2015, as published in the **Federal Register** on April 20, 2015 (80 FR 21767), the NRC approved an indirect license transfer for Renewed Facility Operating Licenses NPF-14 and NPF-22 for the Susquehanna Steam Electric Station, Units 1 and 2. This amendment reflects the indirect transfer of the licenses to Talen Energy Corporation and the name change of the licensee from PPL Susquehanna, LLC to Susquehanna Nuclear, LLC.

*Date of issuance:* June 1, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 30 days

*Amendment Nos.:* 262 for Unit 1 and 243 for Unit 2. A publicly-available version of the Amendment and the Order are in ADAMS under Accession Nos. ML15054A066 and ML15054A058, respectively; documents related to these amendments are listed in the Safety Evaluation enclosed with the Order dated April 10, 2015. Subsequent to the issuance of the Order, the licensee submitted letters dated April 24, 2015 (ADAMS Accession No. ML15127A263), and May 1, 2015 (ADAMS Accession No. ML15133A335). These letters provided additional notifications of regulatory approvals and the closing transaction date, as was required by the Order.

*Renewed Facility Operating License Nos. NPF-14 and NPF-22:* The amendments revised the Renewed Facility Operating Licenses.

*Date of initial notice in Federal Register:* October 6, 2014 (79 FR 60192). The supplemental letters dated October 24, 2014, November 6, 2014, November 25, 2014, December 10, 2014, January 5, 2015, January 13, 2015, March 9, 2015, March 13, 2015, March 18, 2015, March 31, 2015, April 24, 2015, and May 1, 2015, contained clarifying information, did not expand the application beyond the scope of the notice as originally published in the **Federal Register**, and did not affect the applicability of the generic no

significant hazards consideration determination.

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated April 10, 2015.

*Comments received:* Yes. The comments received on the License Transfer Request are addressed in the Safety Evaluation dated April 10, 2015.

*Southern California Edison Company, et al., Docket Nos. 50-206, 50-361, 50-362, and 72-041 San Onofre Nuclear Generating Station (SONGS), Units 1, 2, and 3, and the Independent Spent Fuel Storage Installation, San Diego County, California*

*Date of amendment request:* March 31, 2014, as supplemented by letters dated October 21, 2014, and April 29, 2015.

*Brief description of amendment:* The amendments revised the SONGS emergency action level scheme to reflect the low likelihood of any credible accident at the facility in its permanently shutdown and defueled condition that could result in radiological releases requiring offsite protective measures.

*Date of issuance:* June 5, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 60 days of issuance.

*Amendment Nos.:* Unit 1—166; Unit 2—228; Unit 3—221. A publicly-available version is in ADAMS under Accession No. ML15105A349; documents related to these amendments are listed in the Safety Evaluation enclosed with the amendments.

*Facility Operating License Nos. DPR-13, NPF-10, and NPF-15:* The amendments revised the emergency action levels.

*Date of initial notice in Federal Register:* December 23, 2014 (79 FR 77048). The supplemental letter dated April 29, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the **Federal Register**.

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated June 5, 2015.

No significant hazards consideration comments received: No.

*Southern Nuclear Operating Company, Inc., Docket Nos. 50-424 and 50-425, Vogtle Electric Generating Plant (VEGP), Units 1 and 2, Burke County, Georgia and Southern Nuclear Operating Company, Inc., Docket Nos. 50-348 and 50-364, Joseph M. Farley Nuclear Plant (Farley), Units 1 and 2, Houston County, Alabama*

*Date of application for amendment:* September 17, 2014, as supplemented by letter dated February 13, 2015.

*Brief description of amendments:* The amendments revised the Technical Specification (TS) Surveillance Requirement 3.1.3.2 and TS 5.6.5 related to the moderator temperature coefficient.

*Date of issuance:* June 2, 2015.

*Effective date:* As of its date of issuance and shall be implemented within 90 days from the date of issuance.

*Amendment Nos.:* Farley Unit 1—198, Farley Unit 2—194, VEGP Unit 1—174, VEGP Unit 2—156. A publicly-available version is in ADAMS under Accession No. ML15083A098, documents related to these amendments are listed in the Safety Evaluation enclosed with the amendments.

*Facility Operating License Nos. NPF-2, NPF-8, NPF-68, NPF-81:* The amendments revised the Renewed Facility Operating Licenses and Technical Specifications.

*Date of initial notice in Federal Register:* December 2, 2014 (79 FR 71455). The supplemental letter dated February 13, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the **Federal Register**.

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated June 2, 2015.

No significant hazards consideration comments received: No.

*Tennessee Valley Authority, Docket No. 50-390, Watts Bar Nuclear Plant, Unit 1, Rhea County, Tennessee*

*Date of amendment request:* July 24, 2014.

*Brief description of amendment:* The amendment revised the reactor coolant pump flywheel inspection surveillance requirements to extend the allowable inspection interval to 20 years. The NRC staff issued a notice of availability of a model safety evaluation and model no significant hazards consideration (NSHC) determination for referencing in license amendment applications in the



**Federal Register** on October 22, 2003 (68 FR 60422). The licensee affirmed the applicability of the model NSHC determination in its application dated July 24, 2014.

*Date of issuance:* May 28, 2015.

*Effective date:* As of the date of issuance and shall be implemented within 60 days of issuance.

*Amendment No.:* 99. A publicly-available version is in ADAMS under Accession No. ML15092A761; documents related to this amendment are listed in the Safety Evaluation enclosed with the amendment.

*Facility Operating License No. NPF-90:* Amendment revised the Facility Operating License and Technical Specifications.

*Date of initial notice in Federal Register:* September 30, 2014 (79 FR 58827).

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated May 28, 2015.

NSHC determination comments received: No.

Dated at Rockville, Maryland, this 12th day of June 2015.

For the Nuclear Regulatory Commission.

**A. Louise Lund,**

*Acting Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.*

[FR Doc. 2015-15275 Filed 6-22-15; 8:45 am]

**BILLING CODE 7590-01-P**

## NUCLEAR REGULATORY COMMISSION

[NRC-2015-0020]

### Information Collection: NRC Request for Sodium Iodide I-131 Treatment and Patient Release Information

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of submission to the Office of Management and Budget; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) has recently submitted a proposed collection of information to the Office of Management and Budget (OMB) for review. The information collection is entitled, "NRC Request for Sodium Iodide I-131 Treatment and Patient Release Practices."

**DATES:** Submit comments by July 23, 2015.

**ADDRESSES:** Submit comments directly to the OMB reviewer at: Vlad Dorjets, Desk Officer, Office of Information and Regulatory Affairs, (3150-XXXX), NEOB-10202, Office of Management

and Budget, Washington, DC 20503; telephone: 202-395-7315, email: [Vladik\\_Dorjets@omb.eop.gov](mailto:Vladik_Dorjets@omb.eop.gov).

**FOR FURTHER INFORMATION CONTACT:** Tremaine Donnell, NRC Clearance Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6258; email: [INFOCOLLECTS.Resource@nrc.gov](mailto:INFOCOLLECTS.Resource@nrc.gov).

#### SUPPLEMENTARY INFORMATION:

#### I. Obtaining Information and Submitting Comments

##### A. Obtaining Information

Please refer to Docket ID NRC 2015-0020 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:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC 2015-0020. A copy of the collection of information and related instructions may be obtained without charge by accessing Docket ID NRC 2015-0020 on this Web site.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The supporting statement and Patient Release **Federal Register** Notice (FRN) Soliciting Information is available in ADAMS under Accession No. ML15134A123.

- *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.

- *NRC's Clearance Officer:* A copy of the collection of information and related instructions may be obtained without charge by contacting the NRC's Clearance Officer, Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

##### B. Submitting Comments

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. Background

Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35), the NRC recently submitted a proposed collection of information to OMB for review entitled, "NRC Request for Sodium Iodide I-131 Treatment and Patient Release Practices." The NRC hereby informs potential respondents that an agency may not conduct or sponsor, and that a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

The NRC published an FRN with a 60-day comment period on this information collection on March 3, 2015; 80 FR 11471, entitled "NRC Request for Sodium Iodide I-131 Treatment and Patient Release Practices."

1. *The title of the information collection:* "NRC Request for Sodium Iodide I-131 Treatment and Patient Release Practices."
2. *OMB approval number:* An OMB control number has not yet been assigned to this proposed information collection.
3. *Type of submission:* New.
4. *The form number if applicable:* Not Applicable.
5. *How often the collection is required or requested:* Once.

6. *Who will be required or asked to respond:* Medical professional organizations, physicians, patients, patient advocacy groups, NRC and Agreement State medical use licensees, Agreement States, and other interested individuals who use, receive, license or have interest in the use of I-131 sodium iodide (hereafter referred to as "I-131") for the treatment of thyroid conditions.

7. *The estimated number of annual responses:* A one-time collection estimated to have 1,180 responses (620 medical community + 560 patients).

8. *The estimated number of annual respondents:* 1,180 respondents (620 medical community + 560 patients).

9. *An estimate of the total number of hours needed annually to comply with the information collection requirement or request:* 457.5 hours (255 medical community + 202.5 patients).

10. *Abstract:* The NRC is requesting a one-time information collection that will be solicited in an FRN. The FRN will have specific I-131 patient release questions associated with: (1) Existing Web sites that the responders believe provide access to clear and consistent patient information about I-131 treatment processes and procedures; (2) information the responders believe represent best practices used in making informed decisions on releasing I-131 patients and stand alone or supplemental voluntary patient/licensee guidance acknowledgment forms, if available; (3) an existing set of guidelines that the responder developed or received that provides instructions to released patients; and (4) an existing guidance brochure that the responder believes would be acceptable for nationwide distribution. The responses will form the basis for patient release guidance products developed in response to the NRC's April 28, 2014, Staff Requirements—COMAMM-14-0001/COMWDM-14-0001—“Background and Proposed Direction to NRC Staff to Verify Assumptions Made Concerning Patient Release Guidance.” The Commission, based on information from patients and patient advocacy groups, questioned the availability of clear, consistent, patient friendly and timely patient release information and directed the staff to work with a wide variety of stakeholders when developing new guidance products. This information collection effort was developed to gain input from as many stakeholders as possible. The NRC solicitation in the **Federal Register** is to obtain existing information from a variety of stakeholders.

Dated at Rockville, Maryland, this 18th day of June, 2015.

For the Nuclear Regulatory Commission.

**Tremaine Donnell,**

*NRC Clearance Officer, Office of Information Services.*

[FR Doc. 2015-15391 Filed 6-22-15; 8:45 am]

**BILLING CODE 7590-01-P**

## NUCLEAR REGULATORY COMMISSION

[NRC-2015-0147]

### Information Collection: Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Renewal of existing information collection; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) invites public comment on the renewal of Office of Management and Budget (OMB) approval for an existing collection of information. The information collection is entitled, “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions.”

**DATES:** Submit comments by August 24, 2015. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

**ADDRESSES:** You may submit comments by any of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0147. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Mail comments to:* Tremaine Donnell, Office of Information Services, Mail Stop: T-5 F53, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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:** Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

#### **SUPPLEMENTARY INFORMATION:**

#### **I. Obtaining Information and Submitting Comments**

##### *A. Obtaining Information*

Please refer to Docket ID NRC-2015-0147 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:

- *Federal rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0147.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The supporting statement is available in ADAMS under Accession No. ML15106A720.

- *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.

- *NRC's Clearance Officer:* A copy of the collection of information and related instructions may be obtained without charge by contacting NRC's Clearance Officer, Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

##### *B. Submitting Comments*

Please include Docket ID NRC-2015-0147 in your comment submission.

The NRC cautions you not to include identifying or contact information in comment submissions that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into ADAMS, and 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 into ADAMS.

## II. Background

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the NRC is requesting public comment on its intention to request the OMB's approval for the information collection summarized below.

1. *The title of the information collection:* Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51—Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions.

2. *OMB approval number:* 3150–0021.

3. *Type of submission:* Extension.

4. *The form number, if applicable:* N/A.

5. *How often the collection is required or requested:* Upon submittal of an application for a combined license, construction permit, operating license, operating license renewal, early site permit, design certification, decommissioning or license termination review, or manufacturing license, or upon submittal of a petition for rulemaking.

6. *Who will be required or asked to respond:* Licensees and applicants requesting approvals for actions proposed in accordance with the provisions of 10 CFR parts 30, 32, 33, 34, 35, 36, 39, 40, 50, 52, 54, 60, 61, 70, and 72.

7. *The estimated number of annual responses:* 48.7.

8. *The estimated number of annual respondents:* 48.7.

9. *The estimated number of hours needed annually to comply with the information collection requirement or request:* 48,104.

10. *Abstract:* The NRC's regulations at 10 CFR part 51 specifies information to be provided by applicants and licensees so that the NRC can make determinations necessary to adhere to the policies, regulations, and public laws of the United States, which are interpreted and administered in accordance with the provisions set forth in the National Environmental Policy Act of 1969, as amended.

## III. Specific Requests for Comments

The NRC is seeking comments that address the following questions:

1. Is the proposed collection of information necessary for the NRC to properly perform its functions? Does the information have practical utility?

2. Is the estimate of the burden of the information collection accurate?

3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?

4. How can the burden of the information collection on respondents

be minimized, including the use of automated collection techniques or other forms of information technology?

Dated at Rockville, Maryland, this 18th day of June, 2015.

For the Nuclear Regulatory Commission.

**Tremaine Donnell,**

*NRC Clearance Officer, Office of Information Services.*

[FR Doc. 2015–15390 Filed 6–22–15; 8:45 am]

**BILLING CODE 7590–01–P**

## NUCLEAR REGULATORY COMMISSION

[Docket No. 50–271; NRC–2015–0157]

### Entergy Nuclear Operations, Inc.; Vermont Yankee Nuclear Power Station

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing exemptions in response to a January 6, 2015, request from Entergy Nuclear Operations, Inc. (ENO or the licensee). One exemption permits the use of the Vermont Yankee Nuclear Power Station (VY) Decommissioning Trust Fund (Trust) to implement the licensee's plan to manage irradiated fuel in accordance with the updated Irradiated Fuel Management Plan and post-shutdown decommissioning activities report (PSDAR). The other exemption permits the licensee to make withdrawals from the Trust in accordance with the updated Irradiated Fuel Management Plan and PSDAR without prior notification to the NRC.

**DATES:** June 23, 2015.

**ADDRESSES:** Please refer to Docket ID NRC–2015–0157 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC–2015–0157. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may access publicly-available documents online in the ADAMS public document collection at <http://www.nrc.gov/reading-rm/>

*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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time that a document is referenced.

- *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.

### FOR FURTHER INFORMATION CONTACT:

James Kim, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–4125; email: [James.Kim@nrc.gov](mailto:James.Kim@nrc.gov).

### SUPPLEMENTARY INFORMATION:

## I. Background

Entergy Nuclear Operations, Inc. (ENO), is the holder of Renewed Facility Operating License No. DPR–28 for VY. By letter dated January 12, 2015 (ADAMS Accession No. ML15013A426), ENO submitted to the NRC a certification in accordance with Sections 50.82(a)(1)(i) and 50.82(a)(1)(ii) of Title 10 of the *Code of Federal Regulations* (10 CFR), indicating that it had permanently ceased power operations at VY and had permanently defueled the VY reactor vessel. VY has not operated since December 29, 2014. The facility consists of a boiling water reactor located in the town of Vernon, Windham County, Vermont on the west bank of the Connecticut River, immediately upstream of the Vernon Hydroelectric Station.

## II. Request/Action

By letter dated January 6, 2015 (ADAMS Accession No. ML15013A171), ENO submitted a request for exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv). The exemption from 10 CFR 50.82(a)(8)(i)(A) would permit ENO to make withdrawals from the VY Trust to implement its plan to manage irradiated fuel in accordance with the updated Irradiated Fuel Management Plan and PSDAR. The exemption from 10 CFR 50.75(h)(1)(iv) would permit ENO to make these withdrawals without prior notification of the NRC, similar to withdrawals for decommissioning activities made in accordance with 10 CFR 50.82(a)(8). By a separate letter dated December 19, 2014 (ADAMS Accession No. ML14358A251), ENO submitted an

update to the VY Irradiated Fuel Management Plan (as required by 10 CFR 50.54(bb)). The PSDAR, as required by 10 CFR 50.82(a)(4)(i), was also submitted on December 19, 2014 (ADAMS Accession No. ML14357A110).

The requirements of 10 CFR 50.82(a)(8)(i)(A) restrict the use of Trust withdrawals to expenses for legitimate decommissioning activities consistent with the definition of decommissioning which appears in 10 CFR 50.2. This definition does not include activities associated with irradiated fuel management. Therefore, an exemption from 10 CFR 50.82(a)(8)(i)(A) is needed to allow ENO to use funds from the Trust for irradiated fuel management.

The requirements of 10 CFR 50.75(h)(1)(iv) also restrict the use of Trust disbursements (other than for ordinary and incidental expenses) to decommissioning expenses until final decommissioning has been completed. The requirements of 10 CFR 50.75(h)(1)(iv) further provide that, except for withdrawals being made under 10 CFR 50.82(a)(8) or for payments of ordinary administrative costs and incidental expenses, no disbursement may be made from the Trust without written notice to the NRC at least 30 working days in advance. Therefore, an exemption from 10 CFR 50.75(h)(1)(iv) is needed to allow ENO to use funds from the Trust for irradiated fuel management without prior NRC notification.

### III. Discussion

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 (1) when the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) when any of the special circumstances listed in 10 CFR 50.12(a)(2) are present. These special circumstances include, among other things, the following:

(a) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or

(b) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

#### A. The Exemptions are Authorized by Law

The requested exemptions from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would allow ENO to use a portion of the funds from the Trust for irradiated fuel management without prior notice to the NRC, in the same manner that withdrawals are made under 10 CFR 50.82(a)(8) for decommissioning activities. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR part 50 when the exemptions are authorized by law. The NRC staff has determined, as explained below, that granting the licensee's proposed exemptions will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemptions are authorized by law.

#### B. The Exemptions Present No Undue Risk to the Public Health and Safety

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors. Based on the site-specific cost estimate and the cash flow analysis, use of a portion of the Trust for irradiated fuel management will not adversely impact ENO's ability to complete radiological decommissioning within 60 years and terminate the VY license. Furthermore, exemption from 10 CFR 50.75(h)(1)(iv) to allow the licensee to make withdrawals from the Trust for irradiated fuel management without prior written notification to the NRC should not affect the sufficiency of funds in the Trust to accomplish radiological decontamination of the site because such withdrawals are still constrained by the provisions of 10 CFR 50.82(a)(8)(i)(B)–(C) and are reviewable under the annual reporting requirements of 10 CFR 50.82(a)(8)(v)–(vii).

Based on the above, there are no new accident precursors created by using the Trust in the proposed manner. Thus, the probability of postulated accidents is not increased. Also, based on the above, the consequences of postulated accidents are not increased. No changes are being made in the types or amounts of effluents that may be released offsite. There is no significant increase in occupational or public radiation exposure. Therefore, the requested exemptions will not present an undue risk to the public health and safety.

#### C. The Exemptions are Consistent With the Common Defense and Security

The requested exemptions would allow ENO to use funds from the Trust for irradiated fuel management. Irradiated fuel management under 10 CFR 50.54(bb) is an integral part of the planned ENO decommissioning and final license termination process and will not adversely affect ENO's ability to physically secure the site or protect special nuclear material. This change to enable the use of a portion of the funds from the Trust for activities other than decommissioning activities has no relation to security issues. Therefore, the common defense and security is not impacted by the requested exemptions.

#### D. Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the regulation.

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors. Strict application of these requirements would prohibit withdrawal of funds from the Trust for activities other than decommissioning activities, such as irradiated fuel management, until final radiological decommissioning at VY has been completed.

The total VY Trust balance as of October 31, 2014, was approximately \$655.0 million in 2014 dollars. The ENO analysis projects the total radiological decommissioning cost of VY to be approximately \$817.2 million (2014 dollars). As required by 10 CFR 50.54(bb), ENO estimated the costs associated with the long-term irradiated fuel management at VY to be \$364.4 million in 2014 dollars.

The staff performed an independent cash flow analysis of the Trust through 2075, assuming an annual real rate of return of two percent, as allowed by 10 CFR 50.75(e)(1)(ii), and determined the projected earnings of the Trust. The staff confirmed that the current funds, planned future contributions, and projected earnings of the Trust provide reasonable assurance of adequate funding to complete all NRC required decommissioning activities and to conduct irradiated fuel management in accordance with the updated Irradiated Fuel Management Plan and PSDAR. The staff's review and conclusions are based on ENO's specific financial situation, as described in its December 19, 2014,

letter. Consequently, the staff concludes that application of the requirement that funds from the Trust only be used for decommissioning activities and not for irradiated fuel management is not necessary to achieve the underlying purpose of the rule and, thus, that special circumstances are present supporting the approval of the exemption request.

In its submittal, ENO also requested exemption from the requirements of 10 CFR 50.75(h)(1)(iv) concerning prior written notification to the NRC of withdrawals from the Trust to fund activities other than decommissioning activities. The underlying purpose of notifying the NRC prior to withdrawal of funds from the Trust is to provide an opportunity for NRC intervention, when deemed necessary, if the withdrawals are for expenses other than those authorized by 10 CFR 50.75(h)(1)(iv) and 10 CFR 50.82(a)(8) that could result in there being insufficient funds in the Trust to accomplish radiological decommissioning of the site.

As stated previously, the staff has determined that there are sufficient funds in the Trust to complete legitimate radiological decommissioning activities as well as to conduct irradiated fuel management. Pursuant to the annual reporting requirements in 10 CFR 50.82(a)(8)(v)–(vii), licensees are required to monitor and report the status of the Trust and the funding status for managing irradiated fuel. These reports provide the NRC with awareness of, and the ability to take action on, any actual or potential funding deficiencies. The requested exemptions would not allow withdrawal of funds from the VY Trust for any other purpose that is not currently authorized in the regulations without prior notification to the NRC. Therefore, the granting of this exemption to 10 CFR 50.75(h)(1)(iv) to allow the licensee to make withdrawals from the Trust for authorized expenses for irradiated fuel management without prior written notification to the NRC will still meet the underlying purpose of the regulation.

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(iii) are present whenever compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. The licensee states that the Trust contains funds in excess of the estimated costs of radiological decommissioning and that these excess funds are needed for irradiated fuel management activities. The NRC does

not preclude use of funds from the Trust in excess of those needed for radiological decommissioning for other purposes, such as irradiated fuel management. The NRC has stated that funding for irradiated fuel management may be commingled in the Trust, provided the licensee is able to identify and account for the radiological decommissioning funds separately from the funds set aside for irradiated fuel management (see NRC Regulatory Issue Summary 2001–07, Revision 1, “10 CFR 50.75 Reporting and Recordkeeping for Decommissioning Planning” dated January 8, 2009 (ADAMS Accession No. ML083440158), and Regulatory Guide 1.184, Revision 1, “10 CFR 50.75 Reporting and Recordkeeping for Decommissioning Planning” (ADAMS Accession No. ML13144A840)). To prevent access to those excess funds in the Trust because irradiated fuel management is not associated with radiological decommissioning, would create an unnecessary financial burden without any corresponding safety benefit. The adequacy of the Trust to cover the cost of activities associated with irradiated fuel management, in addition to radiological decommissioning, is supported by the site-specific decommissioning cost analysis. If ENO cannot use its Trust for irradiated fuel management, it would need to obtain additional funding that would not be recoverable from the Trust, or ENO would have to modify its decommissioning approach and methods. The NRC staff concludes that either outcome would impose an unnecessary and undue burden significantly in excess of that contemplated when the regulation was adopted.

Since the underlying purpose of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would be achieved by allowing ENO to use a portion of the Trust for irradiated fuel management without prior NRC notification, and compliance with the regulations would result in an undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, the special circumstances required by 10 CFR 50.12(a)(2)(ii) and 10 CFR 50.12(a)(2)(iii) exist and support the approval of the requested exemptions.

#### *E. Environmental Considerations*

Under 10 CFR 51.22(c)(25), granting of an exemption from the requirements of any regulation of Chapter I is a categorical exclusion provided that (i) there is no significant hazards consideration; (ii) there is no significant change in the types or significant

increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which an exemption is sought are among those identified in 10 CFR 51.22(c)(25)(vi).

The Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation, has determined that approval of the exemption request involves no significant hazards consideration because allowing the licensee to use withdrawals from the Trust, in accordance with the updated Irradiated Fuel Management Plan and PSDAR, without prior notification to the NRC at the permanently shutdown and defueled VY power reactor, does 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. The exempted decommissioning trust fund regulations are unrelated to any operational restriction. Accordingly, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; and no significant increase in individual or cumulative public or occupational radiation exposure. The exempted regulation is not associated with construction, so there is no significant construction impact. The exempted regulation does not concern the source term (*i.e.*, potential amount of radiation in an accident), nor mitigation. Thus, there is no significant increase in the potential for or consequences from radiological accidents. The requirements for using decommissioning trust funds for decommissioning activities and for providing prior written notice for other withdrawals from which the exemption is sought involve recordkeeping requirements, reporting requirements, or other requirements of an administrative, managerial, or organizational nature.

Therefore, pursuant to 10 CFR 51.22(b) and 51.22(c)(25), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request.

#### **IV. Conclusions**

Accordingly, the Commission has determined that, pursuant to 10 CFR

50.12(a), the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants ENO exemptions from the requirements of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) to allow withdrawals from the VY Trust for irradiated fuel management without prior NRC notification.

The exemptions are effective upon issuance.

Dated at Rockville, Maryland, this 17th day of June 2015.

For the Nuclear Regulatory Commission.

**A. Louise Lund,**

*Acting Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.*

[FR Doc. 2015-15473 Filed 6-22-15; 8:45 am]

**BILLING CODE 7590-01-P**

## NUCLEAR REGULATORY COMMISSION

[NRC-2015-0033]

### Information Collection; Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Renewal of existing information collection; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) invites public comment on the renewal of Office of Management and Budget (OMB) approval for an existing collection of information. The information collection is entitled, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."

**DATES:** Submit comments by August 24, 2015. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

**ADDRESSES:** You may submit comments by any of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0033. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Mail comments to:* Tremaine Donnell, Office of Information Services,

Mail Stop: T-5 F53, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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:** Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

#### **SUPPLEMENTARY INFORMATION:**

#### **I. Obtaining Information and Submitting Comments**

##### *A. Obtaining Information*

Please refer to Docket ID NRC-2015-0033 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:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0033.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The supporting statement and burden estimates are available in ADAMS under Accession Nos.: ML15114A468 and ML15114A470.

- *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.

- *NRC's Clearance Officer:* A copy of the collection of information and related instructions may be obtained without charge by contacting the NRC's Clearance Officer, Tremaine Donnell, Office of Information Services, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6258; email: [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV).

##### *B. Submitting Comments*

Please include Docket ID NRC-2015-0033 in the subject line of your comment submission, in order to ensure that the NRC is able to make your

comment submission available to the public in this docket.

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. Background**

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35), the NRC is requesting public comment on its intention to request the OMB's approval for the information collection summarized below.

1. *The title of the information collection:* 10 CFR part 37, Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.
2. *OMB approval number:* 3150-0214.
3. *Type of submission:* Extension.
4. *The form number, if applicable:* Standard Fingerprint Form, FD-258.
5. *How often the collection is required or requested:* One time for initial compliance notifications and fingerprints for the reviewing officials; and as needed for implementation notifications, event notifications, notifications of shipments of radioactive material, and fingerprinting of new employees.
6. *Who will be required or asked to respond:* Licensees that are authorized to possess and use category 1 or category 2 quantities of radioactive material.
7. *The estimated number of annual responses:* 103,983.
8. *The estimated number of annual respondents:* 1,500 (300 NRC Licensees + 1,200 Agreement State Licensees).
9. *The estimated number of hours needed annually to comply with the information collection requirement or request:* 138,570.2 hours (1932.4 hours reporting + 85,644.2 hours

recordkeeping + 50,993.6 hours third-party disclosure).

10. *Abstract:* Part 37 of Title 10 of the *Code of Federal Regulations* (10 CFR), contains security requirements for the use of category 1 and category 2 quantities of radioactive material. Licensees are required to: (1) Develop procedures for implementation of the security provisions; (2) develop a security plan that describes how security is being implemented; (3) conduct training on the procedures and security plan; (4) conduct background investigations for those individuals permitted access to category 1 or category 2 quantities of radioactive material; (5) coordinate with LLEAs so the LLEAs would be better prepared to respond in an emergency; (6) conduct preplanning and coordination activities before shipping radioactive material; and (7) implement security measures for the protection of the radioactive material. Licensees are required to promptly report any attempted or actual theft or diversion of the radioactive material. Licensees are required to keep copies of the security plan, procedures, background investigation records, training records, and documentation that certain activities have occurred. The NRC uses the information required by 10 CFR part 37 to fulfill its responsibilities to respond to, investigate, and correct situations that adversely affect public health and safety or the common defense and security.

### III. Specific Requests for Comments

The NRC is seeking comments that address the following questions:

1. Is the proposed collection of information necessary for the NRC to properly perform its functions? Does the information have practical utility?
2. Is the estimate of the burden of the information collection accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?
4. How can the burden of the information collection on respondents be minimized, including the use of automated collection techniques or other forms of information technology?

Dated at Rockville, Maryland, this 18th day of June, 2015.

For the Nuclear Regulatory Commission.

**Tremaine Donnell,**

*NRC Clearance Officer, Office of Information Services.*

[FR Doc. 2015-15392 Filed 6-22-15; 8:45 am]

BILLING CODE 7590-01-P

## NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-250, 50-260, and 50-296; NRC-2014-0054]

### Browns Ferry Nuclear Plant, Units 1, 2, and 3

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** License amendment application; withdrawal by applicant.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) has granted the request of the Tennessee Valley Authority (TVA, the licensee) to withdraw its application dated November 22, 2013, as supplemented by letters dated April 4, August 15, September 30, 2014, and January 29, 2015, for a proposed amendment to Renewed Facility Operating License (RFOL) Nos. DPR-33, DPR-52, and DPR-68, for the Browns Ferry Nuclear Plant, Units 1, 2, and 3 (Browns Ferry). The proposed amendment would have revised the Browns Ferry Technical Specifications to decrease the allowable leakage rate criteria for the Main Steam Isolation Valves (MSIVs).

**DATES:** June 23, 2015.

**ADDRESSES:** Please refer to Docket ID NRC-2014-0054 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- Federal Rulemaking Web site: Go to <http://www.regulations.gov> and search for Docket ID NRC-2014-0054. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- NRC's Agencywide Documents Access and Management System (ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time that a document is referenced.

- 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.

**FOR FURTHER INFORMATION CONTACT:**

Farideh Saba, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-1447, email: [Farideh.Saba@nrc.gov](mailto:Farideh.Saba@nrc.gov).

**SUPPLEMENTARY INFORMATION:** The NRC has granted the request of the TVA to withdraw its November 22, 2013, application for the proposed amendment to RFOLs for Browns Ferry, located in Limestone County, AL.

By letter dated November 22, 2013 (ADAMS Accession No. ML14015A403), as supplemented by letters dated April 4, August 15, September 30, 2014, and January 29, 2015 (ADAMS Accession Nos. ML14100A143, ML14230A827, ML14275A247, and ML15030A499, respectively), TVA proposed changing Browns Ferry Technical Specification 3.6.1.3, "Primary Containment Isolation Valves (PCIVs)," to reduce the individual and total leakage rate through the MSIVs. In the TVA letter dated August 30, 2013, "Updated Reply to Notice of Violation; EA-11-252," the Alternative Leakage Treatment (ALT) Pathway was identified as being in a nonconforming/degraded condition. The corrective actions that were outlined to change the ALT Pathway included modification of licensing documents to show lower individual and total leakage rates through the MSIVs. The proposed change would have made the current passive secondary ALT Pathway the primary pathway and decreased the leakage rates from 100 standard cubic feet per hour (scfh) per valve to 60 scfh for individual MSIVs and the combined leakage rates for all four main steam lines from 150 scfh to 85 scfh.

The NRC published a Biweekly Notice in the **Federal Register** on April 8, 2014 (79 FR 19401), that gave notice that this proposed amendment was under consideration by the NRC. However, by letter dated May 29, 2015 (ADAMS Accession No ML15159B009), the licensee requested to withdraw the proposed amendment.

Dated at Rockville, Maryland, this 16th day of June 2015.

For the Nuclear Regulatory Commission.

**Farideh E. Saba,**

*Senior Project Manager, Plant Licensing Branch II-2, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.*

[FR Doc. 2015-15478 Filed 6-22-15; 8:45 am]

BILLING CODE 7590-01-P



## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-75189; File No. SR-Phlx-2015-49]

### Self-Regulatory Organizations; NASDAQ OMX PHLX LLC; Notice of Filing of Proposed Rule Change to Rule 1080.07

June 17, 2015.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on June 5, 2015, NASDAQ OMX PHLX LLC (“Phlx” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, 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 from interested persons.

#### I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend and correct Rule 1080.07 in a number of ways, as described further below.

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 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 purpose of the proposal is to amend and correct certain rule text and provide additional clarity to Phlx Participants regarding the trading of

Complex Orders on the Exchange. The Exchange’s Complex Order System (“System”), which is governed by Rule 1080.07 includes an opening process called the Complex Order Opening Process or “COOP,” the Complex Order Live Auction (“COLA”), an automated auction for seeking additional liquidity and price improvement for Complex Orders, and a Complex Limit Order book, the CBOOK.

Except for the time period referred to in Rule 1080.07(f)(i)(F) and the acceptance and treatment of all-or-none orders (both of which are discussed below), the Exchange proposes to correct several inconsistencies between the existing Complex Orders rule, Rule 1080.07, and the operation of the Complex Orders System today.

###### Opening Inconsistencies

First, the Exchange proposes to amend the rule text applicable to its opening process. Specifically, Rule 1080.07(d) currently provides for performing a COOP Evaluation in order to identify a COLA-eligible order and then operating an auction respecting that order, similar to the way the COLA operates.<sup>3</sup> The Exchange proposes to amend Rule 1080.07(d) to reflect that the System operates the opening auction process for Complex Orders differently than the COLA.<sup>4</sup> Specifically, the COOP identifies a price at which the maximum number of contracts can trade on the opening based on interest received in the Complex Order Strategy.<sup>5</sup> Thus, the COOP operates like a traditional opening process for non-Complex Orders (meaning, single leg orders), considering buys and sells, taking all interest into account (without bias toward any participant) to determine which interest is executable and identifying any imbalance.<sup>6</sup>

Despite the current rule text, a Complex Order on the opening would not have been designated as the COLA-eligible Order with priority over all

other same-side orders. Instead, such order would have been considered for execution alongside other same-priced same-side orders received in the same Complex Order Strategy, both before and during the COOP, consistent with a normal opening process. Specifically, for each Complex Order Strategy, the System will take into consideration all Complex Orders, identify the price at which the maximum number of contracts can trade and calculate the imbalance, if any, as follows:

- Pursuant to existing Rule 1080.07(d)(i), the System will accept pre-opening Complex Orders, and will accept Complex Orders prior to re-opening following a halt in trading on the Exchange. Complex Orders received prior to the opening or during a trading halt will reside on the CBOOK (as defined above). There will be one such COOP per Complex Order Strategy. These provisions are not changing.

- Rule 1080.07(d)(ii) will be amended to add reference to a timer. Specifically, new rule text will provide that once trading in each option component of a Complex Order Strategy has opened (or re-opened following a trading halt) for a certain configurable time not to exceed 60 seconds<sup>7</sup> (and none of the conditions described in Rule 1080.07(c)(ii) exist),<sup>8</sup> the System will initiate the COOP, provided that a COOP will only be conducted for any Complex Order Strategy that has a Complex Order received before the opening<sup>9</sup> of that Complex Order Strategy. The Exchange is proposing to add new rule text to provide that the Exchange will not conduct a COOP when a particular Complex Order Strategy is already open as a result of another electronic auction process, such as PIXL pursuant to Rule 1080(n) or the Exchange’s Solicitation mechanism or if another electronic auction involving the same Complex

<sup>7</sup> This is known as the opening delay timer, which is intended to allow a brief period of time for the prices for the various series of an option to stabilize after the opening of those series.

<sup>8</sup> These include: the Complex Order is received prior to the opening on the Exchange of any options component of the Complex Order; during an opening rotation for any options component of the Complex Order; during a trading halt for any options component of the Complex Order; when the Exchange’s Risk Monitor Mechanism is engaged for any options component of the Complex Order that represents all of the PBBO pursuant to Rule 1093; or when the Exchange’s market for any options component of the Complex Order is disseminated pursuant to Rule 1082(a)(ii)(B).

<sup>9</sup> Currently, the Rule provides that the COOP is conducted if a Complex Order is pending at the opening or re-opening. However, such Complex Order may no longer be pending (perhaps it was canceled), such that a COOP is actually triggered by receipt of the order.

<sup>3</sup> The COLA is an auction intended to solicit interest in a particular Complex Order other than on the opening. See Rule 1080.07(e).

<sup>4</sup> The rule provides that the System determines which Complex Order, if any, on the CBOOK will be the “COLA-eligible order” subject to a COLA. This is not correct.

<sup>5</sup> A Complex Order Strategy means a particular combination of components of a Complex Order and their ratios to one another. The Exchange will calculate both a bid price and an offer price for each Complex Order Strategy based on the current PBBO (as defined below) for each component of the Complex Order. Each Complex Order Strategy will be assigned a strategy identifier by the System. See Rule 1080.07(a)(ii).

<sup>6</sup> An imbalance is the number of contracts that cannot be matched with other interest at a particular price. See e.g. NOM Chapter VI, Section 8(a)(1).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.



Order Strategy is in progress.<sup>10</sup> If that Complex Order Strategy is already open, a COOP is not needed and will not occur.

- The Exchange is also proposing to add to Rule 1080.07(d)(ii) that following a trading halt, a COOP will be conducted for any Complex Order Strategy where a Complex Order was received before or during a trading halt or that Complex Order Strategy had previously opened prior to the trading halt.

- The COOP will be conducted in two phases, the “COOP Timer” (as defined below) and the “COOP Evaluation” (also defined below). A COOP can be occurring at the same time in different Complex Order Strategies.

- To add specificity, the Exchange is proposing to add to Rule 1080.07(d)(ii)(A)(1) that the Exchange will send a broadcast message indicating that a COOP has been initiated. The broadcast message will identify the Complex Order Strategy,<sup>11</sup> the opening price (based on the maximum number of contracts that can be executed at one particular price, except if there is no price at which any orders can be executed), and the imbalance side and volume, if any. This broadcast message is called the Complex Order Opening Auction Notification and is sent over an order feed, PHLX Orders, which contains Complex Order information, as well as over the Specialized Quote Feed (“SQF”).<sup>12</sup>

- Pursuant to Rule 1080.07(d)(ii)(A)(1), the Complex Order Opening Auction Notification starts a COOP Timer, which will begin counting a number of seconds during which the Complex Order, if any, may not be traded. The COOP Timer is configurable to a period ranging from 0 to 600 seconds as determined by the Exchange and communicated to Exchange membership on the Exchange’s Web site. The COOP Timer will be configured for the same number of seconds for all options trading on the Exchange. During the COOP Timer, Phlx XL Participants can submit responses to the Complex Order Opening Auction Notification pursuant to subparagraph (B).

The Exchange is proposing to delete Rule 1080.07(d)(ii)(A)(2), which currently provides that the System will not engage the COOP Timer upon re-

opening Complex Order trading when either: (a) The Exchange’s automated execution system was disengaged and subsequently re-engaged, or (b) the Phlx XL Risk Monitor Mechanism was engaged and subsequently disengaged. It further provides that, instead, the System will immediately begin the COOP Evaluation and will not initiate the COOP Timer. This provision is incorrect and obsolete because the Exchange does not and cannot disengage its automatic execution system; automatic execution is a fundamental aspect of the System. With respect to the Risk Monitor Mechanism, its operation has no impact on the COOP Timer.

The Exchange proposes to amend Rule 1080.07(d)(ii)(A)(4) to specify in more detail that Complex Orders received prior to the COOP Timer and Complex Orders received during the COOP Timer (other than COOP Sweeps and Complex Order Responses marked as a response) will be visible to Phlx XL participants upon receipt.

#### Opening—Immediate-or-Cancel Orders and DNA Orders

Currently, Complex Orders marked as Immediate-or-Cancel (“IOC”) <sup>13</sup> and Do Not Auction (“DNA”) <sup>14</sup> can be submitted. The Exchange proposes to adopt into Rule 1080.07(d)(ii)(A)(5) how both IOC and DNA orders are handled on the opening. Complex Orders marked as IOC or DNA received before the COOP is initiated will be cancelled and will not participate in the COOP; however, a COOP will nevertheless occur in that Complex Order Strategy. The Exchange believes that it is appropriate for the COOP to occur even though the IOC or DNA order that triggered it is cancelled,<sup>15</sup> because the opening process is intended to open key strategies in which participants are interested. From a system perspective and as a practical matter, not every Complex Order Strategy can be opened each day, as there are millions of possible permutations, based on the number of options and option series available for trading today. This way, the System can focus on the Complex Order Strategies that attract interest and prepare to open those, making them available for trading on a particular day.

The Exchange believes it is appropriate for the COOP to occur, because responsive interest on both sides of the market can nevertheless

trade against other responding interest. In fact, today, if an order that is not an IOC order (like a Day order) initiates a COOP and then is cancelled by the entering participant before the end of the COOP, responsive interest can nevertheless trade.

IOC and DNA orders are handled differently when received *during a COOP*. IOC Complex Orders received during a COOP will join the COOP and be treated like any other Complex Order, except such orders will be cancelled at the end of the COOP Timer if not executed. This is intended to try to execute the order, because the order may be responding to the Complex Order Opening Auction Notification. The Exchange notes that IOC Complex Orders are handled similarly in the Exchange’s PIXL system for similar reasons;<sup>16</sup> that is, an attempt is made to execute the IOC Complex PIXL order, and therefore there is a delay in executing the order, even though it is marked IOC. Accordingly, the Exchange does not believe that participants will be surprised about this handling.

The Exchange also notes that participants who want their order handled in a more immediate way during a COOP can submit a DNA order, which would not join a COOP that is in progress and instead be cancelled right away, because that would involve a delay. Consistent with the rule language that DNA Orders are cancelled if not immediately executed,<sup>17</sup> DNA Orders do not participate in a COOP.

#### Opening—Responses During COOP Timer

Pursuant to proposed Rule 1080.07(d)(ii)(B), Phlx XL participants <sup>18</sup> may bid and/or offer on either or both side(s) of the market during the COOP Timer by submitting one or more Complex Orders (“Complex Order Response”). In addition, Phlx XL market makers <sup>19</sup> may also bid and/or offer on either or both side(s) of the market

<sup>16</sup> See Phlx Rule 1080(n) governing PIXL; the Exchange notes that this provision does not expressly describe how IOC orders are handled.

<sup>17</sup> See Phlx Rule 1080.07(a)(viii)(B).

<sup>18</sup> This term is currently defined in Rule 1080.07(a)(vii) as Streaming Quote Traders (“SQTs”), Remote Streaming Quote Traders (“RSQTs”), non-SQT Registered Options Traders (“non-SQT ROTs”), specialists and non-Phlx market makers on another exchange; non-broker-dealer customers and non-market-maker off-floor broker-dealers; and Floor Brokers using the Options Floor Broker Management System. Once amended to include Firms (as proposed herein), this term will cover all potential users of the Complex Orders system.

<sup>19</sup> This is a new term that the Exchange believes will help distinguish Phlx XL market makers (which include specialists, SQTs and RSQTs) from other types of Phlx participants. See proposed Rule 1080.07(a)(vii).

<sup>10</sup> See SR-Phlx-2014-66.

<sup>11</sup> Each Complex Order Strategy has an identifier. See Rule 1080.07(a)(ii).

<sup>12</sup> Securities Exchange Act Release Nos. 60877 (October 26, 2009), 74 FR 56255 (October 30, 2009) (SR-Phlx-2009-92) and 66993 (May 15, 2012), 77 FR 30043 (May 21, 2012) (SR-Phlx-2012-63) (addressing TOPO Plus Orders/PHLX Orders).

<sup>13</sup> See Rule 1080.07(b)(i)-(iii).

<sup>14</sup> See Rule 1080.07(a)(viii).

<sup>15</sup> A Complex Order Opening Auction Notification is sent with a price and size of zero, and a buy side.

during the COOP Timer by submitting one or more COOP Sweeps. The Exchange is proposing to codify COOP Sweeps in Rule 1080.07(d)(ii)(B). COOP Sweeps are one-sided and always have a limit price. Like COLA Sweeps, COOP Sweeps can only be entered by Phlx XL market makers, participants who quote electronically as market makers for their own account (SQTs, RSQTs and specialists). Because non-SQT ROTs do not quote electronically, they cannot enter COOP Sweeps or COLA Sweeps, which are electronic.<sup>20</sup> Specifically, a COOP Sweep is a one-sided electronic quotation for execution against opening trading interest in a particular Complex Order Strategy; this definition is proposed to be added to the rule text.<sup>21</sup>

The Exchange believes it is appropriate to permit Phlx XL market makers to submit COOP Sweeps, in addition to Complex Orders, for several reasons. Today, Phlx XL market makers are the only participants who can submit quotes, sweeps of non-Complex Orders, COLA Sweeps and COOP Sweeps (“Sweeps”).<sup>22</sup> All of these, including COOP Sweeps, are submitted over the Specialized Quote Feed, SQF, which is a method of submitting quoting information and receiving information back about those quotes and Sweeps. Quotes and Sweeps can only be submitted over SQF, the quoting protocol, because this protocol is designed to handle quotes and Sweeps. Some Phlx XL market makers choose to submit their interest in the form of a Complex Order, which is submitted through a different interface than SQF and is geared toward the submission of orders (rather than quotes) to the Exchange. The Exchange developed Sweeps in order for Phlx XL market makers to be able to expeditiously submit one-sided responsive interest without having to enter an order, which involves an entirely different protocol and method of entry; this was intended to encourage Phlx XL market makers to submit responsive interest while managing risk, utilizing a single protocol, which should promote just and equitable principles of trade.

There is no advantage to submitting a COOP Sweep versus a Complex Order; Phlx XL market maker interest is handled the same once it is submitted regardless of how it is submitted,

including for priority purposes.<sup>23</sup> Furthermore, there is no timing advantage of submitting a COOP Sweep versus a Complex Order (whether for a Phlx XL market maker or not), because none of the interest is processed until after the COOP Timer ends and all Phlx XL market maker interest is executed on a pro-rata basis, not in time priority. Conversely, there is no disadvantage to non-Phlx XL market makers that they cannot submit a COOP Sweep, just like there is no such disadvantage that such participants cannot submit a quote. By definition, Phlx XL market makers submit, and are obligated to submit, quotes; this is the core distinction between market makers and other market participants.

A Phlx XL market maker may submit multiple COOP Sweeps at different prices (but not multiple COOP Sweeps at the same price, except as provided in sub-paragraph (2)), in increments of \$0.01 in response to a Complex Order Opening Auction Notification, regardless of the minimum trading increment applicable to the specific series.<sup>24</sup>

In addition, Phlx XL market makers may change the size of a previously submitted COOP Sweep during the COOP Timer. The System will use the Phlx XL market maker’s most recently submitted COOP Sweep at each price level as that market maker’s response at that price level, unless the COOP Sweep has a size of zero. A COOP Sweep with a size of zero will remove a Phlx XL market maker’s COOP Sweep from that COOP at that price level.<sup>25</sup> COOP Sweeps will not be visible to any participant and will not be disseminated by the Exchange.<sup>26</sup> This is because COOP Sweeps are only available to trade during the COOP and will expire if unexecuted at the end of the COOP Timer once all executions are complete. Similarly, Complex Order Responses are not visible if marked as a response. A Complex Order Response will expire if unexecuted at the end of the COOP Timer once all executions are complete, but a Complex Order submitted during the COOP Timer which is not marked as a response will be available to be traded after the opening of a Complex Order Strategy unless it is marked IOC.

#### Opening—COOP Evaluation

Upon expiration of the COOP Timer,<sup>27</sup> the System will conduct a COOP Evaluation to determine, for a

particular Complex Order Strategy, the price at which the maximum number of contracts can trade, taking into account Complex Orders marked all-or-none, unless the maximum number of contracts can only trade without including all-or-none orders.<sup>28</sup> The Exchange will open at that price, executing marketable trading interest, in the following order: First, to non-broker-dealer customers in time priority; next to Phlx XL market makers on a pro-rata basis; and then to all other participants on a pro-rata basis.<sup>29</sup> The imbalance of Complex Orders that are unexecutable at that price are placed on the CBOOK.

The following examples illustrate the handling of an all-or-none order on the opening.

#### Example 1:

*Complex Order #1:* Buy 40 for \$1.05 AON customer  
*Complex Order #2:* Buy 30 for \$1.05 customer  
*Complex Order #3:* Buy 20 for \$1.05 customer  
*Complex Order #4:* Sell 50 at \$1.04 AON customer

The result is that Complex Order #4 will trade against the full size of Complex Order #1 (because it was first) and 10 contracts of Complex Order #2.

#### Example 2:

*Complex Order #1:* Buy 40 for \$1.05 AON customer  
*Complex Order #2:* Buy 30 for \$1.05 customer  
*Complex Order #3:* Buy 20 for \$1.05 customer  
*Complex Order #4:* Sell 20 at \$1.04 AON customer

The result is that Complex Order #4 will trade against 20 contracts of Complex Order #2 since the all-or-none contingency of Order #1 cannot be satisfied.

*Opening—No trade possible.* If at the end of the COOP Timer the System determines that no market or marketable limit Complex Orders or COOP Sweeps, Complex Orders or COOP Sweeps that are equal to or improve the cPBBO,<sup>30</sup>

<sup>28</sup> The Exchange stopped accepting all-or-none Complex Orders on March 17, 2014 in order to align the System with the rule. The Exchange has incorporated a definition of all-or-none orders in Securities Exchange Act Release No. 72351 (June 9, 2014), 79 FR 33977 (June 13, 2014) (SR-Phlx-2014-39). Now, the Exchange proposes to begin accepting them again and explain how they are handled, including how they are treated on the opening and that they do not leg. See Rule 1080.07(d)(ii)(C), (e)(vi)(A)(1) and (f)(iii)(A).

<sup>29</sup> This is consistent with the Exchange’s normal priority allocation process. See e.g., Rule 1080.07(e)(vi)(B) and Rule 1014(g)(vii).

<sup>30</sup> The term “cPBBO” means the best net debit or credit price for a Complex Order Strategy based on the Phlx Best Bid and/or Offer (“PBBO”) for the individual options components of such Complex

<sup>20</sup> See Rule 1014(b)(ii)(C) and Rule 1080.07(e)(ix).

<sup>21</sup> This definition parallels the definition of an opening sweep in Rule 1017(l)(vii)(A).

<sup>22</sup> Although Rule 1080.07(e)(iv) states that Phlx XL participants can submit COLA Sweeps, this is not correct. Only Phlx XL market makers can submit COLA Sweeps. The Exchange proposes to correct this in Rule 1080.07(a)(vii) and (e)(iv).

<sup>23</sup> See e.g., proposed Rule 1080.07(d)(ii)(C).

<sup>24</sup> See proposed Rule 1080.07(d)(ii)(B)(1).

<sup>25</sup> See Rule 1080.07(d)(ii)(B)(2).

<sup>26</sup> See Rule 1080.07(d)(ii)(B)(3).

<sup>27</sup> See Rule 1080.07(d)(ii)(C).

and/or Complex Orders or COOP Sweeps that cross within the cPBBO exist in the System, all Complex Orders received during the COOP Timer will be placed on the CBOOK, as described in Rule 1080.07(f). This is because, without an opening execution possible based on the prices of orders and COOP Sweeps in a particular strategy, such Complex Orders shall rest on the CBOOK for potential execution later while COOP Sweeps expire.

**Opening—Trade is possible.** If at the end of the COOP Timer the System determines that there are market or marketable limit Complex Orders or COOP Sweeps, Complex Orders or COOP Sweeps that are equal to or improve the cPBBO, and/or Complex Orders or COOP Sweeps that cross within the cPBBO in the Phlx XL System, the System will do the following: If such interest crosses and does not match in size, the execution price is based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the execution price when the larger sized interest is offering (bidding) is the midpoint of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment.<sup>31</sup> If the crossing interest is equal in size, the execution price is the midpoint of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment. This process maximizes the interest which is traded during the opening process and delivers a rational price for the available interest on the opening. The opening price logic maximizes the number of contracts executed during the opening process and ensures that residual contracts of partially executed orders or quotes are at a price equal to or inferior to the opening price, in other words, the logic ensures there is no remaining unexecuted interest available at a price which crosses the opening price. If multiple prices exist that ensure that there is no remaining unexecuted interest available through such price(s), the opening logic chooses the midpoint of such price points.

In determining the execution price and which interest will trade, the

System affords priority to customers on the opening as well. Executable bids/offers include any interest which could be executed without trading *through* residual interest or the cPBBO, or without trading *at* the cPBBO where there is non-broker-dealer customer interest. This is consistent with Rule 1080.07(c)(iii).

To illustrate “*if such interest crosses and does not match in size, the execution price is based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding)*” as referenced above, assume the following is present at the end the COOP Timer for a given Complex Order Strategy:

cPBBO = 3.50 (10)–3.90 (10)  
Complex Order #1: Buy 30 for \$3.79  
Complex Order #2: Sell 20 at \$3.56

COOP Opening execution will be for 20 strategies at a price of \$3.79 because there were more contracts to buy than there were to sell. In this example, while there are multiple price points at which the System can open the same number of contracts, there is only one price point, \$3.79, at which there will be no residual contracts available after the opening process at a price which crosses the opening price. After the System executes 20 strategies at \$3.79, there will remain 10 unexecuted strategies to buy for \$3.79.

If the example were changed slightly such that Complex Order #1 was a market order instead of a limit order, the market order is limited by the cPBBO assuming no customer interest is present, and the COOP execution price for 20 strategies would be \$3.90. The remaining 10 strategies of Complex Order #1 will then leg to the simple market at \$3.90.

To illustrate “*if there is more than one price at which the interest may execute, the execution price when the larger sized interest is offering (bidding) is the midpoint of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment*” as referenced above, assume the following is present at the end the COOP Timer for a given Complex Order Strategy:

cPBBO = 3.50 (10)–3.90 (10)  
Complex Order #1: Buy 20 for \$3.79  
Complex Order #2: Buy 20 for \$3.77  
Complex Order #3: Buy 20 at \$3.74  
Complex Order #4: Sell 20 at \$3.60  
Complex Order #5: Sell 20 at \$3.62

COOP Opening execution will be for 40 strategies at a price of \$3.76. The execution price of \$3.76 is derived from the midpoint of the lowest executable bid price of \$3.74 and the next available

executable bid price of \$3.77, rounded up to the closest minimum trading increment. In this example, 40 strategies can be opened at multiple price points ranging from \$3.74 up to \$3.77. None of these potential opening prices will cause the unexecuted \$3.74 buy order to be available at a price which crosses the opening price, therefore, the System opens at the midpoint of such prices, \$3.76.

If the example were changed slightly such that Complex Order #1 and Complex Order #2 were market orders instead of a limit orders, the COOP Opening execution price for the 40 strategies would be \$3.82, which is the midpoint of the potential opening prices ranging from \$3.74 to \$3.90.

To illustrate “*if the crossing interest is equal in size, the execution price is the midpoint of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment*” as referenced above, assume the following is present at the end the COOP Timer for a given Complex Order Strategy:

cPBBO = 3.50 (10)–3.90 (10)  
Complex Order #1: Buy 10 for \$3.78  
Complex Order #2: Buy 20 for \$3.74  
Complex Order #3: Buy 10 at \$3.71  
Complex Order #4: Sell 20 at \$3.64  
Complex Order #5: Sell 20 at \$3.66

COOP Opening execution will be for 40 strategies at a price of \$3.69. The execution price of \$3.69 is derived from the midpoint of the lowest executable bid price of \$3.71 and the highest executable offer price of \$3.66, rounded up to the closest minimum trading increment. If the example were changed slightly such that Complex Order #4 and Complex Order #5 were market orders rather than limit orders, the COOP Opening execution price for the 40 strategies would be \$3.61, which is derived from the midpoint of the lowest executable bid price of \$3.71 and the highest executable offer of \$3.50, rounded to the closest minimum trading increment.

To illustrate the application of the Acceptable Complex Execution (ACE) parameter as defined in Rule 1080.07(i), assume the following is present at the end the COOP Timer for a given Complex Order Strategy:

ACE Parameter of \$0.05  
cPBBO = 3.50 (10)–4.00 (10)  
cNBBO = 3.70 (10)–3.90 (10)  
Complex Order #1: Buy 10 for \$3.78  
Complex Order #2: Buy 20 for \$3.74  
Complex Order #3: Buy 10 at \$3.71  
Complex Order #4: Sell 20 at market  
Complex Order #5: Sell 20 at market

The COOP Opening execution may not occur more than \$0.05 outside of the

Order Strategy, and, where the underlying security is a component of the Complex Order, the National Best Bid and/or Offer for the underlying security. The cPBBO is a calculated number and does not include orders on the CBOOK or interest on other exchanges. See Rule 1080.07(a)(iv).

<sup>31</sup> See Rule 1080.07(d)(ii)(C)(2).

cNBBO, and thus cannot occur at a price of less than \$3.65 or more than \$3.95. In this case, Complex Order #4 and Complex Order #5 will both be considered in determining the COOP Opening execution price as orders to sell limited by the contra side cNBBO ACE limit of \$3.65. Therefore, the COOP Opening execution price for the 40 strategies would be \$3.68, which is derived from the midpoint of the lowest executable bid price of \$3.71 and the highest executable offer of \$3.65.

If there is any remaining interest after complex interest has traded against other complex interest and there is no component that consists of the underlying security,<sup>32</sup> such interest may “leg” whereby each options component may trade at the PBBO with existing quotes and/or limit orders on the limit order book for the individual components of the Complex Order; provided that remaining interest may execute against any eligible Complex Orders received before legging occurs.<sup>33</sup> If the remaining interest has a component that consists of the underlying security or is an all-or-none Complex Order, such Complex Order will be placed on the CBOOK. Although the current rule text does not provide for legging on the opening, the System is currently programmed to consider whether legging is possible in order to maximize the number of executions. Accordingly, the Exchange proposes to add rule text regarding legging to Rule 1080.07(d)(ii)(C)(2).

The Exchange also proposes to add that the Complex Order Strategy will be open for trading after the COOP even if no executions occur. This is intended to attract additional interest to a Complex Order Strategy. If additional interest arrives, the Exchange does not believe another COOP is needed, because such interest will under the normal processes of the System either be subject to a COLA, be placed on the CBOOK (both of which are disseminated), or be cancelled.

#### Other Inconsistencies

Second, Rule 1080.07(e)(vi)(C) currently provides that when executing against the COLA-eligible order after a COLA, a participating specialist shall be entitled to receive, respecting an option in which he is the specialist, the greater

of: (1) The proportion of the aggregate size at the cPBBO associated with such specialist's COLA Sweep, SQT and RSQT COLA Sweeps, and non-SQT ROT Complex Orders on the CBOOK;<sup>34</sup> (2) the Enhanced Specialist Participation as described in Rule 1014(g)(ii)<sup>35</sup> (60/40/30%); or (3) 40% of the remainder of the order.<sup>36</sup>

The Exchange proposes to better define a COLA Sweep in Rule 1080.07(e)(iv). Specifically, a COLA Sweep, similar but not identical to a COOP Sweep,<sup>37</sup> is a one-sided electronic quotation submitted for execution against other trading interest in a particular Complex Order Strategy. Any COLA Sweeps which remain unexecuted at the end of the COLA Timer once all executions are complete will expire.

The Exchange proposes to amend Rule 1080.07(e)(vi)(C) to eliminate the 40% component, because it does not currently operate.<sup>38</sup> The Exchange believes that the 40% language being deleted may have been an error, because, given the “greater of” language in this provision, the 30% guarantee would never have operated. Accordingly, the Exchange proposes to amend this provision to reflect that the specialist would be entitled to receive the greater of: (1) The proportion of the aggregate size associated with such specialist's COLA Sweep, SQT and RSQT COLA Sweeps, and non-SQT ROT Complex Orders on the CBOOK; or (2) the 60/40/30% Enhanced Specialist Participation described in Rule 1014(g)(ii). The Exchange believes that the specialist guarantee of 60/40/30% is a sufficient incentive for participants to become specialists and make continuous markets in individual options. The Exchange notes that this is

<sup>34</sup> This is commonly known as size pro-rata allocation.

<sup>35</sup> Rule 1014(g)(ii) provides that when the registered specialist is on parity with a controlled account, in accordance with Exchange Rules 119 and 120 and the number of contracts to be bought or sold is greater than five, the specialist is entitled to receive an enhanced participation of 30% of the Remainder of the Order (“Enhanced Specialist Participation”), except in the following circumstances: (1) Where there is one controlled account on parity, the specialist is entitled to receive 60% of the Remainder of the Order; or (2) where there are two controlled accounts on parity, in which case, the specialist is entitled to receive 40% of the Remainder of the Order. *See also* ISE Rule 722.05.

<sup>36</sup> A specialist is not entitled to this enhanced allocation in options in which he is not registered as the specialist.

<sup>37</sup> *See* proposed Rule 1080.07(d)(ii)(B).

<sup>38</sup> Because the minimum 40% allocation did not operate, the specialist may have received less of an allocation than expected when executing against COLA-eligible interest in a limited number of situations.

the same enhanced pro-rata specialist allocation that applies to non-Complex Orders.<sup>39</sup>

In addition, the Exchange proposes to amend Rule 1080.07(e)(vi)(C) to correct it by deleting the limitation of aggregating size only at the cPBBO; the size of the specialist's COLA Sweep, SQT and RSQT COLA Sweeps, and non-SQT ROT Complex Orders on the CBOOK are all aggregated at the execution price, regardless whether the price is at cPBBO or not. Today, the System looks at all of a specialist's COLA Sweeps at a particular price, not just at the cPBBO and compares it to all other Phlx XL market maker interest at that price, so the Exchange proposes to correct the rule.

In short, the Specialist would be entitled to receive the greater of: (1) The proportion of the aggregate size associated with such specialist's COLA Sweep, SQT and RSQT COLA Sweeps, and non-SQT ROT Complex Orders on the CBOOK; or (2) the 60/40/30% Enhanced Specialist Participation described in Rule 1014(g)(ii). The Exchange believes that the specialist guarantee of 60/40/30% is a sufficient incentive for participants to become specialists and make continuous markets in individual options. The Exchange notes that this is the same enhanced pro-rata specialist allocation that applies to non-Complex Orders.<sup>40</sup>

Furthermore, pursuant to Rule 1080.07(e)(vi)(B), for allocation purposes, the rule states that the size of a COLA Sweep or responsive Complex Order received during the COLA Timer shall be limited to the size of the COLA-eligible order. In actuality, the Exchange will accept size in excess of the COLA-eligible order size and such size can be executed against remaining interest<sup>41</sup> after the COLA-eligible order has been executed to the fullest extent possible.<sup>42</sup> For example, where there is a COLA-eligible order bidding \$2.00 for 20 contracts, and the other interest consists of a \$2.10 bid for 10 contracts, a \$2.10 offer for 10 contracts and a \$2.00 offer

<sup>39</sup> Unlike regular, single component options listed and traded on the Exchange, Complex Orders do not have a specialist or required market maker providing continuous markets. Complex Orders operate as an order-driven process, with the prices derived from the prices of the individual components.

<sup>40</sup> Rule 1014(g)(vii).

<sup>41</sup> The remaining interest consists of any potential interest that has been received, including orders, quotes and COLA Sweeps, as well as the individual leg market.

<sup>42</sup> The Exchange notes that this reflects an internal inconsistency in this rule, because another sub-paragraph in the rule addresses the execution of remaining bids or offers from the incoming non-customer Complex Order(s). *See* Rule 1080.07(e)(viii)(C)(2)(e).

<sup>32</sup> Complex Orders that are not executable at the opening price, including those that could not leg because there is a component that consists of the underlying security, will be placed on the CBOOK. *See* proposed Rule 1080.07(d)(ii)(C).

<sup>33</sup> Remaining interest includes Complex Orders that did not execute at the opening price and are therefore on the CBOOK and available to be traded before legging occurs as well as any new interest that may have arrived during the legging process.

for 10 contracts, even though only 10 contracts of the COLA-eligible order are executable, the buy and sell orders at \$2.10 can nevertheless execute against each other; thus, although the COLA-eligible order was not fully executed, it was executed to the fullest extent possible,<sup>43</sup> which permitted additional executions of responsive interest at a different price, to the benefit of those orders.

As a result, participants would have had a greater opportunity for execution and may have received executions in excess of the COLA-eligible order volume, up to the full size of their order. If the System operated as stated in the current rule text, fewer contracts would have been executed, because fewer contracts would have been available for execution against the COLA-eligible order and other responsive interest. It is likely that some of the interest in that Complex Order Strategy would not have traded but for the ability for COLA Sweeps and Complex Orders to be submitted for any size.

The Exchange is proposing to amend the rule to reflect the current practice and permit the full size of responding interest to trade against non-COLA-eligible interest. This change is intended to have as many contracts trade as possible. The Exchange does not believe that the current size limitation in the rule is useful.<sup>44</sup> The Exchange notes that the size of a COLA Sweep or responsive Complex Order is only relevant where the resulting allocation of a trade is conducted on a pro-rata basis, but not respecting non-broker-dealer customer allocations, which are based on time priority. The Exchange believes that permitting interest in excess of the COLA-eligible volume benefits market participants, because it helps ensure that as many contracts as possible are executed. The Exchange does not believe that there is any negative effect from permitting responsive interest of any size. Although in a pro-rata allocation, a greater allocation might result, this is not harmful, but rather enhances the liquidity in the marketplace. It should also be noted that the Exchange considers non-responsive interest present in the system when

executing and allocating in a COLA and such non-responsive interest is also not restricted to the size of the COLA-eligible volume.

Fourth, Rule 1080.07(e)(viii) determines the price at which orders are executed while Rule 1080.07(e)(vi) determines the execution priority of such orders; the Exchange seeks to make the interaction of these two provisions clearer by adding descriptive language to that effect in Rule 1080.07(e)(viii). Rule 1080.07(e)(viii)(C)(1)(d) currently provides that if multiple customer Complex Orders are received on the opposite side of the market from the COLA-eligible order, customer orders will be executed in the order in which they were received. This provision operates to determine the price at which the COLA-eligible order is executed against customer Complex Orders and defines the allocation algorithm utilized for each type of customer. In the context of determining the execution price of such interest, the Exchange uses the term "customer" to include both non-broker-dealer customer orders as well as non-market maker off-floor broker-dealer orders, because in this context non-market maker off-floor broker-dealer orders seek liquidity and are therefore more like customer orders versus other participants, which generally provide liquidity.

With respect to Rule 1080.07(e)(vi) regarding the allocation within a participant category, the System executes non-broker-dealer customer orders in the order in which they were received and non-market maker off-floor broker-dealer orders on a pro-rata basis at each price level. Thus, non-market maker off-floor broker-dealer orders may have received a higher or lower allocation at a particular price than they would have received in time priority allocation, which is required under the current rule, depending on their particular time and size.

The Exchange proposes to change Rule 1080.07(e)(viii)(C)(1)(d) to reflect that off-floor broker-dealer orders at the same price are executed on a pro-rata basis, consistent with the priority rules applicable in other aspects of the execution of Complex Orders<sup>45</sup> and simple orders.<sup>46</sup>

Fifth, pursuant to Rule 1080.07(e)(viii)(C)(2)(d), if multiple non-customer<sup>47</sup> Complex Orders are received on the opposite side of the

market from the COLA-eligible order, such orders will be executed in the order in which they were received. Instead, the System executes non-customer orders on a pro-rata basis among Phlx market maker interest and then, again on a pro-rata basis, among remaining Phlx XL participants at each price level, as described in Rule 1080.07(e)(vi)(B). Non-customer orders may have received a higher or lower allocation at a particular price than they would have received in time priority allocation, depending on their particular time and size.

The Exchange proposes to amend the rule to reflect that non-customer orders are executed on a pro-rata basis, consistent with the priority rules applicable in other aspects of the execution of Complex Orders and simple orders.<sup>48</sup>

Sixth, the System recently operated such that when a Complex Order was received during the final 3 seconds of the trading session, it was placed onto the CBOOK.<sup>49</sup> Pursuant to Rule 1080.07(f)(i)(F), a Complex Order an order should go on the CBOOK when is received during the final 10 seconds of the trading session, rather than 3 seconds. Accordingly, more Complex Orders may have started a COLA than the rule provides for and were perhaps executed rather than resting on the CBOOK, which the Exchange believes may have been considered a benefit for those orders.

At this time, the Exchange proposes to change the rule to reflect a configurable time period (for all options) to determine how many seconds before the end of the trading session that an order is placed on the CBOOK. The Exchange believes that this should maximize executions rather than applying a fixed time period of 10 seconds. The Exchange will notify participants on its Web site in advance when the number of seconds will change. The Exchange believes that this is a useful change, because the Exchange believes that 10 seconds may be too long and may prevent executions from occurring; a COLA can be triggered and completed in less than 3 seconds so the Exchange believes a smaller number than 10 seconds is appropriate to maximize executions.

In addition, the Exchange is adding to this provision a reference to any marketable portion of the Complex Order being executed, because the System seeks to execute any portion that

<sup>43</sup> The Exchange is replacing the term "in its entirety" with "to the fullest extent possible" respecting COLA-eligible orders, because COLA-eligible orders to [sic] not have to be fully executed in order for other interest to be executed; such interest might, for example, be at a different price than the price of the COLA-eligible order. See Rule 1080.07(e)(vii), (e)(viii)(B), (e)(viii)(C)(1), (e)(viii)(C)(1)(e), (e)(viii)(C)(2), (e)(viii)(C)(2)(e) and (e)(viii)(C)(3).

<sup>44</sup> The Exchange notes that this is similar to NYSEArca Rule 6.91(c)(7), which permits executions above such size.

<sup>45</sup> See e.g., Rule 1080.07(e)(vi)(B).

<sup>46</sup> See Rule 1014(g)(vii).

<sup>47</sup> In the context of executing these orders, the Exchange uses the term "non-customer" to include all interest other than non-broker-dealer customer interest and non-market-maker off-floor broker-dealer interest.

<sup>48</sup> See *supra* note 29.

<sup>49</sup> In order to comply with the current rule, the System was changed on March 7, 2014 to 10 seconds to align with the rule.

can be traded before placing a Complex Order on the CBOOK.

Seventh, after the COLA-eligible order has been executed in its entirety, Rule 1080.07(e)(viii)(C)(3) provides that the execution price of crossing interest is based on the price of the smaller sized interest. Crossing interest refers to any buy or sell interest that crosses in price such that a buyer order is at a higher price than the best sell price, for example. If such interest crosses and does not match in size, the execution price of the remaining interest is based on the highest (lowest) executable offer (bid) price when the larger sized interest is offering (bidding), provided, however, that if there is more than one price at which the interest may execute, the execution price when the larger sized interest is offering (bidding) is the midpoint of the highest (lowest) executable offer (bid) price and the next available executable offer (bid) price rounded, if necessary, down (up) to the closest minimum trading increment. If the crossing interest is equal in size, the execution price is the midpoint of lowest executable bid price and the highest executable offer price, rounded, if necessary, up to the closest minimum trading increment.

In determining the execution price and which interest will trade, the System affords priority to non-broker-dealer customers. Executable bids/offers include any interest which could be executed without trading *through* residual interest or the cPBBO, or without trading *at* the cPBBO where there is non-broker-dealer customer interest. This is consistent with Rule 1080.07(c)(iii).

While participants are “blind” to the determination of the execution price because they do not know the size of all eligible interest, the participants that were part of the smaller sized interest would likely have received a better execution price than the rule states.

The Exchange proposes to amend Rule 1080.07(e)(viii)(C)(3) to reflect the use of larger sized interest, because it is indicative of the price of remaining unexecuted interest. The Exchange believes that this correction and level of detail should help participants understand how their execution prices are determined, and this method is fair and orderly, based on both size and midpoint, which reflect the totality of the remaining interest. This is the same process used in the COOP as proposed in Rule 1080.07(d)(ii)(C)(2).

This provision is also proposed to state that if there is any remaining interest, which means any interest present in the System in that Complex Order Strategy at that time provided that

it is not an all-or-none order and there is no component that consists of the underlying security,<sup>50</sup> such interest may “leg” whereby each options component may trade at the PBBO with existing quotes and/or limit orders on the limit order book for the individual components of the Complex Order; provided that remaining interest may execute against any eligible Complex Orders received before legging occurs. This is intended to maximize the number of contracts that execute.

Eighth, Rule 1080.07(b)(i) governs the types of Complex Orders that different participants may submit to the Exchange. The rule does not currently specify a category of participant known as Firms. Because the current rule does not define a Firm, under the current language Firms are broker-dealers that fit the definition of non-market maker off-floor broker-dealer.

At this time, the Exchange is proposing to adopt a definition of Firm in Rule 1080.07(a)(x), based on the current definition in the Phlx fee schedule.<sup>51</sup> Specifically, the Exchange is proposing to define the term “Firm” to mean a broker-dealer trading for its own (proprietary) account that is: (i) A member of The Options Clearing Corporation (“OCC”); or (ii) maintains a Joint Back Office (“JBO”)<sup>52</sup> arrangement with an OCC member. Firms are distinct from non-market maker off-floor broker-dealers because of their OCC membership, which implies that Firms, and thus the JBO participants with whom they have established JBO arrangements are large, well-capitalized entities.

The pricing schedule currently provides that Firm means a non-customer broker-dealer for which orders are identified by a member or member organization as clearing in the firm range at OCC.<sup>53</sup> The term “clearing in the firm range at OCC” refers to what type of an account is held at OCC and is commonly used by exchanges.<sup>54</sup> The participants that clear in the firm range

<sup>50</sup> Complex Orders that are not executable, including those that could not leg because there is a component that consists of the underlying security, will be placed on the CBOOK. See proposed Rule 1080.07(d)(ii)(C).

<sup>51</sup> See Securities Exchange Act Release No. 62140 (May 20, 2010), 75 FR 29788 (May 27, 2010) (SR-Phlx-2010-69).

<sup>52</sup> A member organization can establish and maintain a JBO arrangement with a clearing broker-dealer subject to the requirements of Regulation T Section 220.7 of the Federal Reserve System if each JBO participant is registered as a broker-dealer, maintains a minimum account equity requirement of \$1,000,000, and comply with certain ownership standards. See Rule 703(a)(vi).

<sup>53</sup> See preface to Phlx Pricing Schedule.

<sup>54</sup> See e.g., [http://www.cboe.com/publish/RegCir/](http://www.cboe.com/publish/RegCir/RG13-038.pdf)

at OCC are Firms, including both broker-dealers trading for their own (proprietary) account who are OCC members as well as JBO participants. In contrast, broker-dealers trading for their own (proprietary) account who are *not* OCC members (and do not have a JBO arrangement) must have their trades cleared via an OCC member and do not clear in the firm range.<sup>55</sup> Accordingly, the proposed definition of Firm comports with the definition used in the pricing schedule, with respect to which dozens of proposed rule changes have taken effect based on such pricing differentiation being consistent with the Act, including not being unfairly discriminatory.<sup>56</sup>

In addition, the Exchange proposes to specify the two ways in which Firm orders are handled like Phlx XL market maker orders rather than non-market maker off-floor broker-dealer orders. Specifically, the Exchange proposes to amend Rule 1080.07(e)(i)(B)(1) to provide that Firm orders, like Phlx market maker orders, are not COLA-eligible orders and therefore cannot start a COLA;<sup>57</sup> non-market-maker off-floor broker-dealer orders can start a COLA. In addition, for purposes of Rule 1080.07(e)(viii)(C)(2), Firms orders are proposed to be treated as “non-customer” orders. Specifically, when the System determines how Complex Orders on the opposite side of the market from a COLA-eligible order are executed, the System executes Firm orders on a pro-rata basis along with non-Phlx market maker orders. Non-market-maker off-floor broker-dealer orders are executed along with non-broker-dealer customer orders. In these two ways, Firm orders are proposed to be treated the same way as non-Phlx market makers, rather than the same way as off-floor broker-dealers, because the Exchange believes that the trading style and needs of Firms are more like market makers. Firms are large, well-capitalized broker-dealers trading for their own account, generally submitting large orders, including orders that facilitate their clients’ orders or offset often large positions taken to

<sup>55</sup> These broker-dealer orders are ultimately cleared as customer orders at OCC.

<sup>56</sup> See e.g., Securities Exchange Act Release Nos. 68880 (February 8, 2013), 78 FR 10664 (February 14, 2013) (SR-Phlx-2013-10); and 67189 (June 12, 2012), 77 FR 36310 (June 18, 2012) (SR-Phlx-2012-77).

<sup>57</sup> See Rule 1080.07(e)(i)(B)(1) which defines a COLA-eligible order. The Exchange is deleting from this provision the requirement that such order improve the cPBBO, because that requirement is already stated in Rule 1080.07(e)(i)(A).

accommodate their customers;<sup>58</sup> in order to do so, Firms must have the financial wherewithal that this role necessitates, which by OCC rule applicable to OCC clearing members, generally requires a certain amount of net capital, risk management procedures addressing certain risks and margin requirements, among other things.<sup>59</sup> Thus, in general, Firms are commonly viewed as providers of liquidity, much like market makers.

Ninth, the Exchange proposes to accept all-or-none orders<sup>60</sup> and specify how they are handled. The handling of all-or-none orders on the opening is explained above.<sup>61</sup> Specifically, Rule 1080.07(e)(vi)(A)(1) will provide that all-or-none Complex Orders will not leg into the prices of the individual components of such Complex Order. In addition, Rule 1080.07(f)(iii)(A) will similarly provide that all-or-none Complex Orders on the CBOOK will not leg.

Tenth, the Exchange proposes to amend 1080.07(b)(iii) to specify in more detail that only IOC Complex Orders can be accepted by Floor Brokers from SQTs, RSQTs, non-SQT ROTs, specialists, non-Phlx market makers on another exchange and Firms. Currently, this provision refers to broker-dealers or affiliates of broker-dealers; these terms are not used elsewhere in the rule and is thus confusing.

## 2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the provisions of Section 6 of the Act,<sup>62</sup> in general, and with Section 6(b)(5) of the Act,<sup>63</sup> in particular, which requires, among other things, that the rules of an exchange be designed to promote just and equitable principles of trade as well as protect investors and the public interest. Specifically, the Exchange is proposing various changes that should promote just and equitable principles of trade, because Complex Orders will be handled in a fair and orderly manner by the System, as described above. The Exchange believes that the proposed changes are consistent with how participants could reasonably expect that their complex interest should be

treated. The various corrections are, together, intended to improve the rule overall. The Exchange believes that this should promote just and equitable principles of trade as well as protect investors and the public interest by making more clear how specifically Complex Orders are handled on the Exchange.

More specifically, the opening changes are intended to promote just and equitable principles of trade by seeking to execute as much interest as possible at the best possible price(s). The opening process maximizes price discovery and liquidity while employing price priority, which the Exchange believes is a fairer process on the opening when dealing with potentially different sources of interest, versus a single Complex Order triggering a COLA during the day's trading. Although the COOP operates differently than the COLA, the Exchange notes that the COOP operates like a traditional opening process, seeking to execute as much interest as possible, which is consistent with just and equitable principles of trade.

The opening delay timer promotes just and equitable principles of trade by allowing options prices to stabilize after the options opening, before permitting Complex Orders to become available for trading. If a particular Complex Order Strategy is already open, the COOP does not occur, which is consistent with just and equitable principles of trade, because there is no need for an opening process. The Complex Order Opening Auction Notification is intended to attract interest to the opening process and encourage the opening of a Complex Order Strategy, like the COLA message is intended to attract interest to the COLA. Accordingly, the Complex Order Opening Auction Notification, which contains the opening price, imbalance, if any, and volume, promotes just and equitable principles of trade.

The change to Rule 1080.07(d)(ii)(B)(3) enumerating that COOP responses are not visible promotes just and equitable principles of trade by making this clear to participants and because the temporary, quick nature of the COOP would not render this information useful. The Complex Order Opening Auction Notification is sufficient notification of the forthcoming opening of a particular Complex Order Strategy.

The Exchange noted above that Complex Orders marked IOC do not participate in an auction that such order may trigger if that order would be the first order in that Complex Order Strategy, thereby opening that Strategy

for the day. The Exchange does not believe that this raises regulatory issues, such as the potential for manipulation or abuse relating to the opening auction. The Exchange similarly treats non-Complex Orders marked IOC, in that such orders, if received prior to the opening in an option, are cancelled upon receipt. Thus, the fact that Complex Orders marked IOC do not participate in the opening auction does not raise new concerns for manipulation; today, if a participant enters a DAY or GTC order and then immediately cancels it, an auction will ensue without that order. Accordingly, the Exchange believes that its proposed handling of IOC orders should promote just and equitable principles of trade. Similarly, the proposal addresses how DNA orders are handled, which also promotes just and equitable principles of trade by providing an order type that involves immediate handling.

The Exchange believes that COOP Sweeps, as described above, promote just and equitable principles of trade by providing an opportunity for a single sided quote to be entered by Phlx XL market makers responding to a COOP, much like opening sweeps in Rule 1017 and regular sweeps in Rule 1080. The Exchange does not believe it is unfairly discriminatory for COOP Sweeps to be available only to Phlx XL market makers, because the ability to enter two-sided quotes is also available only to Phlx XL market makers, who use a particular protocol to submit quotes and sweeps to the Exchange. Other Phlx XL participants can submit orders over the protocol specific to orders, specifically IOC orders, which behave in the same manner as a sweep. Accordingly, such other participants are not disadvantaged by the inability to submit sweeps, much like they are not disadvantaged by the inability to submit quotes or sweeps respecting non-Complex Orders.

With respect to the provision in Rule 1080.07(d)(ii)(C)(3) that provides that a Complex Order Strategy will be open after a COOP even if no executions occur, the Exchange believes that this proposed language should promote just and equitable principles of trade by opening a Complex Order Strategy based on the fact that interest was received, regardless of whether the responsive interest resulted in an execution. In addition, it promotes just and equitable principles of trade for the rule to reflect this.

With respect to any priority provisions addressed herein, the proposed treatment is similar to the Exchange's priority rule respecting orders other than Complex Orders, as well as the comparable rules of other

<sup>58</sup> Of course, the clients/customers of a Firm could be other broker-dealers.

<sup>59</sup> See OCC Rules 301, 311 and 601.

<sup>60</sup> The Exchange stopped accepting all-or-none Complex Orders on March 17, 2014 in order to align the System with the rule. The Exchange has incorporated a definition of all-or-none orders in Securities Exchange Act Release No. 72351 (June 9, 2014), 79 FR 33977 (June 13, 2014) (SR-Phlx-2014-39).

<sup>61</sup> See proposed Rule 1080.07(d)(ii)(C).

<sup>62</sup> 15 U.S.C. 78f.

<sup>63</sup> 15 U.S.C. 78f(b)(5).



options exchanges.<sup>64</sup> This includes allocating to the specialist based on all of his interest at a particular price pursuant to proposed Rule 1080.07(e)(vi)(C), off-floor broker-dealer customer orders on a pro-rata basis pursuant to proposed Rule 1080.07(e)(viii)(C)(1)(d), and to Phlx XL market makers and other non-customers each on a pro-rata basis pursuant to proposed Rule 1080.07(e)(viii)(C)(2)(d). The deletion of the 40% allocation promotes just and equitable principles of trade both by correcting the rule text as well as by rendering meaning to the reference to Rule 1014(g)(ii), which is otherwise pointless.

The deletion of aggregating size only at the cPBBO in Rule 1080.07(e)(vi)(C)(1) for purposes of determining the pro rata allocation promotes just and equitable principles of trade by taking into account all expressed interest (the specialist's COLA Sweep, SQT and RSQT COLA Sweeps and non-SQT ROT Complex Orders on the CBOOK) at each price instead of only at one price, the cPBBO. This should maximize the number of contracts executed, to the benefit of those participating in that Complex Order Strategy.

The change to Rule 1080.07(e)(vi)(B) permitting responses for a size greater than the size of the COLA-eligible orders is consistent with just and equitable principles of trade, because it enables as many contracts as possible to trade, which is also consistent with protecting investors and the public interest. Restricting responses to the size of the COLA-eligible order serves no regulatory purpose and, instead, merely limits the number of contracts that can trade. Restricting responses to the size of the COLA-eligible order could also provide interest that has been submitted coincidentally, without intentionally responding to an auction, to have an unfair advantage since this interest would not be restricted to the size of the COLA-eligible order.

The Exchange believes a configurable end of day timer as proposed in Rule 1080.07(f)(i)(F) is consistent with just and equitable principles of trade, because it can be tailored to maximize the number of executions but is still limited to 600 seconds, as originally approved.

The Exchange also believes that the proposed execution process in proposed Rule 1080.07(d)(ii)(C)(2) and (e)(viii)(C)(3) for crossing interest is consistent with just and equitable principles of trade, because it is based

on the price of the larger sized interest, which affects more options contracts and is likely to result in more executions than the current rule provides, because the current rule is based on the mid-point, regardless of size.

The reference to legging remaining interest in these same subparagraphs promotes just and equitable principles of trade by providing an opportunity for additional Complex Orders to trade. The additional executions would be expected by users who expressed an interest to trade by submitting their interest; their expression of interest is not limited to the COLA-eligible order but rather to the Complex Order Strategy as a whole.

In addition, this proposal is not unfairly discriminatory, including to the new category of Firm orders, because it proposes to deal with Complex Orders and responsive interest in a reasonable way. As explained above, it is not uncommon to have certain order types and time-in-force conditions available only to certain participant types, both on the Exchange<sup>65</sup> as well as other exchanges.<sup>66</sup> Indeed, the Exchange's pricing schedule has long distinguished Firms from other broker-dealers.<sup>67</sup> The Exchange believes that certain order types and time-in-force conditions, if made available, would likely not be used by certain market participants, because of the particular trading style of those participants. For example, Phlx XL market makers are not permitted to send in GTC orders; the Exchange does not believe that Phlx XL market makers would be interested in submitting GTC orders, as they generally participate in the marketplace using electronic quotations, which are updated and replaced frequently, unlike GTC orders.

Similarly, the Exchange believes that Firms do not expect or need their Complex Orders to trigger a COLA nor to submit GTC orders, because these are features commonly associated with customers rather than liquidity providers who function to accommodate trading interest. Both of these features involve a temporal component; both a delay and long-lasting interest are inconsistent with the sort of accommodation that Firms provide. Firms are interested in trading in a manner that offers liquidity to their customers. Accordingly, the Exchange believes that by tailoring its offerings to the needs and trading style of Firms, Firms are more likely to send orders to the Exchange, which should increase

order interaction with other market participants, consistent with promoting just and equitable principles of trade.

The Exchange believes that its proposal to accept all-or-none Complex Orders should promote just and equitable principles of trade by offering this order type, commonly available for non-Complex Orders as well as complex orders on other options exchanges, to market participants, who may want a certain minimum size. This contingency is particularly appropriate respecting Complex Orders, because of the complexity of the strategies employed by users; the size of the order may be relevant to such strategy. The Exchange believes that its proposal to not leg all-or-none Complex Orders promotes just and equitable principles of trade, because the all-or-none contingency complicates the execution of such orders expeditiously against the individual components of such orders; the Exchange does not believe that users would expect such orders to leg, as all-or-none orders are often treated differently than other orders because of the nature of that contingency.<sup>68</sup>

The Exchange believes that its proposal to amend 1080.07(b)(iii) to specify in more detail that Floor Brokers can only accept IOC Complex Orders from SQTs, RSQTs, non-SQT ROTs, specialists, non-Phlx market makers on another exchange and Firms is merely replacing vague terms (broker-dealers or affiliates of broker-dealers) to more precise ones that are linked to definitions within the rule. Using defined terms should promote just and equitable principles of trade.

The Exchange believes that deleting reference in Rule 1080.07(d)(ii)(A)(2) to disengaging the automated execution system and the Phlx XL Risk Monitor Mechanism clarifies that the COOP Timer nevertheless occurs in these situations. The COOP Timer facilitates price discovery and opening interest in a Complex Order Strategy, which should, in turn, promote just and equitable principles of trade.

The Exchange believes that specifying in more detail that Complex Orders received prior to the COOP Timer and Complex Orders received during the COOP Timer (other than COOP Sweeps and Complex Order Responses marked as a response) are visible to Phlx XL participants upon receipt should promote just and equitable principles of trade by further attracting additional interest in a particular Complex Order Strategy.

<sup>64</sup> See Phlx Rule 1014(g)(vii)(B)(1)(b). See also CBOE Rule 6.53C(d)(v).

<sup>65</sup> See Phlx Rule 1080(b).

<sup>66</sup> See CBOE Rule 6.53C(d)(iii).

<sup>67</sup> See *supra* note 53.

<sup>68</sup> See e.g., Options Floor Advice A-9.

*(B) Self-Regulatory Organization's Statement on Burden on Competition*

The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended. Specifically, the proposal does not impose an intra-market burden on competition, because these changes make the rule clearer and more complete for all participants. Nor will the proposal impose a burden on competition among the options exchanges, because of the vigorous competition for order flow among the options exchanges. To the extent that market participants disagree with the particular approach taken by the Exchange herein, market participants can easily and readily direct complex order flow to competing venues.

*(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**

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission will: (a) By order approve or disapprove such 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](mailto:rule-comments@sec.gov). Please include File Number SR-Phlx-2015-49 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-Phlx-2015-49. 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 the 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-Phlx-2015-49 and should be submitted on or before July 14, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>69</sup>

**Brent J. Fields,**

*Secretary.*

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**SECURITIES AND EXCHANGE COMMISSION**

[Release No. 34-75193; File No. 4-668]

**Joint Industry Plan; Notice of Filing of Amendment No. 2 to the National Market System Plan Governing the Process of Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail by BATS Exchange, Inc., BATS-Y Exchange, Inc., BOX Options Exchange LLC, C2 Options Exchange, Incorporated, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., EDGA Exchange, Inc., EDGX Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange, LLC, ISE Gemini, LLC, Miami International Securities Exchange LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX LLC, The NASDAQ Stock Market LLC, National Stock Exchange, Inc., New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc.**

June 17, 2015.

**I. Introduction**

Pursuant to Section 11A of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 608 Thereunder,<sup>2</sup> notice is hereby given that, on March 6, 2015, BATS Exchange, Inc., BATS-Y Exchange, Inc., BOX Options Exchange LLC, C2 Options Exchange, Incorporated, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., EDGA Exchange, Inc., EDGX Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange, LLC, ISE Gemini, LLC, Miami International Securities Exchange LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX LLC, The NASDAQ Stock Market LLC, National Stock Exchange, Inc., New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc. (collectively, "SROs" or "Participants"), filed with the Securities and Exchange Commission (the "Commission") a proposal to amend the Plan Governing the Process of Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail (the "Selection Plan").

**II. Background**

On September 3, 2013, the SROs filed for approval the Selection Plan<sup>3</sup> to govern how the SROs would proceed

<sup>1</sup> 15 U.S.C. 78k-1.

<sup>2</sup> 17 CFR 242.608.

<sup>3</sup> See Securities Exchange Act Release No. 70892 (Nov. 15, 2013), 78 FR 69910 (Nov. 21, 2013) (Notice of Selection Plan).

<sup>69</sup> 17 CFR 200.30-3(a)(12).

with formulating and submitting a national market system (“NMS”) plan to create, implement, and maintain a consolidated audit trail (“CAT NMS Plan”).<sup>4</sup> The Selection Plan sets forth the process for the SROs to review, evaluate, and narrow down the Bids submitted in response to the SROs’ request for proposals (“RFP”) for a Plan Processor to build, operate, administer, and maintain the consolidated audit trail, and ultimately for the SROs to select the Plan Processor.<sup>5</sup> The Selection Plan was approved on February 21, 2014.<sup>6</sup>

The SROs now propose to amend the Selection Plan to require an SRO that is a Bidding Participant<sup>7</sup> to be recused from voting in any round by the Selection Committee to select the Plan Processor in which a Bid from or including such Bidding Participant or its Affiliate is being considered. A copy of the proposed amendment to the Selection Plan (“Amendment No. 2”) is attached as *Exhibit A* hereto. The Commission is publishing this notice to solicit comments from interested persons on proposed Amendment No. 2 to the Selection Plan.

### III. Description of the Plan

Set forth in this Section III is the statement of the purpose of Amendment No. 2 to the Selection Plan, along with the information required by Rule 608(a)(4) and (5) under the Exchange Act,<sup>8</sup> prepared and submitted by the SROs to the Commission.<sup>9</sup>

<sup>4</sup> See Securities Exchange Act Release No. 67457 (July 18, 2012), 77 FR 45722 (Aug. 1, 2012) (Rule 613 Adopting Release).

<sup>5</sup> See Notice of Selection Plan, *supra* note 3.

<sup>6</sup> See Securities Exchange Act Release No. 71596 (Feb. 21, 2014), 79 FR 11152 (Feb. 27, 2014) (Selection Plan Approval Order). On December 12, 2014, the SROs filed a proposed amendment to the Selection Plan, which was published for notice and comment in the **Federal Register** on February 11, 2015, to allow the SROs to accept revised Bids prior to Commission approval of the CAT NMS Plan, and to narrow the list of Shortlisted Bidders prior to Commission approval of the CAT NMS Plan (“Amendment No. 1”). See Securities Exchange Act Release No. 74223 (Feb. 6, 2015), 80 FR 7654 (Feb. 11, 2015) (Notice of Amendment No. 1 to the Selection Plan). The Commission is separately issuing an approval order for Amendment No. 1 concurrently with this Notice. See Securities Exchange Act Release No. 75192 (June 17, 2015).

<sup>7</sup> The Selection Plan defines “Bidding Participant” as a Participant that: (1) Submits a Bid; (2) is an Affiliate of an entity that submits a Bid; or (3) is included, or is an Affiliate of an entity that is included, as a Material Subcontractor as part of a Bid. See Notice of Selection Plan, *supra* note 3, Exhibit A at 2. The Selection Plan defines “Participant” as a party to the Selection Plan (*i.e.*, an SRO). See *id.*, Exhibit A at 3.

<sup>8</sup> See 17 CFR 242.608(a)(4) and (a)(5).

<sup>9</sup> See Letter from the Participants to Brent J. Fields, Secretary, Commission, dated March 4, 2015.

#### A. Background

The Selection Plan, filed with the Commission on September 3, 2013,<sup>10</sup> and approved on February 21, 2014,<sup>11</sup> governs the process for Participant review and vote for Bids for the role of Plan Processor for the CAT NMS Plan.<sup>12</sup>

After gaining experience with the development process for the CAT NMS Plan, the Participants believe it is advisable to amend the Selection Plan to ensure that the Participants will be able to choose a Plan Processor without any potential conflict of interest raised by having a Participant vote in any round in the selection process where that Participant has submitted a Bid, a Bid has been submitted by an Affiliate of that Participant, or a Bid has been submitted that includes that Participant or its Affiliate, and any such Bid is under consideration in that round. The Participants propose amending the Selection Plan to require recusal of that Bidding Participant in any of those situations.

##### 1. The Selection Plan Currently Requires Recusal on a Vote Only in the Second Round of the Selection Process

Under the Selection Plan, a Bidding Participant is recused from a vote only in the second round of voting by the Selection Committee to select the Plan Processor (as set forth in Section VI(E)(4) of the Selection Plan) where that Participant has submitted a Bid, a Bid has been submitted by an Affiliate of that Participant, or a Bid has been submitted that includes that Participant or its Affiliate, and any such Bid is under consideration in that round.

##### 2. Requiring Recusal on a Vote in all Rounds of the Selection Will Ensure That All Participants Voting on the Plan Processor Do Not Have Any Conflict of Interest

As noted in the Selection Plan Approval Order, the Selection Plan as currently drafted balances the competing goals of ensuring all Participants participate meaningfully in the process of developing the CAT NMS

<sup>10</sup> See Notice of Selection Plan, *supra* note 3.

<sup>11</sup> See Selection Plan Approval Order, *supra* note 6.

<sup>12</sup> The Participants also have filed a proposed amendment to the Selection Plan (Amendment No. 1) that would allow the Participants to accept revised Bids prior to the Commission’s approval of the CAT NMS Plan, and to narrow the list of Shortlisted Bidders prior to the Commission’s approval of the CAT NMS Plan. See Notice of Amendment No. 1 to the Selection Plan, *supra* note 6. Amendment No. 1 also requires recusal of a Bidding Participant from voting in the narrowing process if a Bid submitted by or including the Participant or an Affiliate of the Participant is a Shortlisted Bid.

Plan and mitigating potential conflicts of interest related to the involvement of Bidding Participants through information barriers and the voting limitations.<sup>13</sup> Based on their experience with these measures as currently set forth in the Plan, the Participants believe that the Plan has adequately addressed the potential conflicts of interest related to Bidding Participants. Nonetheless, the Participants believe that requiring recusal in all rounds of the selection process will further the Participants’ goal of ensuring the fair and impartial consideration and selection of the Plan Processor.

#### B. Requirements Pursuant to Rule 608(a)

##### 1. Description of the Amendments to the Selection Plan

The Participants propose amending the Selection Plan to prohibit a Bidding Participant from voting in any round to select the Plan Processor from among the Shortlisted Bidders where that Bidding Participant has submitted a Bid, a Bid has been submitted by an Affiliate of that Bidding Participant, or a Bid has been submitted that includes that Participant or its Affiliate, and any such Bid is under consideration in that round.

##### 2. Governing or Constituent Documents

Not applicable.

##### 3. Implementation of Amendment

The terms of the proposed amendment will be operative immediately upon approval of the amendment by the Commission.

##### 4. Development and Implementation Phases

Not applicable.

##### 5. Analysis of Impact on Competition

The proposed amendment does not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act. The SROs believe that the amendment further helps assure the fair and impartial consideration and selection of the Plan Processor for the CAT NMS Plan.

##### 6. Written Understanding or Agreements Relating to Interpretation of, or Participation in, Plan

Not applicable.

##### 7. Statement that the Amendments Have Been Approved by the Plan Sponsors

The Selection Plan provides that amendments to the Selection Plan shall

<sup>13</sup> See Selection Plan Approval Order, *supra* note 6 at 11157.

be effected by means of a written amendment that: (1) Sets forth the change, addition, or deletion; (2) is executed by over two-thirds of the Participants; and (3) is approved by the SEC pursuant to Rule 608, or otherwise becomes effective under Rule 608.<sup>14</sup>

The proposed amendment has been executed by all of the Participants, and has consequently been approved by the SROs.

#### 8. Terms and Conditions of Access

Not applicable.

#### 9. Method of Determination and Imposition, and Amount of, Fees and Charges

Not applicable.

#### 10. Method and Frequency of Processor Evaluation

Not applicable.

#### 11. Dispute Resolution

Not applicable.

### IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the Amendment No. 2 to the Selection Plan 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](mailto:rule-comments@sec.gov). Please include File Number 4-668 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 4-668. 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 Amendment to the Plan that are filed with the Commission, and all written communications relating to the Amendment to the Plan 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 10:00 a.m. and 3:00 p.m. Copies of the submission will also be available for inspection and copying at the Participants' principal offices. 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 4-668 and should be submitted on or before July 23, 2015.

By the Commission.

**Brent J. Fields,**  
*Secretary.*

#### **Exhibit A**

Proposed new language is italicized; proposed deletions are in [brackets].

#### **PROPOSED AMENDMENT TEXT**

Additions underlined; deletions bracketed<sup>15</sup>

Plan Processor Evaluation and Selection Plan

#### **V. Selection Committee**

\* \* \*

#### **(B) Voting**

\* \* \*

(3) No Bidding Participant shall vote in *any* [the second] round set forth [in Section VI(E)(4)] below if a Bid submitted by or including the Participant or an Affiliate of the Participant is a part of *such* [the second] round.

\* \* \*

#### **VI. RFP Bid Evaluation and Plan Processor Selection**

\* \* \*

#### **(E) Selection of Plan Processor Under the CAT NMS Plan**

\* \* \*

(2) Each Participant shall have one vote in each round, except that no Bidding Participant shall be entitled to vote in *any* [the second] round if the Participant's Bid, a Bid submitted by an Affiliate of the Participant, or a Bid including the Participant or an Affiliate

<sup>15</sup> The marked additions and deletions show the proposed changes to the current Selection Plan without taking into account Amendment No.1. The effect of the proposed additions and deletions on the Selection Plan, taking into account Amendment No. 1, would be renumbering Section V.(B)(3) as Section V.(B)(4).

of the Participant is considered in *such* [the second] round. [Until the second round, Bidding Participants may vote for any Shortlisted Bid.]

(3) First Round Voting by the Selection Committee

(a) In the first round of voting, each Voting Senior Officer, *subject to the recusal provisions in Paragraph (E)(2) above*, shall select a first and second choice from among the Shortlisted Bids.

\* \* \*

[FR Doc. 2015-15364 Filed 6-22-15; 8:45 am]

**BILLING CODE 8011-01-P**

### **SECURITIES AND EXCHANGE COMMISSION**

**[Investment Company Act Release No. 31677; 812-14325]**

#### **American Funds Insurance Series, et al.; Notice of Application**

June 17, 2015.

**AGENCY:** Securities and Exchange Commission ("Commission").

**ACTION:** Notice of an application for an order under section 12(d)(1)(f) of the Investment Company Act of 1940 (the "Act") for an exemption from sections 12(d)(1)(A) and (B) of the Act, and under sections 6(c) and 17(b) of the Act for an exemption from sections 17(a)(1) and (2) of the Act.

**SUMMARY OF THE APPLICATION:** The requested order would permit certain registered management investment companies to acquire shares of certain registered open-end management investment companies that are outside the same group of investment companies as the acquiring investment companies.

**APPLICANTS:** American Funds Insurance Series (the "Trust"), Capital Research and Management Company ("Capital Research" or the "Adviser"),<sup>1</sup> and American Funds Distributors, Inc. (the "Distributor").

**FILING DATES:** The application was filed on June 27, 2014 and amended on May 7, 2015.

**HEARING OR NOTIFICATION OF HEARING:** An order granting the application will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Commission's Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests

<sup>1</sup> All references to the term "Adviser" herein include successors-in-interest to Capital Research. Successors-in-interest are limited to any entity resulting from a reorganization of Capital Research into another jurisdiction or a change in the type of business organization.

should be received by the Commission by 5:30 p.m. on July 13, 2015, and should be accompanied by proof of service on applicants, in the form of an affidavit or, for lawyers, a certificate of service. Pursuant to rule 0–5 under the Act, hearing requests should state the nature of the writer's interest, any facts bearing upon the desirability of a hearing on the matter, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Commission's Secretary.

**ADDRESSES:** Secretary, U.S. Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

**Applicants:** Paul F. Roye, Esq. and Michael J. Triessl, Esq., Capital Research and Management Company, 333 South Hope Street, Los Angeles, CA 90071.

**FOR FURTHER INFORMATION CONTACT:** Kay-Mario Vobis, Senior Counsel, at (202) 551–6728, or Daniele Marchesani, Branch Chief, at (202) 551–6821 (Division of Investment Management, Chief Counsel's Office).

**SUPPLEMENTARY INFORMATION:** The following is a summary of the application. The complete application may be obtained via the Commission's Web site by searching for the file number, or an applicant using the Company name box, at <http://www.sec.gov/search/search.htm> or by calling (202) 551–8090.

### Applicants' Representations

1. The Trust is an open-end management investment company registered under the Act and organized as a Massachusetts business trust. The Trust is comprised of separate series, each of which may be an Underlying Fund (as defined below), pursuing distinct investment objectives and strategies. Capital Research is a Delaware corporation and is registered as an investment adviser under the Investment Advisers Act of 1940 ("Advisers Act") and serves as investment adviser to each Underlying Fund. The Distributor is a California corporation and is registered as a broker-dealer under the Securities Exchange Act of 1934 (the "Exchange Act"). The Distributor serves as distributor for the shares of the Underlying Funds.

2. Applicants request an exemption to permit registered management investment companies that operate as a "fund of funds" and that are not part of the same "group of investment companies," within the meaning of section 12(d)(1)(G)(ii) of the Act, as the Trust ("Unrelated Funds of Funds") to acquire shares of current or future

separate series of the Trust ("Underlying Funds")<sup>2</sup> in excess of the limits in section 12(d)(1)(A) of the Act, and to permit Underlying Funds, any principal underwriter for an Underlying Fund, and any broker or dealer registered under the Exchange Act ("Broker") to sell shares of an Underlying Fund to an Unrelated Fund of Funds in excess of the limits in section 12(d)(1)(B) of the Act. Applicants are also requesting relief from sections 17(a)(1) and (2) to permit an Underlying Fund to sell its shares and to redeem its shares from Unrelated Funds of Funds that own 5% or more of the shares of an Underlying Fund. Applicants request that the relief apply to: (a) Each registered open-end management investment company or series thereof that currently or subsequently is part of the same "group of investment companies," within the meaning of section 12(d)(1)(G)(ii) of the Act, as the Trust, and that is advised by Capital Research or any entity controlling, controlled by, or under common control with Capital Research (such advisers are included in the term "Adviser" and such registered open-end management investment companies or their series are included in the term "Underlying Funds"); (b) each Unrelated Fund of Funds that enters into a Participation Agreement (as defined below) with an Underlying Fund to purchase shares of the Underlying Fund; and (c) any principal underwriter to an Underlying Fund or Broker selling shares of an Underlying Fund.<sup>3</sup>

<sup>2</sup> As of the date of the application, the Underlying Funds include the following series of the Trust: Asset Allocation Fund; Blue Chip Income and Growth Fund; Bond Fund; Capital Income Builder; Cash Management Fund; Global Bond Fund; Global Growth Fund; Global Growth and Income Fund; Global Small Capitalization Fund; Growth Fund; Global Balanced Fund; Growth-Income Fund; High-Income Bond Fund; International Fund; International Growth and Income Fund; Managed Risk Asset Allocation Fund; Managed Risk Blue Chip Income and Growth Fund; Managed Risk Growth Fund; Managed Risk Growth-Income Fund; Managed Risk International Fund; Mortgage Fund; New World Fund; and U.S. Government/AAA-Rated Securities Fund. In instances where an Unrelated Fund of Funds acquires shares of a Managed Risk Fund (as defined below), the term "Underlying Fund" includes both the Managed Risk Fund as well as its respective Managed Risk Acquired Fund (as defined below). The term "Underlying Fund" also includes any Managed Risk Acquired Fund to the extent that an Unrelated Fund of Funds invests directly in the Managed Risk Acquired Fund in reliance on the requested relief.

<sup>3</sup> All entities that currently intend to rely on the requested order are named as applicants. Any other entity that relies on the order in the future will comply with the terms and conditions of the application. An Unrelated Fund of Funds may rely on the requested order only to invest in an Underlying Fund and not in any other registered investment company.

3. Certain Underlying Funds may currently or in the future operate pursuant to a master-feeder structure or pursuant to a Managed Risk Fund Structure (defined below). Each Underlying Fund operating pursuant to a master-feeder structure will operate in compliance with section 12(d)(1)(E) of the Act. Each Underlying Fund operating pursuant to a Managed Risk Fund Structure<sup>4</sup> will comply with all provisions of section 12(d)(1)(E), including paragraph (ii), except as is necessary to permit its investment in the Managed Risk Strategy Component (defined below) to pursue its objectives.<sup>5</sup>

4. Applicants represent that the "Managed Risk Fund Structure" is an integrated two-tier fund structure that is substantially similar to a master-feeder structure. Like the feeder fund in a master-feeder structure, the top-tier fund in a Managed Risk Fund Structure (the Managed Risk Fund) invests its assets in only one other mutual fund (the Managed Risk Acquired Fund). Applicants state that the one difference between the master-feeder structure and the Managed Risk Fund Structure is that, while a feeder fund only invests in a master fund, a Managed Risk Fund may also invest in cash, cash equivalents, and certain hedging instruments in connection with a risk-management strategy that is specifically designed to reduce the volatility of the Managed Risk Acquired Fund and the risk of large net asset value declines (the "Managed Risk Strategy Component").<sup>6</sup>

<sup>4</sup> Each Managed Risk Fund operates pursuant to Section 12(d)(1)(G) and the relief provided by rule 12d1–2 as well as the further relief granted by the Commission to the Trust from the restrictions under rule 12d1–2(a), which permits series of the Trust to invest in hedging instruments that would not be deemed securities within the meaning of Section 2(a)(36) of the Act.

<sup>5</sup> An Unrelated Fund of Funds may not rely on the requested order to invest in an Underlying Fund that serves as a feeder fund unless the Underlying Fund is part of the same "group of investment companies," within the meaning of section 12(d)(1)(G)(ii) of the Act, as its corresponding master fund (each, a "Master Fund"). As defined in the application, a "Master Fund" is not an "Underlying Fund." Similarly, an Unrelated Fund of Funds may not rely on the requested order to invest in an Underlying Fund that is a Managed Risk Fund unless the Managed Risk Fund and the fund in which it invests (the "Managed Risk Acquired Fund") have the same investment adviser and are part of the same "group of investment companies."

<sup>6</sup> The Managed Risk Strategy Component of each Managed Risk Fund is executed by Milliman Financial Risk Management LLC ("Milliman"), a Delaware LLC, as a sub-adviser to that Managed Risk Fund. No Unrelated Fund of Funds investing in a Managed Risk Fund will be advised or sub-advised by Milliman or any other sub-adviser to that Managed Risk Fund (or by any person directly or indirectly controlling, controlled by, or under

Continued

5. Each Unrelated Fund of Funds will be advised by an investment adviser, within the meaning of section 2(a)(20)(A) of the Act, that is registered as an investment adviser under the Advisers Act (an “Unrelated Fund of Funds Adviser”). An Unrelated Fund of Funds or its Unrelated Fund of Funds Adviser may contract with an investment adviser that meets the definition of section 2(a)(20)(B) of the Act (an “Unrelated Fund of Funds Sub-Adviser”). Applicants state that Unrelated Funds of Funds will be interested in using the Underlying Funds as part of their overall investment strategy.

### Applicants’ Legal Analysis

#### A. Section 12(d)(1)

1. Section 12(d)(1)(A) of the Act, in relevant part, prohibits a registered investment company from acquiring shares of an investment company if the securities represent more than 3% of the total outstanding voting stock of the acquired company, more than 5% of the total assets of the acquiring company, or, together with the securities of any other investment companies, more than 10% of the total assets of the acquiring company. Section 12(d)(1)(B) of the Act prohibits a registered open-end investment company, its principal underwriter, and any Broker from selling the investment company’s shares to another investment company if the sale will cause the acquiring company to own more than 3% of the acquired company’s voting stock, or if the sale will cause more than 10% of the acquired company’s voting stock to be owned by investment companies generally.

2. Section 12(d)(1)(f) 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. Applicants seek an exemption under section 12(d)(1)(f) of the Act to permit Unrelated Funds of Funds to acquire shares of the Underlying Funds in excess of the limits in section 12(d)(1)(A), and an Underlying Fund, any principal underwriter for an Underlying Fund, and any Broker to sell shares of an Underlying Fund to an Unrelated Fund of Funds in excess of the limits in section 12(d)(1)(B) of the Act.

3. Applicants state that the terms and conditions of the proposed arrangement

common control with Milliman or such other sub-adviser).

will adequately address the policy concerns underlying sections 12(d)(1)(A) and (B), which include concerns about undue influence by a fund of funds over underlying funds, excessive layering of fees, and overly complex fund structures. Accordingly, applicants believe that the requested exemption is consistent with the public interest and the protection of investors.

4. Applicants believe that neither an Unrelated Fund of Funds nor an Unrelated Fund of Funds Affiliate<sup>7</sup> would be able to exert undue influence over the Underlying Funds.<sup>8</sup> To limit the control that an Unrelated Fund of Funds may have over an Underlying Fund, applicants propose a condition prohibiting the Unrelated Fund of Funds Adviser, any person controlling, controlled by or under common control with the Unrelated Fund of Funds Adviser, and any investment company or issuer that would be an investment company but for section 3(c)(1) or 3(c)(7) of the Act that is advised or sponsored by the Unrelated Fund of Funds Adviser or any person controlling, controlled by or under common control with the Unrelated Fund of Funds Adviser (the “Unrelated Fund of Funds Advisory Group”) from controlling (individually or in the aggregate) an Underlying Fund within the meaning of section 2(a)(9) of the Act. The same prohibition would apply to the Unrelated Fund of Funds Sub-Adviser, any person controlling, controlled by or under common control with the Unrelated Fund of Funds Sub-Adviser, and any investment company or issuer that would be an investment company but for section 3(c)(1) or

<sup>7</sup> An “Unrelated Fund of Funds Affiliate” is defined as the Unrelated Fund of Funds Adviser, Unrelated Fund of Funds Sub-Adviser, a promoter, or a principal underwriter of an Unrelated Fund of Funds, and any person controlling, controlled by, or under common control with any of those entities. An “Underlying Fund Affiliate” is defined as an investment adviser, sponsor, promoter or principal underwriter of an Underlying Fund (or its respective Master Fund), and any person controlling, controlled by or under common control with any of those entities.

<sup>8</sup> For purposes of the investment calculations required by Conditions 1, 4, 6, 7, and 8 in the application with respect to investments in an Underlying Fund, each Participation Agreement (defined below) will require that an Unrelated Fund of Funds (or with the members of the Unrelated Fund of Funds Advisory Group and the Unrelated Fund of Funds Sub-Advisory Group, as applicable) separately calculate its investments in each Managed Risk Fund and the respective Managed Risk Acquired Fund. In calculating its investments in the Managed Risk Acquired Fund, however, an Unrelated Fund of Funds (or with the members of the Unrelated Fund of Funds Advisory Group and the Unrelated Fund of Funds Sub-Advisory Group, as applicable) will aggregate its direct and indirect (through a Managed Risk Fund) investments in the Managed Risk Acquired Fund.

3(c)(7) of the Act (or portion of such investment company or issuer) advised or sponsored by the Unrelated Fund of Funds Sub-Adviser or any person controlling, controlled by, or under common control with the Unrelated Fund of Funds Sub-Adviser (the “Unrelated Fund of Funds Sub-Advisory Group”). Applicants propose other conditions to limit the potential for undue influence over the Underlying Funds, including that no Unrelated Fund of Funds or Unrelated Fund of Funds Affiliate (except to the extent it is acting in its capacity as an investment adviser to an Underlying Fund) will cause an Underlying Fund to purchase a security in an offering of securities during the existence of any underwriting or selling syndicate of which a principal underwriter is an Underwriting Affiliate (“Affiliated Underwriting”). An “Underwriting Affiliate” is a principal underwriter in any underwriting or selling syndicate that is an officer, director, member of an advisory board, investment adviser, sub-adviser or employee of the Unrelated Fund of Funds, or a person of which any such officer, director, member of an advisory board, investment adviser, sub-adviser or employee is an affiliated person. An Underwriting Affiliate does not include any person whose relationship to an Underlying Fund is covered by section 10(f) of the Act.

5. Applicants do not believe that the proposed arrangement will involve excessive layering of fees. The board of directors or trustees (the “Board”) of each Unrelated Fund of Funds, including a majority of the directors or trustees who are not “interested persons” (within the meaning of section 2(a)(19) of the Act) (the “Independent Trustees”), will find that the advisory fees charged under such advisory contract are based on services provided that will be in addition to, rather than duplicative of, the services provided under the advisory or management agreement of any Underlying Fund in which the Unrelated Fund of Funds may invest. In addition, an Unrelated Fund of Funds Adviser will waive fees otherwise payable to it by the Unrelated Fund of Funds in an amount at least equal to any compensation (including fees received pursuant to any plan adopted by an Underlying Fund under rule 12b–1 under the Act) received from an Underlying Fund by the Unrelated Fund of Funds Adviser, or an affiliated person of the Unrelated Fund of Funds Adviser, other than any advisory fees paid to the Unrelated Fund of Funds Adviser or its affiliated person by the Underlying Fund, in connection with

the investment by the Unrelated Fund of Funds in the Underlying Fund.

Applicants also state that with respect to registered separate accounts that invest in an Unrelated Fund of Funds, no sales load will be charged at the Unrelated Fund of Funds level or at the Underlying Fund level.<sup>9</sup> Other sales charges and service fees, as defined in Rule 2830 of the Conduct Rules of the NASD (“NASD Conduct Rules”), if any, will only be charged at the Unrelated Fund of Funds level or at the Underlying Fund level, not both. With respect to other investments in an Unrelated Fund of Funds, any sales charges and/or service fees charged with respect to shares of the Unrelated Fund of Funds will not exceed the limits applicable to a fund of funds as set forth in NASD Conduct Rule 2830.<sup>10</sup>

6. Applicants submit that the proposed arrangement will not create an overly complex fund structure. Applicants note that no Underlying Fund will acquire securities of any other investment company or company relying on section 3(c)(1) or 3(c)(7) of the Act in excess of the limits contained in section 12(d)(1)(A) of the Act, except in certain circumstances identified in condition 12 below.

7. With respect to Underlying Funds that operate using a Managed Risk Fund Structure, applicants believe that having an Unrelated Fund of Funds as an investor will also not raise concerns about complex structures, undue influence or the layering of fees. Applicants note that an Unrelated Fund of Funds investing in a Managed Risk Fund could technically result in a three-tier arrangement. However, given that the Managed Risk Funds effectively operate as an integrated two-tier fund structure that is substantially similar to a master-feeder structure, and given the transparency of the Managed Risk Fund Structure, including the fact that each Managed Risk Fund may invest in only one Managed Risk Acquired Fund and the Managed Risk Strategy Component, applicants do not believe this will result

<sup>9</sup> Applicants represent that each Unrelated Fund of Funds that enters into a Participation Agreement (as defined below) will represent therein that no insurance company sponsoring a registered separate account funding variable insurance contracts will be permitted to invest in the Unrelated Fund of Funds unless the insurance company has certified to the Unrelated Fund of Funds that the aggregate of all fees and charges associated with each contract that invests in the Unrelated Fund of Funds, including fees and charges at the separate account, Unrelated Fund of Funds and Underlying Fund levels, will be reasonable in relation to the services rendered, the expenses expected to be incurred and the risks assumed by the insurance company.

<sup>10</sup> Any references to NASD Conduct Rule 2830 include any successor or replacement FINRA Rule to NASD Conduct Rule 2830.

in an overly complex arrangement. Applicants also have agreed to certain representations to further ensure that investments in the Managed Risk Fund Structure do not raise concerns about complex structures, undue influence or the layering of fees.<sup>11</sup>

8. Applicants also represent that to ensure that Unrelated Funds of Funds comply with the terms and conditions of the requested exemption from section 12(d)(1)(A) of the Act, an Unrelated Fund of Funds must enter into a participation agreement between the Trust, on behalf of the relevant Underlying Fund, and the Unrelated Funds of Funds (“Participation Agreement”) before investing in an Underlying Fund in excess of the limits in section 12(d)(1)(A). The Participation Agreement will require the Unrelated Fund of Funds to adhere to the terms and conditions of the requested order. An Unrelated Fund of Funds may rely on the requested order only to invest in the Underlying Funds and not in any other registered investment company.

#### B. Section 17(a)

1. Section 17(a) of the Act generally prohibits sales or purchases of securities between a registered investment

<sup>11</sup> In particular, applicants represent that: (1) The Adviser will serve as the investment adviser to both the Managed Risk Fund and the Managed Risk Acquired Fund in which it invests; (2) the Managed Risk Fund will invest only in one Managed Risk Acquired Fund and the Managed Risk Strategy Component; (3) other than to permit its investment in the Managed Risk Strategy Component, the Managed Risk Fund will comply with all of the provisions of section 12(d)(1)(E) of the Act; (4) the hedging instruments purchased in connection with the Managed Risk Strategy Component will be purchased solely to assist the Managed Risk Fund in achieving its investment strategy of stabilizing volatility and providing downside protection and will not be purchased for speculative purposes; (5) the Board of the Managed Risk Funds will not authorize the payment of any investment advisory fee by a Managed Risk Fund to the Adviser unless it is based on the provision of services that are in addition to, rather than duplicative of, the services that the Adviser provides to the Managed Risk Acquired Fund; (6) the Board of the Managed Risk Funds, including a majority of the Independent Trustees, will authorize the Adviser to manage volatility and provide downside protection based only on the portfolio holdings of the Managed Risk Acquired Fund, consistent with the applicable Managed Risk Fund’s investment objective, and will review the appropriateness of this authorization at least annually; (7) the Board will review and approve at least annually the continuing appropriateness of the operations of each Managed Risk Fund, including with respect to (i) the Managed Risk Fund’s use of derivatives, (ii) how the Adviser (and any relevant sub-adviser) assesses and manages risk with respect to the Managed Risk Fund’s use of derivatives; and (iii) whether the Managed Risk Fund’s disclosure of its use of derivatives in its offering documents and periodic reports is consistent with relevant Commission and staff guidance; and (8) no Unrelated Fund of Funds may invest in a feeder fund that is investing in a Managed Risk Fund in reliance on section 12(d)(1)(E) of the Act.

company and any affiliated person of the company. Section 2(a)(3) of the Act defines an “affiliated person” of another person to include any person 5% or more of whose outstanding voting securities are directly or indirectly owned, controlled, or held with power to vote by the other person.

2. Applicants seek relief from section 17(a) to permit an Underlying Fund that is an affiliated person of an Unrelated Fund of Funds because the Unrelated Fund of Funds holds 5% or more of the Underlying Fund’s shares to sell its shares to and redeem its shares from an Unrelated Fund of Funds. Applicants state that any proposed transactions directly between an Underlying Fund and an Unrelated Fund of Funds will be consistent with the policies of each Underlying Fund and each Unrelated Fund of Funds and the general purposes of the Act. The Participation Agreement will require any Unrelated Fund of Funds that purchases shares from an Underlying Fund to represent that the purchase of shares from the Underlying Fund by the Unrelated Fund of Funds will be accomplished in compliance with the investment restrictions of the Unrelated Fund of Funds and will be consistent with the investment policies set forth in the Unrelated Fund of Funds’ registration statement.

3. 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 (i) the terms of the proposed transaction are fair and reasonable and do not involve overreaching on the part of any person concerned; (ii) the proposed transaction is consistent with the policies of each registered investment company involved; and (iii) the proposed transaction is consistent with the general purposes of the Act. Section 6(c) of the Act permits the Commission to exempt any person or transactions from any provision of the Act if such exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act.

4. Applicants submit that the proposed transactions satisfy the standards for relief under sections 17(b) and 6(c) of the Act.<sup>12</sup> Applicants state

<sup>12</sup> Applicants acknowledge that receipt of compensation by (a) an affiliated person of an Unrelated Fund of Funds, or an affiliated person of such person, for the purchase by the Unrelated Fund of Funds of shares of an Underlying Fund or (b) an affiliated person of an Underlying Fund, or an affiliated person of such person, for the sale by the Underlying Fund of its shares to an Unrelated



that the terms of the transactions are reasonable and fair and do not involve overreaching. Applicants note that any consideration paid for the purchase or redemption of shares directly from an Underlying Fund will be based on the net asset value of the Underlying Fund. Applicants state that any proposed transactions directly between an Underlying Fund and an Unrelated Fund of Funds will be consistent with the policies of each Underlying Fund and each Unrelated Fund of Funds and the general purposes of the Act.

#### Applicants' Conditions

Applicants agree that any order granting the requested relief will be subject to the following conditions:

1. The members of an Unrelated Fund of Funds Advisory Group will not control (individually or in the aggregate) an Underlying Fund (or its respective Master Fund) within the meaning of section 2(a)(9) of the Act. The members of an Unrelated Fund of Funds Sub-Advisory Group will not control (individually or in the aggregate) an Underlying Fund (or its respective Master Fund) within the meaning of section 2(a)(9) of the Act. If, as a result of a decrease in the outstanding voting securities of an Underlying Fund, the Unrelated Fund of Funds Advisory Group or the Unrelated Fund of Funds Sub-Advisory Group, each in the aggregate, becomes a holder of more than 25 percent of the outstanding voting securities of an Underlying Fund, it (except for any member of the Unrelated Fund of Funds Advisory Group or Unrelated Fund of Funds Sub-Advisory Group that is a separate account funding variable insurance contracts) will vote its shares of the Underlying Fund in the same proportion as the vote of all other holders of the Underlying Fund's shares. A registered separate account funding variable insurance contracts will seek voting instructions from its contract holders and will vote its shares in accordance with the instructions received and will vote those shares for which no instructions were received in the same proportion as the shares for which instructions were received. An unregistered separate account funding variable insurance contracts will either (i) vote its shares of the Underlying Fund in the same proportion as the vote of all other holders of the Underlying Fund's shares; or (ii) seek voting instructions from its contract holders and vote its shares in accordance with

the instructions received and vote those shares for which no instructions were received in the same proportion as the shares for which instructions were received.

2. No Unrelated Fund of Funds or Unrelated Fund of Funds Affiliate will cause any existing or potential investment by the Unrelated Fund of Funds in shares of an Underlying Fund to influence the terms of any services or transactions between the Unrelated Fund of Funds or an Unrelated Fund of Funds Affiliate and the Underlying Fund (or its respective Master Fund) or an Underlying Fund Affiliate.

3. The board of directors or trustees of an Unrelated Fund of Funds, including a majority of the Independent Trustees, will adopt procedures reasonably designed to ensure that the Unrelated Fund of Funds Adviser and any Unrelated Fund of Funds Sub-Adviser(s) are conducting the investment program of the Unrelated Fund of Funds without taking into account any consideration received by the Unrelated Fund of Funds or an Unrelated Fund of Funds Affiliate from an Underlying Fund (or its respective Master Fund) or an Underlying Fund Affiliate in connection with any services or transactions.

4. Once an investment by an Unrelated Fund of Funds in the securities of an Underlying Fund exceeds the limit in section 12(d)(1)(A)(i) of the Act, the Board of the Underlying Fund (or its respective Master Fund), including a majority of the Independent Trustees, will determine that any consideration paid by the Underlying Fund (or its respective Master Fund) to the Unrelated Fund of Funds or an Unrelated Fund of Funds Affiliate in connection with any services or transactions: (a) Is fair and reasonable in relation to the nature and quality of the services and benefits received by the Underlying Fund (or its respective Master Fund); (b) is within the range of consideration that the Underlying Fund (or its respective Master Fund) would be required to pay to another unaffiliated entity in connection with the same services or transactions; and (c) does not involve overreaching on the part of any person concerned. This condition does not apply with respect to any services or transactions between an Underlying Fund (or its respective Master Fund) and its investment adviser(s) or any person controlling, controlled by, or under common control with such investment adviser(s).

5. No Unrelated Fund of Funds or Unrelated Fund of Funds Affiliate (except to the extent it is acting in its

capacity as an investment adviser to an Underlying Fund (or its respective Master Fund)) will cause an Underlying Fund (or its respective Master Fund) to purchase a security in any Affiliated Underwriting.

6. The Board of an Underlying Fund (or of its respective Master Fund), including a majority of the Independent Trustees, will adopt procedures reasonably designed to monitor any purchases of securities by the Underlying Fund (or its respective Master Fund) in an Affiliated Underwriting once an investment by an Unrelated Fund of Funds in the securities of the Underlying Fund exceeds the limit of section 12(d)(1)(A)(i) of the Act, including any purchases made directly from an Underwriting Affiliate. The Board of the Underlying Fund (or its respective Master Fund) will review these purchases periodically, but no less frequently than annually, to determine whether the purchases were influenced by the investment by the Unrelated Fund of Funds in shares of the Underlying Fund. The Board of the Underlying Fund (or its respective Master Fund) shall consider, among other things, (i) whether the purchases were consistent with the investment objectives and policies of the Underlying Fund (or its respective Master Fund); (ii) how the performance of securities purchased in an Affiliated Underwriting compares to the performance of comparable securities purchased during a comparable period of time in underwritings other than Affiliated Underwritings or to a benchmark such as a comparable market index; and (iii) whether the amount of securities purchased by the Underlying Fund (or its respective Master Fund) in Affiliated Underwritings and the amount purchased directly from an Underwriting Affiliate have changed significantly from prior years. The Board of the Underlying Fund shall take any appropriate actions based on its review, including, if appropriate, the institution of procedures designed to ensure that purchases of securities in Affiliated Underwritings are in the best interest of shareholders.

7. Each Underlying Fund (or its respective Master Fund) shall maintain and preserve permanently in an easily accessible place a written copy of the procedures described in the preceding condition, and any modifications to such procedures, and shall maintain and preserve for a period of not less than six years from the end of the fiscal year in which any purchase in an Affiliated Underwriting occurred, the first two years in an easily accessible

place, a written record of each purchase of securities in Affiliated Underwritings once an investment by an Unrelated Fund of Funds in the securities of an Underlying Fund exceeds the limit in section 12(d)(1)(A)(i) of the Act, setting forth from whom the securities were acquired, the identity of the underwriting syndicate's members, the terms of the purchase and the information or materials upon which the Board's determinations were made.

8. Before investing in shares of an Underlying Fund in excess of the limits in section 12(d)(1)(A), each Unrelated Fund of Funds and Underlying Fund will execute a Participation Agreement stating, without limitation, that their boards of directors or trustees and their investment advisers understand the terms and conditions of the order and agree to fulfill their responsibilities under the order. At the time of its investment in shares of an Underlying Fund in excess of the limit in section 12(d)(1)(A)(i), an Unrelated Fund of Funds will notify the Underlying Fund of the investment. At such time, the Unrelated Fund of Funds will also transmit to the Underlying Fund a list of the names of each Unrelated Fund of Funds Affiliate and Underwriting Affiliate. The Unrelated Fund of Funds will notify the Underlying Fund of any changes to the list of the names as soon as reasonably practicable after a change occurs. The Underlying Fund and the Unrelated Fund of Funds will maintain and preserve a copy of the order, the Participation Agreement and the list with any updated information for the duration of the investment and for a period of not less than six years thereafter, the first two years in an easily accessible place.

9. Prior to approving any advisory contract under section 15 of the Act, the board of directors or trustees of each Unrelated Fund of Funds, including a majority of the Independent Trustees, will find that the advisory fees charged under such advisory contracts are based on services provided that will be in addition to, rather than duplicative of, the services provided under the advisory contract(s) of any Underlying Fund (or its respective Master Fund) in which the Unrelated Fund of Funds may invest. These findings and their basis will be recorded fully in the minute books of the appropriate Unrelated Fund of Funds.

10. An Unrelated Fund of Funds Adviser will waive fees otherwise payable to it by the Unrelated Fund of Funds in an amount at least equal to any compensation (including fees received pursuant to any plan adopted by an Underlying Fund (or its respective

Master Fund) under rule 12b-1 under the Act) received from an Underlying Fund (or its respective Master Fund) by the Unrelated Fund of Funds Adviser, or an affiliated person of the Unrelated Fund of Funds Adviser, other than any advisory fees paid to the Unrelated Fund of Funds Adviser or its affiliated person by the Underlying Fund (or its respective Master Fund), in connection with the investment by the Unrelated Fund of Funds in the Underlying Fund. Any Unrelated Fund of Funds Sub-Adviser will waive fees otherwise payable to the Unrelated Fund of Funds Sub-Adviser, directly or indirectly, by the Unrelated Fund of Funds in an amount at least equal to any compensation received from any Underlying Fund (or its respective Master Fund) by the Unrelated Fund of Funds Sub-Adviser, or an affiliated person of the Unrelated Fund of Funds Sub-Adviser, other than any advisory fees paid to the Unrelated Fund of Funds Sub-Adviser or its affiliated person by the Underlying Fund (or its respective Master Fund), in connection with the investment by the Unrelated Fund of Funds in the Underlying Fund made at the direction of the Unrelated Fund of Funds Sub-Adviser. In the event that the Unrelated Fund of Funds Sub-Adviser waives fees, the benefit of the waiver will be passed through to the Unrelated Fund of Funds.

11. With respect to registered separate accounts that invest in an Unrelated Fund of Funds, no sales load will be charged at the Unrelated Fund of Funds level or at the Underlying Fund level. Other sales charges and service fees, as defined in NASD Conduct Rule 2830, if any, will only be charged at the Unrelated Fund of Funds level or at the Underlying Fund level, not both. With respect to other investments in an Unrelated Fund of Funds, any sales charges and/or service fees charged with respect to shares of the Unrelated Fund of Funds will not exceed the limits applicable to a fund of funds as set forth in NASD Conduct Rule 2830.

12. No Underlying Fund or its respective Master Fund will acquire securities of any other investment company or company relying on section 3(c)(1) or 3(c)(7) of the Act in excess of the limits contained in section 12(d)(1)(A) of the Act, except to the extent that such Underlying Fund or its respective Master Fund: (a) Acquires such securities in compliance with section 12(d)(1)(E) of the Act;<sup>13</sup> (b)

<sup>13</sup> Solely for the purposes of condition 12, the investment by a Managed Risk Fund in a Managed Risk Acquired Fund will be deemed to have been made pursuant to section 12(d)(1)(E),

receives securities of another investment company as a dividend or as a result of a plan of reorganization of a company (other than a plan devised for the purpose of evading section 12(d)(1) of the Act); or (c) acquires (or is deemed to have acquired) securities of another investment company pursuant to exemptive relief from the Commission permitting such Underlying Fund or its respective Master Fund to: (i) Acquire securities of one or more investment companies for short-term cash management purposes, or (ii) engage in inter-fund borrowing and lending transactions.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

**Brent J. Fields,**  
Secretary.

[FR Doc. 2015-15337 Filed 6-22-15; 8:45 am]

BILLING CODE 8011-01-P

## SECURITIES AND EXCHANGE COMMISSION

[Extension: Rule 12b-1]; OMB Control No. 3235-0212, SEC File No. 270-188]

### Submission for OMB Review; Comment Request

*Upon Written Request, Copies Available From:* Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549-2736.

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (the "Commission") has submitted to the Office of Management and Budget a request for extension of the previously approved collection of information discussed below.

Rule 12b-1 under the Investment Company Act of 1940 (17 CFR 270.12b-1) permits a registered open-end investment company ("fund" or "mutual fund") to bear expenses associated with the distribution of its shares, provided that the mutual fund complies with certain requirements, including, among other things, that it adopt a written plan ("rule 12b-1 plan") and that it has in writing any agreements relating to the rule 12b-1 plan. The rule in part requires that (i) the adoption or material amendment of a rule 12b-1 plan be approved by the mutual fund's directors, including its independent directors, and, in certain circumstances, its shareholders; (ii) the board review quarterly reports of

notwithstanding the fact that such arrangement does not comply with section 12(d)(1)(E)(ii).

amounts spent under the rule 12b-1 plan; and (iii) the board, including the independent directors, consider continuation of the rule 12b-1 plan and any related agreements at least annually. Rule 12b-1 also requires mutual funds relying on the rule to preserve for six years, the first two years in an easily accessible place, copies of the rule 12b-1 plan and any related agreements and reports, as well as minutes of board meetings that describe the factors considered and the basis for adopting or continuing a rule 12b-1 plan.

Rule 12b-1 also prohibits funds from paying for distribution of fund shares with brokerage commissions on their portfolio transactions. The rule requires funds that use broker-dealers that sell their shares to also execute their portfolio securities transactions, to implement policies and procedures reasonably designed to prevent: (i) The persons responsible for selecting broker-dealers to effect transactions in fund portfolio securities from taking into account broker-dealers' promotional or sales efforts when making those decisions; and (ii) a fund, its adviser or principal underwriter, from entering into any agreement under which the fund directs brokerage transactions or revenue generated by those transactions to a broker-dealer to pay for distribution of the fund's (or any other fund's) shares.

The board and shareholder approval requirements of rule 12b-1 are designed to ensure that fund shareholders and directors receive adequate information to evaluate and approve a rule 12b-1 plan and, thus, are necessary for investor protection. The requirement of quarterly reporting to the board is designed to ensure that the rule 12b-1 plan continues to benefit the fund and its shareholders. The recordkeeping requirements of the rule are necessary to enable Commission staff to oversee compliance with the rule. The requirement that funds or their advisers implement, and fund boards approve, policies and procedures in order to prevent persons charged with allocating fund brokerage from taking distribution efforts into account is designed to ensure that funds' selection of brokers to effect portfolio securities transactions is not influenced by considerations about the sale of fund shares.

Based on information filed with the Commission by funds, Commission staff estimates that there are approximately 7837 mutual fund portfolios that have at least one share class subject to a rule 12b-1 plan.<sup>1</sup> However, many of these

<sup>1</sup> This estimate is based on information from the Commission's NSAR database.

portfolios are part of an affiliated group of funds or mutual fund family that is overseen by a common board of directors. Although the board must review and approve the rule 12b-1 plan for each fund separately, we have allocated the costs and hourly burden related to rule 12b-1 based on the number of fund families that have at least one fund that charges rule 12b-1 fees, rather than on the total number of mutual fund portfolios that individually have a rule 12b-1 plan.<sup>2</sup> Based on information filed with the Commission, the staff estimates that there are approximately 330 fund families with common boards of directors that have at least one fund with a rule 12b-1 plan.

Based on previous conversations with fund representatives, Commission staff estimates that for each of the 330 mutual fund families with a portfolio that has a rule 12b-1 plan, the average annual burden of complying with the rule is 425 hours. This estimate takes into account the time needed to prepare quarterly reports to the board of directors, the board's consideration of those reports, and the board's initial or annual consideration of whether to continue the plan.<sup>3</sup> We therefore estimate that the total hourly burden per year for all funds to comply with current information collection requirements under rule 12b-1, is 140,250 hours (330 fund families × 425 hours per fund family = 140,250 hours).

If a currently operating fund seeks to (i) adopt a new rule 12b-1 plan or (ii) materially increase the amount it spends for distribution under its rule 12b-1 plan, rule 12b-1 requires that the fund obtain shareholder approval. As a consequence, the fund will incur the cost of a proxy.<sup>4</sup> Based on previous conversations with fund representatives, Commission staff estimates that

<sup>2</sup> This allocation is based on previous conversations with fund representatives on how fund boards comply with the requirements of rule 12b-1. Despite this allocation of hourly burdens and costs, the number of annual responses each year will continue to depend on the number of fund portfolios with rule 12b-1 plans rather than the number of fund families with rule 12b-1 plans. The staff estimates that the number of annual responses per fund portfolio will be four per year (quarterly, with the annual reviews taking place at one of the quarterly intervals). Thus, we estimate that funds will make 31,348 responses (7837 fund portfolios × 4 responses per fund portfolio = 31,348 responses) each year.

<sup>3</sup> We do not estimate any costs or time burden related to the recordkeeping requirements in rule 12b-1, as funds are either required to maintain these records pursuant to other rules or would keep these records in any case as a matter of business practice.

<sup>4</sup> In general, a fund adopts a rule 12b-1 plan before it begins operations. Therefore, the fund is not required to obtain the approval of its public shareholders because the fund's shares have not yet been offered to the public.

approximately three funds per year prepare a proxy in connection with the adoption or material amendment of a rule 12b-1 plan. Funds typically hire outside legal counsel and proxy solicitation firms to prepare, print, and mail such proxies. The staff further estimates that the cost of each fund's proxy is \$34,372. Thus the total annual cost burden of rule 12b-1 to the fund industry is \$103,116 (3 funds requiring a proxy × \$34,372 per proxy).

The estimate of average burden hours is made solely for the purposes of the Paperwork Reduction Act, and is not derived from a comprehensive or even a representative survey or study of the costs of Commission rules and forms.

The collections of information required by rule 12b-1 are necessary to obtain the benefits of the rule. Notices to the Commission will not be kept confidential. 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.

The public may view the background documentation for this information collection at the following Web site, [www.reginfo.gov](http://www.reginfo.gov). Comments should be directed to: (i) Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10102, New Executive Office Building, Washington, DC 20503, or by sending an email to: [ShaguftaAhmed@omb.eop.gov](mailto:ShaguftaAhmed@omb.eop.gov); and (ii) Pamela Dyson, Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549 or send an email to: [PRA\\_Mailbox@sec.gov](mailto:PRA_Mailbox@sec.gov). Comments must be submitted to OMB within 30 days of this notice.

Dated: June 18, 2015.

**Brent Fields,**

Secretary.

[FR Doc. 2015-15378 Filed 6-22-15; 8:45 am]

BILLING CODE 8011-01-P

## SECURITIES AND EXCHANGE COMMISSION

### Sunshine Act Meeting

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Public Law 94-409, that the Securities and Exchange Commission will hold a Closed Meeting on Thursday, June 25, 2015 at 2:00 p.m.

Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the Closed Meeting. Certain

staff members who have an interest in the matters also may be present.

The General Counsel of the Commission, or her designee, has certified that, in her opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c)(3), (5), (7), 9(B) and (10) and 17 CFR 200.402(a)(3), (a)(5), (a)(7), (a)(9)(ii) and (a)(10), permit consideration of the scheduled matter at the Closed Meeting.

Commissioner Piwowar, as duty officer, voted to consider the items listed for the Closed Meeting in closed session.

The subject matter of the Closed Meeting will be:  
Institution and settlement of injunctive actions;  
Institution and settlement of administrative proceedings;  
Resolution of litigation claims; and  
Other matters relating to enforcement proceedings.

At times, changes in Commission priorities require alterations in the scheduling of meeting items.

For further information and to ascertain what, if any, matters have been added, deleted, or postponed, please contact the Office of the Secretary at (202) 551-5400.

Dated: June 18, 2015.

**Brent J. Fields,**  
Secretary.

[FR Doc. 2015-15449 Filed 6-19-15; 11:15 am]

BILLING CODE 8011-01-P

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-75191; File No. SR-NYSEArca-2014-117]

### Self-Regulatory Organizations; NYSE Arca, Inc.; Order Disapproving Proposed Rule Change To Remove the Exchange's Quote Mitigation Plan as Provided in Commentary .03 to Exchange Rule 6.86

June 17, 2015.

#### I. Introduction

On October 2, 2014, NYSE Arca, Inc. ("NYSE Arca" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to remove the Exchange's quote mitigation plan as provided by Commentary .03 to NYSE Arca Rule 6.86. The proposed rule change was published for comment in the **Federal**

**Register** on October 21, 2014.<sup>3</sup> On December 2, 2014, pursuant to Section 19(b)(2) of the Act,<sup>4</sup> 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 approve or disapprove the proposed rule change.<sup>5</sup> On January 8, 2015, the Exchange submitted a comment letter in further support of its proposal.<sup>6</sup> On January 16, 2015, the Commission issued an Order Instituting Proceedings to Determine Whether to Approve or Disapprove the proposed rule change.<sup>7</sup> On February 27, 2015 and June 4, 2015, the Exchange submitted comment letters in further support of its proposal.<sup>8</sup> No additional comment letters were submitted. This order disapproves the proposed rule change.

#### II. Description of the Proposal

In 2007, the Exchange adopted a quote mitigation plan in connection with the Options Penny Pilot Program ("Penny Pilot").<sup>9</sup> According to the

<sup>3</sup> See Securities Exchange Act Release No. 73362 (October 15, 2014), 79 FR 62983 ("Notice").

<sup>4</sup> 15 U.S.C. 78s(b)(2).

<sup>5</sup> See Securities Exchange Act Release No. 73720, 79 FR 72747 (December 8, 2014). The Commission designated January 19, 2015, as the date by which it should approve, disapprove, or institute proceedings to determine whether to approve or disapprove the proposed rule change.

<sup>6</sup> See Letter from Elizabeth King, Secretary & General Counsel, Exchange, to Kevin O'Neill, Deputy Secretary, Commission, dated January 8, 2015 ("NYSE Arca Letter 1") available at <http://www.sec.gov/comments/sr-nysearca-2014-117/nysearca2014117.shtml>.

<sup>7</sup> See Securities and Exchange Release No. 74088, 80 FR 3687 (January 23, 2015) (Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposal Rule Change to Remove the Exchange's Quote Mitigation Plan as Provided by Commentary .03 to Exchange Rule 6.86) ("OIP").

<sup>8</sup> See Letters from Elizabeth King, Secretary & General Counsel, Exchange, to Kevin O'Neill, Deputy Secretary, Commission, dated February 27, 2015 ("NYSE Arca Letter 2") available at <http://www.sec.gov/comments/sr-nysearca-2014-117/nysearca2014117-2.pdf> and to Brent Fields, Secretary, Commission, dated June 4, 2015 ("NYSE Arca Letter 3") available at <http://www.sec.gov/comments/sr-nysearca-2014-117/nysearca2014117-3.pdf>.

<sup>9</sup> See Securities and Exchange Release No. 55156 (January 23, 2007), 72 FR 4759 (February 1, 2007) (Order Granting Approval of SR-NYSEArca-2006-73) ("Quote Mitigation Approval Order"). In this Order, the Commission approved a proposed rule change to amend the NYSE Arca rules to (i) permit thirteen options classes to be quoted in pennies on a pilot basis and (ii) adopt a quote mitigation plan. In approving the Penny Pilot, the Commission analyzed data provided by the options exchanges to assess the potential impact the Penny Pilot would have on, among other things, the increase in quotation message traffic. According to the Exchange, the quote mitigation plan was designed to mitigate the volume of data processed and disseminated by OPRA. See Securities and Exchange Release No. 55590 (October 12, 2006), 72 FR 4759 (October 18, 2006) (Notice of SR-NYSEArca-2006-73). In approving the Exchange's

Exchange, the quote mitigation plan was designed to reduce the number of quotation messages sent by the Exchange to the Options Price Reporting Authority ("OPRA") by only submitting quote messages for "active" series.<sup>10</sup> The Exchange defines active series under the quote mitigation plan in Commentary .03 to Exchange Rule 6.86 as: (i) Series that have traded on any options exchange in the previous 14 calendar days; or (ii) series that are solely listed on the Exchange; or (iii) series that have been trading ten days or less; or (iv) series for which the Exchange has received an order.<sup>11</sup> In addition, under the Exchange's quote mitigation plan, the Exchange may define a series as active on an intraday basis if: (i) The series trades at any options exchange; (ii) the Exchange receives an order in the series; or (iii) the Exchange receives a request for quote from a customer in that series.<sup>12</sup>

The Exchange proposes to remove its quote mitigation plan from its rules by deleting Commentary .03 to Exchange Rule 6.86.<sup>13</sup> The Exchange states that its quote mitigation plan is no longer necessary primarily for three reasons. First, the Exchange states that its incorporation of select provisions of the Options Listing Procedures Plan ("OLPP")<sup>14</sup> in Exchange Rule 6.4A serves to reduce the potential for excess quoting because the OLPP limits the number of options series eligible to be listed, which, according to the Exchange, reduces the number of options series a market maker would be obligated to quote.<sup>15</sup> Second, the

quote mitigation plan the Commission stated that "because the Commission expects that the Penny Pilot Program will increase quote message traffic, the Commission is also approving the Exchange's proposal to reduce the number of quotations it disseminates." See Quote Mitigation Approval Order at 4760.

<sup>10</sup> See Notice, *supra* note 3, at 62983.

<sup>11</sup> See Exchange Rule 6.86, Commentary .03, and Notice, *supra* note 3, at 62983.

<sup>12</sup> See *id.*

<sup>13</sup> See Notice, *supra* note 3, at 62984. In addition, the Exchange proposes to amend paragraphs (b)(1) and (b)(2) of Exchange Rule 6.86 to delete references to the "Quote Mitigation Plan," which refer to the quote mitigation plan set forth in Commentary .03 to Exchange Rule 6.86. See *id.*

<sup>14</sup> See Amendment to Plan for the Purpose of Developing and Implementing Procedures Designed to Facilitate the Listing and Trading of Standardized Options Submitted Pursuant to Section 11A(a)(3)(B) of the Securities Exchange Act available at <http://www.theocc.com/clearing/industry-services/olpp.jsp> (providing for the most current OLPP). See also Securities and Exchange Release No. 44521 (July 6, 2001), 66 FR 36809 (July 13, 2001) (order approving the OLPP).

<sup>15</sup> See Notice, *supra* note 3, at 62983. See also Securities and Exchange Release No. 61977 (April 23, 2010), 75 FR 22884 (April 30, 2010) (SR-NYSEArca-2010-30) (in which the Exchange

Continued

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

Exchange states its view that Exchange Rule 6.37B Commentary .01, which removes certain options series from market makers' continuous quoting obligations, reduces the number of quote messages that the Exchange sends to OPRA.<sup>16</sup> The Exchange states that reliance on the OLPP, via Exchange Rule 6.4A, and the refined market maker quoting obligations, pursuant to Commentary .01 to Exchange Rule 6.37B, is sufficient as a quote mitigation plan.<sup>17</sup> Third, the Exchange states that both the Exchange's systems capacity and OPRA's systems capacity are more than sufficient to accommodate any additional increase in quote message traffic that might be sent to OPRA as a result of the deletion of the quote mitigation plan.<sup>18</sup> The Exchange represents that it continually assesses its capacity needs and ensures that the capacity that it requests from OPRA is sufficient and compliant with the requirements established in the OPRA Capacity Guidelines.<sup>19</sup>

The Exchange further represents that it has in place certain measures that act as additional safeguards against excessive quoting.<sup>20</sup> According to the Exchange, these safeguards include monitoring and alerting market makers disseminating an unusual number of quotes, a business plan designed to ensure that new listings are actively traded,<sup>21</sup> and a ratio threshold fee designed to encourage the efficient use of orders.<sup>22</sup>

### III. Summary of Comment Letters

NYSE Arca submitted three comment letters in which it: (1) Supports its position that Rule 6.4A of the OLPP

together with the current exceptions from a market maker's continuous quoting obligations for certain options series would be sufficient as a quote mitigation plan;<sup>23</sup> (2) provides additional information to support its argument that relying on the OLPP requirements in Rule 6.4A would suffice as a quote mitigation plan; and (3) supports its argument that the Exchange and OPRA have sufficient capacity to accommodate an increase in quote message traffic resulting from elimination of the Exchange's quote mitigation plan.<sup>24</sup>

The Exchange states that at least one other options exchange primarily relies on the OLPP requirements in Rule 6.4A as a quote mitigation plan.<sup>25</sup> The Exchange explains that the OLPP Rule 6.4A puts a restriction on the range of permissible strike prices based on the price of the underlying security.<sup>26</sup> The Exchange states its view that reliance on the OLPP requirements is consistent with the Act and would sufficiently limit the number of options series listed on the Exchange.<sup>27</sup>

Next, the Exchange argues that eliminating its quote mitigation plan is consistent with the Act because refined market maker quoting obligations currently in place on the Exchange, which exempt certain options series from market makers' continuous quoting obligations, reduce the universe of series in which a market maker is required to quote.<sup>28</sup> The Exchange notes that these refined obligations were adopted following implementation of its quote mitigation plan,<sup>29</sup> and believes that as a result, market makers do not

need to quote in approximately 5,000 options series, thereby decreasing quote message traffic.<sup>30</sup>

The Exchange argues that it has sufficient capacity to handle quoting in all options series, including quotes in those series that are inactive and not currently disseminated pursuant to the Exchange's quote mitigation plan.<sup>31</sup> In support of this statement, the Exchange explains that although quotes in inactive series do not generate quote traffic from NYSE Arca, the Exchange must nonetheless receive and process quotes in such series, and perform additional processing to suppress quotes in these series to comply with their quote mitigation plan.<sup>32</sup> The Exchange states that because it is already processing the quotes it suppresses, it is "confident that its own systems capacity is more than sufficient to accommodate any increase in the traffic that might be sent to OPRA."<sup>33</sup> The Exchange notes that in its requests for capacity submitted to the Independent Systems Capacity Advisory ("ISCA") (which OPRA uses to ensure overall aggregate capacity), NYSE Arca assumes that (1) options series that are inactive at that time could become active in the future, thereby increasing overall message traffic sent to OPRA, and (2) that all options series that it lists, including those without continuous quoting obligations for market makers, will generate message traffic to OPRA.<sup>34</sup> The Exchange further states its belief that OPRA also would be able to accommodate any increase in quote message traffic resulting from NYSE Arca no longer suppressing quotes in inactive series.<sup>35</sup>

The Exchange further argues that eliminating its quote mitigation plan is consistent with the Act because the Exchange actively monitors market maker quoting activity and alerts market makers to heightened levels of quoting activity, which could result from systems issues or an incorrectly set parameter that generates erroneous quotes.<sup>36</sup> The Exchange notes that NYSE Arca's requests for capacity to the ISCA are adjusted to account for "some level" of erroneous quoting.<sup>37</sup>

The Exchange also states that the landscape regarding quote message traffic and capacity has changed since the adoption of the Penny Pilot.<sup>38</sup> NYSE

adopted select provisions of the OLPP into Exchange Rule 6.4A).

<sup>16</sup> Commentary .01 to Exchange Rule 6.37B provides that Exchange market makers continuous quoting obligations do not apply "to adjusted option series, and series with a time to expiration of nine months or greater, for options on equities and Exchange Traded Fund Shares, and series with a time to expiration of twelve months or greater for Index options." See also Notice, *supra* note 3, at 62984.

<sup>17</sup> See Notice, *supra* note 3, at 62984. The Exchange states its view that limiting the number of options series listed on the Exchange is preferable to suppressing the quotes of inactive options series, as required under current Exchange Rule 6.86, because all quotes sent by Exchange market makers are actionable even if not displayed. See *id.*

<sup>18</sup> See Notice, *supra* note 3, at 62984.

<sup>19</sup> See *id.*

<sup>20</sup> See *id.*

<sup>21</sup> See *id.* (citing to NYSE Arca Options Listing Policy Statement, available at, <http://www.nyse.com/pdfs/TraderNoticeArcaLOPSChanges092713.pdf>).

<sup>22</sup> See *id.* (citing to NYSE Arca Options Fee Schedule, available at, [https://www.theice.com/publicdocs/nyse/markets/arca-options/NYSE\\_Arca\\_Options\\_Fee\\_Schedule.pdf](https://www.theice.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf)).

<sup>23</sup> See NYSE Arca Letter 1, *supra* note 6, at 1. See also NYSE Arca Letter 2, *supra* note 8, at 1–2. The Exchange also supplies an actual illustration of how the Rule results in quote mitigation. *Id.* at 2.

<sup>24</sup> See NYSE Arca Letter 1, *supra* note 6.

<sup>25</sup> See NYSE Arca Letter 1, *supra* note 6, at 1–2. The comment letter further notes that the Miami International Securities Exchange, LLC ("MIAX") stated in a response to comments on a proposed rule change relating to increasing the number of options series associated with Short Term Options Series that it was not using a quote mitigation strategy, but instead employs a listing policy that mitigates the number of classes and series listed on its exchange by not listing illiquid options classes and products that are not already trading on another market. (See NYSE Arca Letter 1, *supra* note 6, at 2 (citing Letter to Elizabeth Murphy, Secretary, U.S. Securities Exchange Commission, from Brian O'Neill, VP and Senior Counsel, MIAX, dated June 2, 2013, available at <http://www.sec.gov/comments/sr-miax-2013-23/miax201323-2.pdf>)). NYSE Arca notes that it has a similar policy designed to help ensure that the Exchange does not list options that generate quote volume without providing the benefit of trading volume. See NYSE Arca Letter 1, *supra* note 6, at 2 and 4.

<sup>26</sup> See NYSE Arca Letter 2, *supra* note 8, at 1–2.

<sup>27</sup> See NYSE Arca Letter 1, *supra* note 6, at 1.

<sup>28</sup> See NYSE Arca Letter 1, *supra* note 6, at 1.

<sup>29</sup> See *id.*

<sup>30</sup> *Id.*

<sup>31</sup> See NYSE Arca Letter 1, *supra* note 6, at 2.

<sup>32</sup> See NYSE Arca Letter 1, *supra* note 6, at 2.

<sup>33</sup> See NYSE Arca Letter 1, *supra* note 6, at 2–3.

<sup>34</sup> *Id.*

<sup>35</sup> See NYSE Arca Letter 1, *supra* note 6, at 2.

<sup>36</sup> See NYSE Arca Letter 1, *supra* note 6, at 3–4.

<sup>37</sup> *Id.* at 4.

<sup>38</sup> See NYSE Arca Letter 3, *supra* note 8, at 2.

Arca represents that in January 2007, 15% of quotes received by the Exchange were not sent to OPRA, compared to 5.8% as of April 2015.<sup>39</sup> The Exchange also states that at the time the Penny Pilot was adopted, OPRA's total capacity was set to 359,000 messages per seconds ("mps"), and that by July 2015, OPRA's peak capacity is anticipated to be 42,100,000 mps.<sup>40</sup> In addition, the Exchange states, based on peak message traffic figures on the Exchange for one day in May 2015,<sup>41</sup> that if the quotes the Exchange suppressed on that day had been sent to OPRA, industry quotes published by OPRA would have increased by no more than 1%, and that this would use less than .05% of total OPRA capacity.<sup>42</sup>

#### IV. Discussion

Under Section 19(b)(2)(C) of the Act, the Commission shall approve a proposed rule change of a self-regulatory organization if the Commission finds that such proposed rule change is consistent with the requirements of the Act, and the rules and regulations thereunder that are applicable to such organization.<sup>43</sup> The Commission shall disapprove a proposed rule change if it does not make such a finding.<sup>44</sup> Rule 700(b)(3) of the Commission's Rules of Practice states that the "burden to demonstrate that a proposed rule change is consistent with the [Act] . . . is on the self-regulatory organization that proposed the rule change" and that a "mere assertion that the proposed rule change is consistent with those requirements . . . is not sufficient."<sup>45</sup>

After careful consideration, the Commission cannot find that the

proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>46</sup> In particular, the Commission cannot find that the proposed rule change is consistent with Section 6(b)(5) of the Act,<sup>47</sup> which requires that the rules of a national securities exchange be designed, among other things, 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 to protect investors and the public interest.

In conjunction with the adoption of the Penny Pilot in 2007 that permitted the options exchanges to quote certain options series in one and five cent increments, and in response to a letter sent by the then Chairman of the Commission,<sup>48</sup> the options exchanges, including NYSE Arca, adopted quote mitigation plans.<sup>49</sup> The Commission emphasized the importance of options exchanges' quote mitigation strategies in connection with the Penny Pilot in its orders approving an expansion of the Penny Pilot in 2007. In those orders, the Commission noted that options exchanges participating in the Penny Pilot would continue to use quote mitigation strategies.<sup>50</sup> Likewise, when the Commission approved NYSE Arca's proposal to again expand the Penny Pilot in 2009, the Commission reiterated that the Exchange would retain and

continue to employ its quote mitigation strategy.<sup>51</sup>

When considering whether the Exchange's quote mitigation plan was consistent with the Act, the Commission relied upon supporting data and analysis provided by the Exchange.<sup>52</sup> In its proposal to provide for a quote mitigation plan, NYSE Arca represented that the quote mitigation plan was intended to reduce the number of quotations generated by the Exchange for all option issues traded at NYSE Arca, not just options on issues included in the Penny Pilot, and that the Exchange anticipated the quote mitigation plan would reduce quote message traffic by 20–30%.<sup>53</sup> In approving NYSE Arca's proposal in February 2007, the Commission stated that because it expected that the Penny Pilot would increase quote message traffic, the Commission also approved the Exchange's proposal to reduce the number of quotations it disseminates.<sup>54</sup>

In 2007 and 2009, the Commission approved rule changes submitted by NYSE Arca expanding the number of classes eligible to participate in the Penny Pilot.<sup>55</sup> In so approving, the Commission reviewed data provided by the options exchanges, including data relating to OPRA's capacity to process the increase in quotes resulting from the expansion of the Penny Pilot and the effectiveness of its quote mitigation plan.<sup>56</sup> In approving each of these expansions, the Commission noted that

<sup>39</sup> *Id.*  
<sup>40</sup> *Id.*  
<sup>41</sup> *Id.* The Exchange represents that as of Friday May 29, 2015, peak message traffic for the Exchange was 1,707,820 mps, measured over a 100 millisecond period. Based on this, the Exchange believes that if the highest percentage of quotes suppressed by the Exchange during this period (8.3%) had been published at the same rate as quotes the Exchange had not suppressed during this time, the mps rate would instead be 1,849,569. *Id.*  
<sup>42</sup> *Id.*  
<sup>43</sup> 15 U.S.C. 78s(b)(2)(C)(i).  
<sup>44</sup> 15 U.S.C. 78s(b)(2)(C)(i); see also 17 CFR 201.700(b)(3) and note 45 *infra*, and accompanying text.  
<sup>45</sup> 17 CFR 201.700(b)(3). The description of a proposed rule change, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding. See *id.* Any failure of a self-regulatory organization to provide the information solicited by Form 19b-4 may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Act and the rules and regulations issued thereunder that are applicable to the self-regulatory organization. *Id.*

<sup>46</sup> In disapproving the proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

<sup>47</sup> 15 U.S.C. 78f(b)(5).

<sup>48</sup> In a letter sent to the options exchanges on June 7, 2006, encouraging the implementation of a penny pilot program, then Chairman Cox noted that quoting options in pennies would increase quote message traffic, which the systems of exchanges, market data vendors, and securities firms must be able to manage, and for that reason, quoting options in pennies would begin in a small number of options. To assist in managing the anticipated increase in quote traffic, Chairman Cox asked that options exchanges include a workable quote mitigation strategy in any proposal to allow quoting in pennies. See Commission Press Release 2006-91, "SEC Chairman Cox Urges Options Exchanges to Start Limited Penny Quoting," June 7, 2006.

<sup>49</sup> See Quote Mitigation Approval Order, *supra* note 9.

<sup>50</sup> See Securities Exchange Act Release No. 56568, 72 FR 56422 (October 3, 2007) (SR-NYSEArca-2007-88); 56567 (September 27, 2007), 72 FR 56307 (October 3, 2007) (Amex-2007-96); 56565 (September 27, 2007), 72 FR 56403 (October 3, 2007) (CBOE-2007-98); 56564 (September 27, 2007), 72 FR 56412 (October 3, 2007) (ISE-2007-74); 56563 (September 27, 2007), 72 FR 56429 (October 3, 2007) (Phlx-2007-62); and 56566 (September 27, 2007), 72 FR 56400 (October 3, 2007) (BSE-2007-40).

<sup>51</sup> See Securities Exchange Act Release No. 60711, 74 FR 49419 (September 28, 2009) (SR-NYSEArca-2009-44). See also Securities Exchange Act Nos. 60373 (October 23, 2009), 74 FR 56675 (November 2, 2009) (Phlx-2009-91); 60864 (October 22, 2009), 74 FR 55876 (October 29, 2009) (CBOE-2009-076); 60865 (October 22, 2009), 74 FR 55880 (ISE-2009-82); 60886 (October 27, 2009), 74 FR 56897 (November 3, 2009); 60874 (October 23, 2009), 74 FR 56682 (November 2, 2009) (NASDAQ-2009-091); and 61106 (December 3, 2009), 74 FR 65193 (December 9, 2009) (NYSEAmex-2009-74).

<sup>52</sup> See Quote Mitigation Approval Order, *supra* note 9.

<sup>53</sup> See Quote Mitigation Approval Order, *supra* note 9, at 4760.

<sup>54</sup> See Quote Mitigation Approval Order, *supra* note 9, at 4760.

<sup>55</sup> The Commission approved thirteen classes to participate in the Penny Pilot on January 23, 2007. See Quote Mitigation Approval Order, *supra* note 9. On September 27, 2007, the Commission approved an expansion of Penny Pilot, which raised the number of participating classes to 63. See Securities Exchange Act Release No. 56568, 72 FR 56422 (October 3, 2007) (SR-NYSEArca-2007-88) ("Order Approving Expansion 1"). On September 23, 2009, the Commission approved another expansion, raising the number of participating classes to 363. See Securities Exchange Act Release No. 60711, 74 FR 49419 (September 28, 2009) (SR-NYSEArca-2009-44) ("Order Approving Extension 2").

<sup>56</sup> See Order Approving Expansion 1 and Order Approving Expansion 2, *supra* note 55 at 56423-24 and 49422-23, respectively.

it relied, in part, on the Exchange's representation that it would continue to use its quote mitigation plan to suppress certain quotation traffic that would otherwise be sent to OPRA.<sup>57</sup> The Commission also relied on data provided by the options exchanges to support representations that capacity was not a concern, and that the quote mitigation plans in place were successful.<sup>58</sup> For example, NYSE Arca, provided the Commission with data supporting its claim that the Exchange's quote mitigation plan mitigated 12.1 million quotes a day or 13 percent of NYSE Arca's daily quote traffic sent to OPRA.<sup>59</sup> In another report, NYSE Arca provided data on OPRA's then-current capacity, future capacity, and peaks in message traffic sent to OPRA to support its argument that quote traffic increases were manageable.<sup>60</sup>

As noted above, the Exchange believes that its quote mitigation plan is no longer necessary because: (1) the Exchange has incorporated select provisions of the OLPP in Exchange Rule 6.4A, which the Exchange believes limits the number of series eligible to be traded; (2) current Exchange Rule 6.37B Commentary .01 removes certain options series from market makers' continuous quoting obligations, which the Exchange believes reduces the number of quote messages that the Exchange sends to OPRA; and (3) both the system capacity at the Exchange and at OPRA are more than sufficient to accommodate any additional increase in quote message traffic that might be disseminated if NYSE Arca's quote mitigation plan is eliminated. However, the Exchange has not provided the Commission with sufficient data regarding potential changes in quote message traffic if the Commission approves its proposal.

For example, the Exchange does not provide sufficient data about the number of quote messages that its quote mitigation plan currently suppresses relative to capacity at OPRA. Specifically, the Exchange provided data from May 29, 2015 that purports to show that if all quote messages suppressed by the Exchange were instead sent to OPRA, industry quotes

published by OPRA would increase by no more than 1%. The Exchange asserts that this increase would use less than .05% of total OPRA capacity across all option exchanges. Importantly, however, the Exchange does not provide data that shows the excess capacity between peak quote message traffic sent from all options exchanges and OPRA's Peak Capacity for the May 29, 2015 sample. If peak quote message traffic sent to OPRA by all the options exchanges was at or approached OPRA's Peak Capacity, then potentially even a small increase in quote message traffic from one exchange could result in OPRA's capacity being exceeded.

In addition, the Exchange does not provide data or analysis demonstrating the potential impact the Exchange's proposal would have on market participants who consume the OPRA and/or the Exchange's quotation message feeds.<sup>61</sup> Nor does the Exchange quantify the number or percentage of quote messages that have been and would continue to be suppressed as a result of the implementation of Exchange Rule 6.4A<sup>62</sup> or current Exchange Rule 6.37B Commentary .01.<sup>63</sup>

<sup>61</sup> See Order Approving Expansion 2, *supra* note 55 at 49421 (The Commission noted that several commenters expressed concerns that increased quotation message traffic imposes costs on exchanges and other market participants to process and store the additional quotations and they questioned the ability of market systems to effectively handle the increased quote message traffic that would likely result from the expansion of the Penny Pilot to 363 classes. In approving the expansion, the Commission noted that NYSE Arca "had adopted and [would] continue to utilize quote mitigation strategies that should continue to mitigate the expected increase in quotation traffic.") *Id.* at 49422–23.

<sup>62</sup> In 2009, the OLPP Participants, including NYSE Arca, represented that the new strategy they were proposing as Amendment No. 3 to the OLPP (which was subsequently codified as Rule 6.4A on the Exchange's rulebook) would be "an additional strategy" to be used to address overall capacity concerns in the industry. See Securities Exchange Act Release No. 60365 (July 22, 2009), 74 FR 37266 (July 28, 2009) (Notice of Filing of Amendment No. 3 to the OLPP proposing uniform standards to the range of options series exercise prices available for trading). Although it was anticipated that the exercise price limitation bands set forth in Amendment No. 3 would also have the attendant benefit of further reducing increases in quote message traffic, nothing in the language in the exchanges' OLPP filings suggest that the methodology set forth in Amendment No. 3 (to limit the number of options series available for trading) was intended to replace the options exchanges' quote mitigation strategies, nor does the language in those filings suggest that it was contemplated at the time that the options exchanges would eliminate their existing exchange-specific quote mitigation strategies.

<sup>63</sup> While NYSE Arca stated in its proposed rule change to adopt Exchange Rule 6.37B Commentary .01 that the burden of continuous quoting in adjusted series is counter to efforts to mitigate the number of quotes collected and disseminated, and that the proposal would further the goal of quote mitigation, this was not a basis given for the

The Commission notes that the Exchange's comment letter stated its belief that as a result of refined quoting obligations, market makers do not need to quote in approximately 5,000 options series, and that this has resulted in a decrease in message traffic,<sup>64</sup> however, the Exchange did not provide data to quantify the decrease in message traffic for the Commission to consider. Absent sufficient information and data of this type, the Commission is not able to adequately evaluate the Exchange's assertion that "reliance on the OLPP, via Rule 6.4A, together with the refined market maker obligation, pursuant to Commentary .01 to Rule 6.37B, is sufficient as a quote mitigation strategy and obviates the need for Rule 6.86."<sup>65</sup> Other information or data may also be helpful for the Commission's consideration of the proposed rule change. Without sufficient supporting data and analysis, the Commission is not able to adequately assess the impact of NYSE Arca's proposed rule change to eliminate its quote mitigation plan and make a determination that the proposed rule change is consistent with the Act.

Given the limitations in the data provided by NYSE Arca, as described above, the Commission cannot find a sufficient basis to conclude that the proposal is consistent with the Act. The Commission notes, however, that the Penny Pilots for each of the options exchanges are anticipated to be extended for an additional year, until June 30, 2016. In connection with any future requests to extend the Penny Pilots after that date, the Commission intends to require each exchange to submit detailed information to allow for permanent approval or disapproval by the Commission. Such proposals should, among other things, provide detailed data and analysis to support the efficacy, or any proposed modification or elimination, of any exchanges' quote mitigation plan.<sup>66</sup>

For the foregoing reasons, the Commission does not believe that NYSE

proposed rule change, and the Exchange did not provide any data on what the impact of the proposal on quote volume would be. See Securities Exchange Act Release No. 65210 (August 26, 2011), 76 FR 54516 (September 1, 2011) (SR–NYSEArca–2011–59). Additionally, the Commission did not consider the potential impact of the proposal on quote mitigation as a basis for approving the elimination of continuous quoting obligation in certain series. See Securities Exchange Act Release No. 65573 (October 14, 2011), 76 FR 65305 (October 20, 2011) (SR–NYSEArca–2011–59).

<sup>64</sup> See NYSE Arca Letter 1, *supra* note 6, at 3.

<sup>65</sup> See Notice, *supra* note 3, at 62984.

<sup>66</sup> In reviewing the quote mitigation plans in this manner, the Commission would be able to consider the market-wide impact of any proposed modification to or elimination of an exchange's quote mitigation practices.

<sup>57</sup> *Id.*

<sup>58</sup> *Id.* For example, in Order Approving Expansion 2, the Commission noted that on June 2, 2009, the sustained message traffic peak of 852,350 messages per second reported by OPRA is still well below the OPRA's current message per second capacity limit of 2,050,000. See Order Approving Expansion 2, *supra* note 55 at 49422.

<sup>59</sup> See *Understanding Economic and Capacity Impacts of the Penny Pilot*, NYSE ARCA Options, May 31, 2007.

<sup>60</sup> See *The Options Penny Pilot*, NYSE ARCA, received August 18, 2009.



Arca has met its burden to demonstrate that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder, including that the rules of an exchange be 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.<sup>67</sup>

#### IV. Conclusion

For the reasons set forth above, the Commission does not believe that NYSE Arca has met its burden to demonstrate that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, Section 6(b)(5) of the Act.

*It is therefore ordered*, pursuant to Section 19(b)(2) of the Act, that the proposed rule change (SR-NYSEArca-2014-117) be, and hereby is, disapproved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>68</sup>

**Brent J. Fields,**  
Secretary.

[FR Doc. 2015-15341 Filed 6-22-15; 8:45 am]

BILLING CODE 8011-01-P

## SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 31679; 812-14358]

### Academy Funds Trust and Innovator Management LLC; Notice of Application

June 17, 2015.

**ACTION:** Notice of an application under section 6(c) of the Investment Company Act of 1940 (the “Act”) for an exemption from section 15(a) of the Act and rule 18f-2 under the Act.

**SUMMARY OF APPLICATION:** Applicants request an order that would permit them to enter into and materially amend subadvisory agreements without shareholder approval.

**APPLICANTS:** Academy Funds Trust (the “Trust”) and Innovator Management LLC (“Innovator” or the “Adviser”).

**FILING DATES:** The application was filed on September 12, 2014 and amended on January 28, 2015, May 12, 2015 and June 3, 2015.

**HEARING OR NOTIFICATION OF HEARING:** An order granting the application will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Commission’s Secretary and serving applicants with a copy of the request, personally or by mail. Hearing requests should be received by the Commission by 5:30 p.m. on July 8, 2015, and should be accompanied by proof of service on the applicants, in the form of an affidavit or, for lawyers, a certificate of service. Pursuant to rule 0-5 under the Act, hearing requests should state the nature of the writer’s interest, any facts bearing upon the desirability of a hearing on the matter, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by writing to the Commission’s Secretary.

**ADDRESSES:** Secretary, U.S. Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090. Applicants: 123 South Broad Street, Suite 1630, Philadelphia, PA 19109.

**FOR FURTHER INFORMATION CONTACT:** Bruce R. MacNeil, Senior Counsel, at (202) 551-6817, or James M. Curtis, Branch Chief, at (202) 551-6712 (Division of Investment Management, Chief Counsel’s Office).

**SUPPLEMENTARY INFORMATION:** The following is a summary of the application. The complete application may be obtained via the Commission’s Web site by searching for the file number, or an applicant using the Company name box, at <http://www.sec.gov/search/search.htm> or by calling (202) 551-8090.

#### Applicants’ Representations

1. The Trust is organized as a Delaware statutory trust and is registered as an open-end management investment company with multiple series. Each series of the Trust has its own investment objective, policies and restrictions, and each is managed by the Adviser and may be managed by various subadvisers.<sup>1</sup>

<sup>1</sup> Applicants also request relief with respect to any existing or future series of the Trust and any other existing or future registered open-end management investment company or series thereof that: (a) Is advised by Innovator or its successors, including any entity controlling, controlled by or under common control with Innovator or its successors (included in the term “Adviser”); (b) uses the manager-of-managers structure (“Manager of Managers Structure”) described in the application; and (c) complies with the terms and conditions of the application (each a “Fund” and together, the “Funds”). The only existing investment company that currently intends to rely on the requested order, the Trust, is named as an applicant. For purposes of the requested order, “successor” is limited to an entity that results from

2. Innovator is a Delaware limited partnership registered as an investment adviser under the Investment Advisers Act of 1940 (“Advisers Act”). Innovator provides investment management services to the Funds under an investment advisory agreement with the Trust (the “Advisory Agreement”).<sup>2</sup> The terms of the Advisory Agreement comply or will comply with section 15(a) of the Act. Each Advisory Agreement was or will be approved by the board of trustees of the relevant Fund (the board of trustees of any Fund, a “Board”), including by a majority of the trustees who are not “interested persons” (as defined in section 2(a)(19) of the Act) of the Trust or Adviser (the “Independent Trustees”), and by the shareholders of the respective Fund in the manner required by sections 15(a) and (c) of the Act and rule 18f-2 thereunder.<sup>3</sup>

3. Under the terms of each Advisory Agreement, Innovator is responsible for the overall management of the Funds’ business affairs and selecting investments in accordance with the Funds’ investment objectives, policies and restrictions. For the investment management services that it provides to the Funds, the Adviser receives the fee specified in the Advisory Agreements. In addition, pursuant to the Advisory Agreement, Innovator may retain one or more subadvisers (each, a “Subadviser”) for the purpose of managing all or a portion of the assets of the Funds. Pursuant to its authority under the Advisory Agreements, the Adviser intends to enter into subadvisory agreements (the “Subadvisory Agreements”) with certain unaffiliated Subadvisers to provide investment advisory services to the Funds. Each Subadvisory Agreement has been or will be approved by the Board, including by a majority of the Independent Trustees in accordance with Sections 15(a) and 15(c) of the Act. In addition, the terms of each Subadvisory Agreements comply or will comply fully with the requirements of Sections 15(a) and 15(c) of the Act other than the shareholder approval required under Section 15(a). Each Subadviser to a Fund will be an “investment adviser,” as defined in section 2(a)(20)(B) of the Act, and registered as an investment adviser

a reorganization into another jurisdiction or a change in the type of organization.

<sup>2</sup> Innovator or another Adviser will enter into substantially similar investment advisory agreements to provide investment management services to each future Fund (each included in the term “Advisory Agreement”). Each other Adviser will also be registered as an investment adviser under the Advisers Act.

<sup>3</sup> Applicants are not seeking any exemptions with respect to the Advisory Agreements.

<sup>67</sup> 15 U.S.C. 78f(b)(5).

<sup>68</sup> 17 CFR 200.30-3(a)(12).

under the Advisers Act or not subject to such registration.<sup>4</sup>

4. The Adviser will supervise the management and investment programs and operations of the Funds and evaluate the abilities and performance of other money management firms in order to identify appropriate Subadvisers for the Fund's investment strategy. After a Subadviser is selected, the Adviser will continuously supervise and monitor the Subadviser's performance and periodically recommend to the Board which Subadvisers should be retained or released. Neither the Trust nor the Funds will be responsible for paying subadvisory fees to any Subadviser. The Adviser will compensate the Subadvisers for a Fund out of the advisory fees that are paid to the Adviser under the applicable Advisory Agreement.

5. Applicants request an order to permit the Adviser, subject to the approval of the Board, to do the following without obtaining shareholder approval: (a) Select certain unaffiliated Subadvisers to manage all or a portion of the assets of the Funds or future Funds pursuant to Subadvisory Agreements, and (b) materially amend Subadvisory Agreements with the Subadvisers. Each Fund's prospectus will contain, at all times following the approval of the Manager of Managers Structure, the disclosure required by condition 2 below.

6. The requested relief will not extend to any subadviser that is an affiliated person, as defined in section 2(a)(3) of the Act, of the Trust, a Fund or the Adviser (other than by reason of serving as a subadviser to one or more Funds) ("Affiliated Subadviser").

7. The Funds will inform shareholders of the hiring of a new Subadviser pursuant to the following procedures ("Modified Notice and Access Procedures"): (a) Within 90 days after a new Subadviser is hired for any Fund, that Fund will send its shareholders either a Multi-manager Notice or a Multi-manager Notice and Multi-manager Information Statement, as applicable;<sup>5</sup> and (b) the Fund will

make the Multi-manager Information Statement available on the Web site identified in the Multi-manager Notice no later than when the Multi-manager Notice (or Multi-manager Notice and Multi-manager Information Statement) is first sent to shareholders, and will maintain it on that Web site for at least 90 days.

#### Applicants' Legal Analysis

1. Section 15(a) of the Act provides, in relevant part, that it is unlawful for any person to act as an investment adviser to a registered investment company except pursuant to a written contract that has been approved by the vote of a majority of the company's outstanding voting securities. Rule 18f-2 under the Act provides that each series or class of securities in a series investment company affected by a matter must approve that matter if the Act requires shareholder approval.

2. Section 6(c) 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 provisions of the Act, or from any rule thereunder, if such exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act. Applicants state that the requested relief meets this standard for the reasons discussed below.

3. Applicants assert that the requested relief is consistent with the protection of investors. Primary responsibility for management of the Funds, including the selection and supervision of the Subadvisers, is vested in the Adviser, subject to the oversight of the Board. Applicants state that from the perspective of the investor, the role of the Subadvisers with respect to the Funds is substantially equivalent to the role of the individual portfolio managers employed by the Adviser for a Fund's assets managed by the Adviser. Both the portfolio managers and the Subadvisers are concerned principally with the selection of portfolio investments in accordance with each Fund's respective investment objectives and policies and have no significant supervisory,

management or administrative responsibilities with respect to the Funds. Applicants state that requiring shareholder approval of each Subadvisory Agreement would impose costs and unnecessary delays on the Funds, and may preclude the Adviser from acting promptly in a manner considered advisable by the Board. Applicants note that the Advisory Agreements and any subadvisory agreement with an Affiliated Subadviser will remain subject to sections 15(a) and (c) of the Act and rule 18f-2 thereunder.

#### Applicants' Conditions

Applicants agree that any order granting the requested relief will be subject to the following conditions:

1. Before a Fund may rely on the requested order, the operation of the Fund in the manner described in the application will be approved by a majority of the Fund's outstanding voting securities, as defined in the Act, or in the case of a Fund whose public shareholders purchase shares on the basis of a prospectus containing the disclosure contemplated by condition 2 below, by the initial shareholder(s) before offering shares of that Fund to the public.

2. Each Fund relying on the requested order will disclose in its prospectus the existence, substance, and effect of any order granted pursuant to the application. Each Fund will hold itself out to the public as utilizing the Manager of Managers Structure. The prospectus will prominently disclose that the Adviser has ultimate responsibility (subject to oversight by the Board) to oversee the Subadvisers and recommend their hiring, termination, and replacement.

3. The Funds will inform shareholders of the hiring of a new Subadviser within 90 days after the hiring of the new Subadviser pursuant to the Modified Notice and Access Procedures.

4. The Adviser will not enter into a subadvisory agreement with any Affiliated Subadviser without such agreement, including the compensation to be paid thereunder, being approved by the shareholders of the applicable Fund.

5. At all times, at least a majority of the Board will be Independent Trustees, and the nomination of new or additional Independent Trustees will be placed within the discretion of the then-existing Independent Trustees.

6. Whenever a subadviser change is proposed for a Fund with an Affiliated Subadviser, the Board, including a majority of the Independent Trustees, will make a separate finding, reflected

<sup>4</sup> If the name of any Fund contains the name of a subadviser, the name of the Adviser will precede the name of the subadviser.

<sup>5</sup> The "Multi-manager Notice" will be modeled on a Notice of Internet Availability as defined in rule 14a-16 under the Securities Exchange Act of 1934 ("Exchange Act"), and specifically will, among other things: (a) Summarize the relevant information regarding the new Subadviser; (b) inform shareholders that the Multi-manager Information Statement is available on a Web site; (c) provide the Web site address; (d) state the time period during which the Multi-manager Information Statement will remain available on that Web site;

(e) provide instructions for accessing and printing the Multi-manager Information Statement; and (f) instruct the shareholder that a paper or email copy of the Multi manager Information Statement may be obtained, without charge, by contacting the Funds. A "Multi-manager Information Statement" will meet the requirements of Regulation 14C, Schedule 14C and Item 22 of Schedule 14A under the Exchange Act for an information statement. Multi-manager Information Statements will be filed electronically with the Commission via the EDGAR system.

in the Board minutes, that such change is in the best interests of the Fund and its shareholders, and does not involve a conflict of interest from which the Adviser or the Affiliated Subadviser derives an inappropriate advantage.

7. The Adviser will provide general management services to each Fund, including overall supervisory responsibility for the general management and investment of each Fund's assets and, subject to review and approval of the Board, will: (a) Set each Fund's overall investment strategies; (b) evaluate, select and recommend Subadvisers to manage all or a part of each Fund's assets; (c) allocate and, when appropriate, reallocate each Fund's assets among one or more Subadvisers; (d) monitor and evaluate the performance of Subadvisers; and (e) implement procedures reasonably designed to ensure that the Subadvisers comply with each Fund's investment objective, policies and restrictions.

8. No trustee or officer of the Trust or a Fund, or member, manager, or officer of the Adviser, will own, directly or indirectly (other than through a pooled investment vehicle that is not controlled by such person), any interest in a Subadviser, except for (a) ownership of interests in the Adviser or any entity that controls, is controlled by, or is under common control with the Adviser or (b) ownership of less than 1% of the outstanding securities of any class of equity or debt of any publicly traded company that is either a Subadviser or an entity that controls, is controlled by, or is under common control with a Subadviser.

9. Any new Subadvisory Agreement or any amendment to an existing Advisory Agreement or Subadvisory Agreement that directly or indirectly results in an increase in the aggregate advisory fee rate payable by the Fund will be submitted to the Fund's shareholders for approval.

10. In the event the Commission adopts a rule under the Act providing substantially similar relief to that in the order requested in the application, the requested order will expire on the effective date of that rule.

For the Commission, by the Division of Investment Management, under delegated authority.

**Brent J. Fields,**

*Secretary.*

[FR Doc. 2015-15384 Filed 6-22-15; 8:45 am]

**BILLING CODE 8011-01-P**

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-75188; File No. SR-CBOE-2015-058]

### Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the Fees Schedule

June 17, 2015.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on June 9, 2015, Chicago Board Options Exchange, Incorporated (the "Exchange" or "CBOE") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, 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 from interested persons.

#### I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend its Fees Schedule. The text of the proposed rule change is available on the Exchange's Web site (<http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx>), at the Exchange's Office of the Secretary, 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 proposes to make certain changes to its Fees Schedule.<sup>3</sup> First, the Exchange proposes to amend its Volume Incentive Program ("VIP"). Under VIP, the Exchange credits each Trading Permit Holder ("TPH") the per contract amount set forth in the VIP table resulting from each public customer ("C" origin code) order transmitted by that TPH (with certain exceptions) which is executed electronically on the Exchange in all underlying symbols excluding Underlying Symbol List A,<sup>4</sup> DJX, MXEA, MXEF, XSP, XSPAM, and mini-options, provided the TPH meets certain volume thresholds in a month.<sup>5</sup> The Exchange proposes to increase the VIP credit for complex orders in Tier 2 from \$0.16 per contract to \$0.21 per contract, in Tier 3 from \$0.16 per contract to \$0.22 per contract and in Tier 4 from \$0.17 per contract to \$0.23 per contract. The purpose of this change is to incentivize the sending of complex orders to the Exchange and to adjust the incentive tiers accordingly as competition requires while maintaining an incremental incentive for TPH's to strive for the highest tier level.

The Exchange next proposes to amend the Complex Order Book ("COB") Taker Surcharge. By way of background, the COB Taker Surcharge ("Surcharge") is a \$0.05 per contract per side surcharge for non-customer complex order executions that take liquidity from the COB in all underlying classes except Underlying Symbol List A and mini-options. Additionally, the Surcharge is not assessed on non-customer complex order executions in the Complex Order Auction ("COA"), the Automated Aim Mechanism ("AIM"), orders originating from a Floor Broker PAR, electronic executions against single leg markets, or stock-option order executions. The

<sup>3</sup> The Exchange initially filed the proposed fee changes on June 1, 2015 (SR-CBOE-2015-054). On June 9, 2015, the Exchange withdrew that filing and submitted this filing.

<sup>4</sup> The following products are included in "Underlying Symbol List A": OEX, XEO, RUT, SPX (including SPXw), SPXpm, SRO, VIX, VXST, VOLATILITY INDEXES and binary options.

<sup>5</sup> Excluded from the VIP credit are options in Underlying Symbol List A, DJX, MXEA, MXEF, XSP, XSPAM, mini-options, QCC trades, public customer to public customer electronic complex order executions, and executions related to contracts that are routed to one or more exchanges in connection with the Options Order Protection and Locked/Crossed Market Plan referenced in Rule 6.80 (see CBOE Fees Schedule, Volume Incentive Program).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

Exchange first proposes to increase the amount of the Surcharge from \$0.05 per contract to \$0.08 per contract. Additionally, the Exchange proposes to eliminate the exclusion of non-customer complex order executions in the COA and AIM mechanisms from the Surcharge. Specifically, the Exchange notes that all complex order auction responses executed in COA and AIM will be assessed the Surcharge (*i.e.*, initiating orders and AIM Contra orders will not be assessed the Surcharge). The Exchange proposes these changes in order to help offset the increased rebates given to complex orders under VIP. In light of the abovementioned changes, the Exchange also proposes to rename the COB Taker Surcharge to “Complex Taker Fee.” Particularly, the surcharge is no longer limited to COB executions as the Surcharge will now include auction responses in COA and AIM. As such, the Exchange believes it is appropriate to rename the Surcharge to more accurately reflect what transactions are being charged and avoid potential confusion. Additionally, the Exchange proposes to change the term “Surcharge” to “Fee” to avoid confusion with other surcharges currently listed in the Fees Schedule.

The Exchange next notes that it currently assesses a \$0.65 per contract fee for electronic executions by Broker-Dealers, non-Trading Permit Holders (“non-TPHs”) Market-Makers, Professionals/Voluntary Professionals and Joint Back-Offices (“JBOs”) in non-Penny Pilot equity, ETF, ETN and index options (excluding Underlying Symbol List A) classes. The Exchange proposes increasing this transaction fee from \$0.65 per contract to \$0.75 per contract. The Exchange also proposes to increase the Marketing Fee for all non-Penny Pilot option classes from \$0.65 per contract to \$0.70 per contract. The Exchange notes that these increases are similar to, and in line with, the amounts assessed by another exchange for similar transactions.<sup>6</sup>

Lastly, the Exchange proposes to amend language in the Fees Schedule relating to the VIX Tier Appointment Surcharge. The VIX Tier Appointment is assessed to any Market-Maker that either (a) has a VIX Tier Appointment at any time during a calendar month and trades at least 100 VIX options contracts electronically while that appointment is active; or (b) trades at least 1,000 VIX options contracts in open outcry during a calendar month. Additionally, a description of the VIX

Tier Appointment Fee in the Fees Schedule provides that “In order for a Market-Maker Trading Permit to be used to act as a Market-Maker in VIX, the Trading Permit Holder must obtain a VIX Tier Appointment for that Market-Maker Trading Permit.” The Exchange seeks to add clarifying language to this sentence in the Fees Schedule. Particularly, the Exchange seeks to clarify that Trading Permit Holders must obtain a VIX Tier Appointment in order for a Market-Maker Trading Permit to be used to act electronically as a Market-Maker in VIX. The Exchange notes that Rule 8.3(i) provides that during Regular Trading Hours, a Market-Maker has an appointment to trade open outcry in all Hybrid classes traded on the Exchange. As VIX is a Hybrid class, a Market-Maker does not need an appointment to trade open outcry. Accordingly, the Exchange seeks to amend the first sentence of the VIX Tier Appointment description to clarify in the Fees Schedule that a VIX Tier Appointment is only necessary for acting as a Market-Maker electronically.

## 2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the “Act”) and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.<sup>7</sup> Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>8</sup> requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitation transactions in securities, 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. Additionally, the Exchange believes the proposed rule change is consistent with Section 6(b)(4) of the Act,<sup>9</sup> which requires that Exchange rules provide for the equitable allocation of reasonable dues, fees, and other charges among its Trading Permit Holders and other persons using its facilities.

The Exchange believes that increasing the VIP complex order credits is reasonable because it will allow all TPHs transmitting public customer

complex orders that reach certain volume thresholds to receive an increased credit for doing so. The amounts of the credits being proposed are also closer to the amounts of credits paid to market participants by another exchange for similar transactions.<sup>10</sup> Additionally, the Exchange notes that increasing the credit (and providing higher credits for complex orders than for simple orders) is reasonable, equitable and not unfairly discriminatory because it is intended to incentivize the sending of more complex orders to the Exchange. This should provide greater liquidity and trading opportunities, including for market participants who send simple orders to the Exchange (as simple orders can trade with the legs of complex orders). The greater liquidity and trading opportunities should benefit not just public customers (whose orders are the only ones that qualify for the VIP) but all market participants.

The Exchange believes that the proposed increase to the amount of the COB Contra Surcharge from \$0.05 per contract per side to \$0.08 per contract per side is reasonable because the total amount assessed to these transactions, including the Surcharge, is still within the range of fees paid by other market participants for similar transactions.<sup>11</sup> Further, other exchanges assess higher fees for complex orders than for noncomplex ones.<sup>12</sup> Applying the Surcharge to all market participants except customers is equitable and not unfairly discriminatory because customer order flow enhances liquidity on the Exchange for the benefit of all market participants. Specifically, Customer liquidity benefits all market participants by providing more trading opportunities, which attracts Market-

<sup>10</sup> See International Securities Exchange, LLC (“ISE”) Schedule of Fees, Section II (which lists complex order fees and rebates). For each public customer order transmitted by a market participant (with certain exceptions) a rebate of between \$0.30 per contract and \$0.46 per contract in Select Symbols and between \$0.63 per contract and \$0.83 per contract is given to that market participant, depending on the qualifying thresholds that market participant meets.

<sup>11</sup> See *e.g.*, NYSE Arca, Inc. (“Arca”) Options Fees Schedule, page 7 (Electronic Complex Order Executions) which provides that for complex order-to-complex order transactions, non-customers are assessed \$0.50 in penny pilot options and \$0.85 in non-penny pilot options. Depending upon the type of market participant a CBOE TPH is, non-customer CBOE TPHs would be assessed between \$0.11 and \$0.73 (which includes the proposed COB Contra Surcharge increase) for such transactions (*see* CBOE Fees Schedule).

<sup>12</sup> See ISE Schedule of Fees, Section I (which lists regular Maker rebates and fees and Taker fees for Select Symbols) as compared to Section II (which lists complex order fees and rebates for Select Symbols). Market participants are assessed higher fees for executing complex orders.

<sup>6</sup> See NASDAQ OMX PHLX LLC (“PHLX”) Pricing Schedule, Section II, Multiply Listed Options Fees.

<sup>7</sup> 15 U.S.C. 78f(b).

<sup>8</sup> 15 U.S.C. 78f(b)(5).

<sup>9</sup> 15 U.S.C. 78f(b)(4).

Makers. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants. By exempting customer orders, the Surcharge will not discourage the sending of customer orders, and therefore there should still be plenty of customer orders for other market participants to trade with. The Exchange believes it's reasonable, equitable and not unfairly discriminatory to assess the Surcharge to complex order auction responses executed in COA and AIM (and not on initiating orders or AIM contra orders) because auction responses in COA and AIM, like other non-customer complex order executions that take liquidity from the COB and are assessed the Surcharge, remove liquidity from the market and because the proposed change applies uniformly to all TPHs. The Exchange believes renaming the surcharge from "COB Taker Surcharge" to "Complex Taker Fee" alleviates potential confusion as to what transactions the surcharge applies to and therefore prevents potential confusion, thereby removing impediments to and perfecting the mechanism of a free and open market and a national market system, and, in general, protecting investors and the public interest.

Increasing the fee for electronic executions by broker-dealers, non-TPHs, Market-Makers, Professionals/Voluntary Professionals and JBOs in non-Penny Pilot equity, ETF, ETN and Index options (excluding Underlying Symbol List A) classes is reasonable because the proposed fee amount is similar to the amount assessed by another exchange for similar transactions.<sup>13</sup> The Exchange believes that the proposed increase is also equitable and not unfairly discriminatory because the Exchange will assess broker-dealers, non-TPH Market-Makers, Professionals/Voluntary Professionals and JBOs the same electronic options transaction fees in Non-Penny Pilot options classes. The Exchange notes that it does not assess Customers the electronic options transaction fees in Non-Penny Pilot options because Customer order flow enhances liquidity on the Exchange for the benefit of all market participants, as discussed above. The Exchange notes that Market-Makers are assessed lower electronic options transaction fees in Non-Penny Pilot options as compared to Professionals, JBOs, Broker Dealers and non-Trading Permit Holder Market-Makers because they have obligations to

the market and regulatory requirements, which normally do not apply to other market participants (e.g., obligations to make continuous markets). Further, Market-Makers will pay a \$0.70 per contract Marketing Fee for many non-Penny Pilot transactions, which broker-dealers, non-Trading Permit Holder Market-Makers, Professionals/Voluntary Professionals and JBOs do not pay.<sup>14</sup> Clearing Trading Permit Holder Proprietary orders are assessed lower options transaction fees in Non-Penny Pilot options because they also have obligations, which normally do not apply to other market participants (e.g., must have higher capital requirements, clear trades for other market participants, must be members of the Options Clearing Corporation). Accordingly, the differentiation between electronic transaction fees for Customers, Market-Makers, Clearing Trading Permit Holders and other market participants recognizes the differing obligations and contributions made to the liquidity and trading environment on the Exchange by these market participants. Assessing higher fees for transactions in electronic, non-Penny Pilot classes is equitable and not unfairly discriminatory because in non-Penny Pilot classes the spreads are naturally larger than in Penny Pilot classes, and these wider spreads allow for greater profit potential. Limiting this fee increase to electronic transactions is equitable and not unfairly discriminatory because electronic trading requires constant system development and maintenance.

Increasing the Marketing Fee for all non-Penny Pilot options classes is reasonable, equitable and not unfairly discriminatory because the proposed fee amount is in line with the amount assessed by another exchange for similar transactions and because it applies to all Market-Makers.<sup>15</sup> Additionally, assessing higher fees for transactions in non-Penny Pilot classes is equitable and not unfairly discriminatory because in non-Penny Pilot classes the spreads are naturally larger than in Penny Pilot classes, and these wider spreads allow for greater profit potential.

Finally, the Exchange believes clarifying its Fees Schedule with regards to when a VIX Tier Appointment is necessary (i.e., acting as a Market-Maker electronically versus on-floor) maintains clarity in the rules and eliminates potential confusion. The alleviation of potential confusion will remove impediments to and perfect the

mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest.

#### *B. Self-Regulatory Organization's Statement on Burden on Competition*

The Exchange does not believe that the proposed rule changes will impose any burden on competition that are not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because, while different fees and rebates are assessed to different market participants in some circumstances, these different market participants have different obligations and different circumstances (as described in the "Statutory Basis" section above). For example, Clearing TPHs have clearing obligations that other market participants do not have. Market-Makers have quoting obligations that other market participants do not have. There is a history in the options markets of providing preferential treatment to Customers. Further, the Exchange fees and rebates, both current and those proposed to be changed, are intended to encourage market participants to bring increased volume to the Exchange (which benefits all market participants), while still covering Exchange costs (including those associated with the upgrading and maintenance of Exchange systems).

The Exchange does not believe that the proposed rule changes will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because the proposed changes are intended to promote competition and better improve the Exchange's competitive position and make CBOE a more attractive marketplace in order to encourage market participants to bring increased volume to the Exchange (while still covering costs as necessary). Further, the proposed changes only affect trading on CBOE. To the extent that the proposed changes make CBOE a more attractive marketplace for market participants at other exchanges, such market participants are welcome to become CBOE market participants.

#### *C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others*

The Exchange neither solicited nor received comments on the proposed rule change.

<sup>13</sup> See PHLX Pricing Schedule, Section II, Multiply Listed Options Fees.

<sup>14</sup> See CBOE Fees Schedule, Marketing Fee.

<sup>15</sup> See PHLX Pricing Schedule, Section II, Multiply Listed Options Fees.

### III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>16</sup> and paragraph (f) of Rule 19b-4<sup>17</sup> thereunder. 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 necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change 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](mailto:rule-comments@sec.gov). Please include File Number SR-CBOE-2015-058 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-CBOE-2015-058. 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-CBOE-2015-058 and should be submitted on or before July 14, 2015.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>18</sup>

**Brent J. Fields,**

*Secretary.*

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**BILLING CODE 8011-01-P**

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-75190; File No. SR-NYSEMKT-2014-86]

### Self-Regulatory Organizations; NYSE MKT LLC.; Order Disapproving Proposed Rule Change To Remove the Exchange's Quote Mitigation Plan as Provided in Exchange Rule 970.1NY

June 17, 2015.

#### I. Introduction

On October 2, 2014, NYSE MKT LLC, ("NYSE MKT" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to remove the Exchange's quote mitigation plan as provided by NYSE MKT Rule 970.1NY. The proposed rule change was published for comment in the **Federal Register** on October 21, 2014.<sup>3</sup> On December 2, 2014, pursuant to section 19(b)(2) of the Act,<sup>4</sup> 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 approve or disapprove the proposed rule change.<sup>5</sup>

<sup>18</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 73367 (October 15, 2014), 79 FR 63009 ("Notice").

<sup>4</sup> 15 U.S.C. 78s(b)(2).

<sup>5</sup> See Securities Exchange Act Release No. 73718, 79 FR 72748 (December 8, 2014). The Commission designated January 19, 2015, as the date by which it should approve, disapprove, or institute

On January 8, 2015, the Exchange submitted a comment letter in further support of its proposal.<sup>6</sup> On January 16, 2015, the Commission issued an Order Instituting Proceedings to Determine Whether to Approve or Disapprove the proposed rule change.<sup>7</sup> On February 27, 2015 and June 4, 2015, the Exchange submitted comment letters in further support of its proposal.<sup>8</sup> No additional comment letters were submitted. This order disapproves the proposed rule change.

#### II. Description of the Proposal

In 2007, the Exchange adopted a quote mitigation plan in connection with the Options Penny Pilot Program ("Penny Pilot").<sup>9</sup> The Exchange's quote mitigation plan consisted of several different strategies used together to mitigate quotes.<sup>10</sup> In 2009, the Exchange adopted the quote mitigation plan used by NYSE Arca.<sup>11</sup> According to the Exchange, the quote mitigation plan was designed to reduce the number of quotation messages sent by the Exchange to the Options Price Reporting Authority ("OPRA") by only submitting

proceedings to determine whether to approve or disapprove the proposed rule change.

<sup>6</sup> See Letter from Elizabeth King, Secretary & General Counsel, Exchange, to Kevin O'Neill, Deputy Secretary, Commission, dated January 8, 2015 ("NYSE MKT Letter 1") available at <http://www.sec.gov/comments/sr-nysemkt-2014-86/nysemkt201486-1.pdf>.

<sup>7</sup> See Securities and Exchange Release No. 74087, 80 FR 3697 (January 23, 2015) (Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposal Rule Change to Remove the Exchange's Quote Mitigation Plan as Provided by Exchange Rule 970.1NY) ("OIP").

<sup>8</sup> See Letters from Elizabeth King, Secretary & General Counsel, Exchange, to Kevin O'Neill, Deputy Secretary, Commission, dated February 27, 2015 ("NYSE MKT Letter 2") available at <http://www.sec.gov/comments/sr-nysemkt-2014-86/nysemkt201486-2.pdf> and to Brent Fields, Secretary, Commission, dated June 4, 2015 ("NYSE MKT Letter 3") available at <http://www.sec.gov/comments/sr-nysemkt-2014-86/nysemkt201486-3.pdf>.

<sup>9</sup> See Securities and Exchange Release No. 55162 (January 24, 2007), 72 FR 4738 (February 1, 2007) (Order Granting Approval of SR-Amex-2006-106) ("Quote Mitigation Approval Order"). In this Order, the Commission approved a proposed rule change to amend the American Stock Exchange LLC (n/k/a NYSE MKT) rules to (i) permit thirteen options classes to be quoted in pennies on a pilot basis and (ii) adopt various quote mitigation strategies. In approving the Penny Pilot, the Commission analyzed data provided by the options exchanges to assess the potential impact the Penny Pilot would have on, among other things, the increase in quotation message traffic. The Exchange subsequently adopted the quote mitigation plan used by NYSE Arca. See Securities and Exchange Release No. 59472 (February 27, 2009), 74 FR 9843 (March 6, 2009) (SR-ALTR-2008-14) ("Quote Mitigation Approval Order No. 2").

<sup>10</sup> See Order Granting Approval of SR-Amex-2006-106, *supra* note 9, at 4739.

<sup>11</sup> See Quote Mitigation Approval Order No. 2, *supra* note 9.

<sup>16</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>17</sup> 17 CFR 240.19b-4(f).

quote messages for “active” series.<sup>12</sup> The Exchange defines active series under the quote mitigation plan in Exchange Rule 970.1NY as: (i) Series that have traded on any options exchange in the previous 14 calendar days; or (ii) series that are solely listed on the Exchange; or (iii) series that have been trading ten days or less; or (iv) series for which the Exchange has received an order.<sup>13</sup> In addition, under the Exchange’s quote mitigation plan, the Exchange may define a series as active on an intraday basis if: (i) the series trades at any options exchange; (ii) the Exchange receives an order in the series; or (iii) the Exchange receives a request for quote from a customer in that series.<sup>14</sup>

The Exchange proposes to remove its quote mitigation plan from its rules by deleting Exchange Rule 970.1NY.<sup>15</sup> The Exchange states that its quote mitigation plan is no longer necessary primarily for three reasons. First, the Exchange states that its incorporation of select provisions of the Options Listing Procedures Plan (“OLPP”)<sup>16</sup> in Exchange Rule 903A serves to reduce the potential for excess quoting because the OLPP limits the number of options series eligible to be listed, which, according to the Exchange, reduces the number of options series a market maker would be obligated to quote.<sup>17</sup> Second, the Exchange states its view that Exchange Rule 925.1NY Commentary .01, which removes certain options series from market makers’ continuous quoting obligations, reduces the number of quote messages that the Exchange sends to OPRA.<sup>18</sup> The Exchange states

that reliance on the OLPP, via Exchange Rule 903A, and the refined market maker quoting obligations, pursuant to Commentary .01 to Exchange Rule 925.1NY, is sufficient as a quote mitigation plan.<sup>19</sup> Third, the Exchange states that both the Exchange’s systems capacity and OPRA’s systems capacity are more than sufficient to accommodate any additional increase in quote message traffic that might be sent to OPRA as a result of the deletion of the quote mitigation plan.<sup>20</sup> The Exchange represents that it continually assesses its capacity needs and ensures that the capacity that it requests from OPRA is sufficient and compliant with the requirements established in the OPRA Capacity Guidelines.<sup>21</sup>

The Exchange further represents that it has in place certain measures that act as additional safeguards against excessive quoting.<sup>22</sup> According to the Exchange, these safeguards include monitoring and alerting market makers disseminating an unusual number of quotes, a business plan designed to ensure that new listings are actively traded,<sup>23</sup> and a ratio threshold fee designed to encourage the efficient use of orders.<sup>24</sup>

### III. Summary of Comment Letters

NYSE MKT submitted three comment letters in which it: (1) supports its position that Rule 903A of the OLPP together with the current exceptions from a market maker’s continuous quoting obligations for certain options series would be sufficient as a quote mitigation plan,<sup>25</sup> (2) provides additional information to support its argument that relying on the OLPP requirements in Rule 903A would suffice as a quote mitigation plan; and (3) supports its argument that the Exchange and OPRA have sufficient capacity to accommodate an increase in

a time to expiration of twelve months or greater for Index options.” See also Notice, *supra* note 3, at 63009–10.

<sup>19</sup> See Notice, *supra* note 3, at 63010. The Exchange states its view that limiting the number of options series listed on the Exchange is preferable to suppressing the quotes of inactive options series, as required under current Exchange Rule 970.1NY, because all quotes sent by Exchange market makers are actionable even if not displayed. See *id.*

<sup>20</sup> See Notice, *supra* note 3, at 63010.

<sup>21</sup> See *id.*

<sup>22</sup> See *id.*

<sup>23</sup> See *id.* (citing to Commentary .09(b) to Exchange Rule 915).

<sup>24</sup> See *id.* (citing to NYSE Amex Options Fee Schedule, available at, [https://www.theice.com/publicdocs/nyse/markets/amex-options/NYSE\\_Amex\\_Options\\_Fee\\_Schedule.pdf](https://www.theice.com/publicdocs/nyse/markets/amex-options/NYSE_Amex_Options_Fee_Schedule.pdf)).

<sup>25</sup> See NYSE MKT Letter 1, *supra* note 6, at 1. See also NYSE MKT Letter 2, *supra* note 8, at 1–2. The Exchange also supplies an actual illustration of how the Rule results in quote mitigation. *Id.* at 2.

quote message traffic resulting from elimination of the Exchange’s quote mitigation plan.<sup>26</sup>

The Exchange states that at least one other options exchange primarily relies on the OLPP requirements in Rule 903A as a quote mitigation plan.<sup>27</sup> The Exchange explains that OLPP Rule 903A puts a restriction on the range of permissible strike prices based on the price of the underlying security.<sup>28</sup> The Exchange states its view that reliance on the OLPP requirements is consistent with the Act and would sufficiently limit the number of options series listed on the Exchange.<sup>29</sup>

Next, the Exchange argues that eliminating its quote mitigation plan is consistent with the Act because refined market maker quoting obligations currently in place on the Exchange, which exempt certain options series from market makers’ continuous quoting obligations, reduce the universe of series in which a market maker is required to quote.<sup>30</sup> The Exchange notes that these refined obligations were adopted following implementation of its quote mitigation plan,<sup>31</sup> and believes that as a result, market makers do not need to quote in approximately 5,000 options series, thereby decreasing quote message traffic.<sup>32</sup>

The Exchange argues that it has sufficient capacity to handle quoting in all options series, including quotes in those series that are inactive and not currently disseminated pursuant to the Exchange’s quote mitigation plan.<sup>33</sup> In support of this statement, the Exchange explains that although quotes in inactive series do not generate quote traffic from NYSE MKT, the Exchange

<sup>26</sup> See NYSE MKT Letter 1 *supra* note 6.

<sup>27</sup> See NYSE MKT Letter 1, *supra* note 6, at 1–2. The comment letter further notes that the Miami International Securities Exchange, LLC (“MIAX”) stated in a response to comments on a proposed rule change relating to increasing the number of options series associated with Short Term Options Series that it was not using a quote mitigation strategy, but instead employs a listing policy that mitigates the number of classes and series listed on its exchange by not listing illiquid options classes and products that are not already trading on another market. (See NYSE MKT Letter 1, *supra* note 6, at 2 (citing Letter to Elizabeth Murphy, Secretary, U.S. Securities Exchange Commission, from Brian O’Neill, VP and Senior Counsel, MIAX, dated June 2, 2013, available at <http://www.sec.gov/comments/sr-miax-2013-23/miax201323-2.pdf>)). NYSE MKT notes that it has a similar policy designed to help ensure that the Exchange does not list options that generate quote volume without providing the benefit of trading volume. See NYSE MKT Letter 1, *supra* note 6, at 2 and 4.

<sup>28</sup> See NYSE MKT Letter 2, *supra* note 8, at 1–2.

<sup>29</sup> See NYSE MKT Letter 1, *supra* note 6, at 1.

<sup>30</sup> See NYSE MKT Letter 1, *supra* note 6, at 3.

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> See NYSE MKT Letter 1, *supra* note 6, at 2.

<sup>12</sup> See Notice, *supra* note 3, at 63009.

<sup>13</sup> See Exchange Rule 970.1NY, and Notice, *supra* note 3, at 63009.

<sup>14</sup> See Exchange Rule 970.1NY.

<sup>15</sup> See Notice, *supra* note 3, at 63010. In addition, the Exchange proposes to amend paragraphs (b)(1) and (b)(2) of Exchange Rule 970.1NY (Firm Quotes) to delete references to the “Quote Mitigation Plan.” *Id.*

<sup>16</sup> See Amendment to Plan for the Purpose of Developing and Implementing Procedures Designed to Facilitate the Listing and Trading of Standardized Options Submitted Pursuant to Section 11A(a)(3)(B) of the Securities Exchange Act available at <http://www.theocc.com/clearing/industry-services/olpp.jsp> (providing for the most current OLPP). See also Securities and Exchange Release No. 44521 (July 6, 2001), 66 FR 36809 (July 13, 2001) (order approving the OLPP).

<sup>17</sup> See Notice, *supra* note 3, at 63009. See also Securities and Exchange Release No. 61978 (April 23, 2010), 75 FR 22886 (April 30, 2010) (NYSEAmex–2010–39) (in which the Exchange adopted select provisions of the OLPP into Exchange Rule 903A).

<sup>18</sup> Commentary .01 to Exchange Rule 925.1NY provides that Exchange market makers continuous quoting obligations do not apply “to adjusted option series, and series with a time to expiration of nine months or greater, for options on equities and Exchange Traded Fund Shares, and series with



must nonetheless receive and process quotes in such series, and perform additional processing to suppress quotes in these series to comply with their quote mitigation plan.<sup>34</sup> The Exchange states that because it is already processing the quotes it suppresses, it is “confident that its own systems capacity is more than sufficient to accommodate any increase in the traffic that might be sent to OPRA.”<sup>35</sup> The Exchange notes that in its requests for capacity submitted to the Independent Systems Capacity Advisory (“ISCA”) (which OPRA uses to ensure overall aggregate capacity), NYSE MKT assumes that (1) options series that are inactive at that time could become active in the future, thereby increasing overall message traffic sent to OPRA, and (2) that all options series that it lists, including those without continuous quoting obligations for market makers, will generate message traffic to OPRA.<sup>36</sup> The Exchange further states its belief that OPRA also would be able to accommodate any increase in quote message traffic resulting from NYSE MKT no longer suppressing quotes in inactive series.<sup>37</sup>

The Exchange further argues that eliminating its quote mitigation plan is consistent with the Act because the Exchange actively monitors market maker quoting activity and alerts market makers to heightened levels of quoting activity, which could result from systems issues or an incorrectly set parameter that generates erroneous quotes.<sup>38</sup> The Exchange notes that NYSE MKT’s requests for capacity to the ISCA are adjusted to account for “some level” of erroneous quoting.<sup>39</sup>

The Exchange also states that the landscape regarding quote message traffic and capacity has changed since the adoption of the Penny Pilot.<sup>40</sup> NYSE MKT represents that in January 2007, using the quote mitigation plan currently in place on the Exchange, 15% of quotes received by the NYSE Arca, were not sent to OPRA, compared to 4.3% received by the Exchange as of April 2015.<sup>41</sup> The Exchange also states that at the time the Penny Pilot was adopted, OPRA’s total capacity was set

to 359,000 messages per seconds (“mps”), and that by July 2015, OPRA’s peak capacity is anticipated to be 42,100,000 mps.<sup>42</sup> In addition, the Exchange states, based on peak message traffic figures on the Exchange for one day in May 2015,<sup>43</sup> that if the quotes the Exchange suppressed on that day had been sent to OPRA, industry quotes published by OPRA would have increased by no more than 1.5%, and that this would use less than .05% of total OPRA capacity.<sup>44</sup>

#### IV. Discussion

Under section 19(b)(2)(C) of the Act, the Commission shall approve a proposed rule change of a self-regulatory organization if the Commission finds that such proposed rule change is consistent with the requirements of the Act, and the rules and regulations thereunder that are applicable to such organization.<sup>45</sup> The Commission shall disapprove a proposed rule change if it does not make such a finding.<sup>46</sup> Rule 700(b)(3) of the Commission’s Rules of Practice states that the “burden to demonstrate that a proposed rule change is consistent with the [Act] . . . is on the self-regulatory organization that proposed the rule change” and that a “mere assertion that the proposed rule change is consistent with those requirements . . . is not sufficient.”<sup>47</sup>

After careful consideration, the Commission cannot find that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>48</sup> In particular, the

Commission cannot find that the proposed rule change is consistent with section 6(b)(5) of the Act,<sup>49</sup> which requires that the rules of a national securities exchange be designed, among other things, 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 to protect investors and the public interest.

In conjunction with the adoption of the Penny Pilot in 2007 that permitted the options exchanges to quote certain options series in one and five cent increments, and in response to a letter sent by the then Chairman of the Commission,<sup>50</sup> the options exchanges, including NYSE MKT, adopted quote mitigation plans.<sup>51</sup> The Commission emphasized the importance of options exchanges’ quote mitigation strategies in connection with the Penny Pilot in its orders approving an expansion of the Penny Pilot in 2007. In those orders, the Commission noted that options exchanges participating in the Penny Pilot would continue to use quote mitigation strategies.<sup>52</sup> Likewise, when the Commission approved NYSE Arca’s proposal to again expand the Penny Pilot in 2009, the Commission reiterated that the NYSE Arca would retain and continue to employ its quote mitigation strategy.<sup>53</sup>

impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

<sup>49</sup> 15 U.S.C. 78f(b)(5).

<sup>50</sup> In a letter sent to the options exchanges on June 7, 2006, encouraging the implementation of a penny pilot program, then Chairman Cox noted that quoting options in pennies would increase quote message traffic, which the systems of exchanges, market data vendors, and securities firms must be able to manage, and for that reason, quoting options in pennies would begin in a small number of options. To assist in managing the anticipated increase in quote traffic, Chairman Cox asked that the options exchanges include a workable quote mitigation strategy in any proposal to allow quoting in pennies. See Commission Press Release 2006–91, “SEC Chairman Cox Urges Options Exchanges to Start Limited Penny Quoting,” June 7, 2006.

<sup>51</sup> See Quote Mitigation Approval Order, *supra* note 9.

<sup>52</sup> See Securities Exchange Act Release No. 56568, 72 FR 56422 (October 3, 2007) (SR–NYSEArca–2007–88); 56567 (September 27, 2007), 72 FR 56307 (October 3, 2007) (Amex–2007–96); 56565 (September 27, 2007), 72 FR 56403 (October 3, 2007) (CBOE–2007–98); 56564 (September 27, 2007), 72 FR 56412 (October 3, 2007) (ISE–2007–74); 56563 (September 27, 2007), 72 FR 56429 (October 3, 2007) (Phlx–2007–62); and 56566 (September 27, 2007), 72 FR 56400 (October 3, 2007) (BSE–2007–40).

<sup>53</sup> See Securities Exchange Act Release No. 60711, 74 FR 49419 (September 28, 2009) (SR–NYSEArca–2009–44). See also Securities Exchange Act Nos. 60373 (October 23, 2009), 74 FR 56675 (November 2, 2009) (Phlx–2009–91); 60864 (October 22, 2009), 74 FR 55876 (October 29, 2009) (CBOE–2009–076);

<sup>42</sup> *Id.*

<sup>43</sup> *Id.* The Exchange represents that as of Friday May 29, 2015, peak message traffic for the Exchange was 3,121,570 mps, measured over a 100 millisecond period. Based on this, the Exchange believes that if the highest percentage of quotes suppressed by the Exchange during this period (6.7%) had been published at the same rate as quotes the Exchange had not suppressed during this time, the mps rate would instead be 3,330,715. *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> 15 U.S.C. 78s(b)(2)(C)(i).

<sup>46</sup> 15 U.S.C. 78s(b)(2)(C)(i); see also 17 CFR 201.700(b)(3) and note 47 *infra*, and accompanying text.

<sup>47</sup> 17 CFR 201.700(b)(3). The description of a proposed rule change, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding. See *id.* Any failure of a self-regulatory organization to provide the information solicited by Form 19b-4 may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Act and the rules and regulations issued thereunder that are applicable to the self-regulatory organization. *Id.*

<sup>48</sup> In disapproving the proposed rule change, the Commission has considered the proposed rule’s

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> See NYSE MKT Letter 1, *supra* note 6, at 2–3.

<sup>37</sup> See NYSE MKT Letter 1, *supra* note 6, at 1–2.

<sup>38</sup> See NYSE MKT Letter 1, *supra* note 6, at 3–4.

<sup>39</sup> *Id.* at 4.

<sup>40</sup> See NYSE MKT Letter 3, *supra* note 8, at 2.

<sup>41</sup> *Id.* Although the Exchange had not yet adopted its current quote mitigation plan in January 2007, it provided data from NYSE Arca from this time period for comparative purposes. *Id.*

In approving NYSE MKT's proposal in February 2007, the Commission stated that because it expected that the Penny Pilot would increase quote message traffic, the Commission also approved the Exchange's proposal to reduce the number of quotations it disseminates.<sup>54</sup> In 2009, the Commission approved NYSE MKT's implementation of a quote mitigation strategy identical to that in place on NYSE Arca.<sup>55</sup>

In 2007 and 2009, the Commission approved rule changes expanding the number of classes eligible to participate in the Penny Pilot.<sup>56</sup> In so approving, the Commission reviewed data provided by the options exchanges, including data relating to OPRA's capacity to process the increase in quotes resulting from the expansion of the Penny Pilot and the effectiveness of its quote mitigation plan.<sup>57</sup> In approving each of these expansions, the Commission noted that it relied, in part, on the Exchange's representation that it would continue to use its quote mitigation plan to suppress certain quotation traffic that would otherwise be sent to OPRA.<sup>58</sup> The Commission also relied on data provided by the options exchanges to support representations that capacity was not a concern, and that the quote mitigation plans in place were successful.<sup>59</sup>

60865 (October 22, 2009), 74 FR 55880 (ISE-2009-82); 60886 (October 27, 2009), 74 FR 56897 (November 3, 2009); 60874 (October 23, 2009), 74 FR 56682 (November 2, 2009) (NASDAQ-2009-091); and 61106 (December 3, 2009), 74 FR 65193 (December 9, 2009) (NYSEAmex-2009-74).

<sup>54</sup> See Quote Mitigation Approval Order, *supra* note 9, at 4740.

<sup>55</sup> See Quote Mitigation Approval Order No. 2, *supra* note 9.

<sup>56</sup> The Commission approved thirteen classes to participate in the Penny Pilot on January 24, 2007. See Quote Mitigation Approval Order, *supra* note 9. On September 27, 2007, the Commission approved an expansion of the Penny Pilot, which raised the number of participating classes to 63. See Securities Exchange Act Release No. 56567, 72 FR 56396 (October 3, 2007) (Amex-2007-96) (Order Approving Expansion 1). On September 23, 2009, the Commission approved another expansion, raising the number of participating classes to 363. See Securities Exchange Act Release No. 60711, 74 FR 49419 (September 28, 2009) (NYSEArca-2009-44) (Order Approving Expansion 2). NYSE MKT filed a proposed rule change for immediate effectiveness, copying the expansion approved by the Commission in NYSE Arca-2009-44. See Securities Exchange Act Release No. 61106 (December 3, 2009), 74 FR 65193 (December 9, 2009) (Notice of Filing and Immediate Effectiveness of NYSEAmex-2009-74).

<sup>57</sup> See Order Approving Expansion 1 and Order Approving Expansion 2, *supra* note 56, at 56398 and 49422-23, respectively.

<sup>58</sup> *Id.*

<sup>59</sup> See Order Approving Expansion 2, *supra* note 56, at 49422. For example, in the order approving Expansion 2, the Commission noted that on June 2, 2009, the sustained message traffic peak of 852,350 messages per second reported by OPRA is still well

As noted above, the Exchange believes that its quote mitigation plan is no longer necessary because: (1) The Exchange has incorporated select provisions of the OLPP in Exchange Rule 903A, which the Exchange believes limits the number of series eligible to be traded; (2) current Exchange Rule 925.1 NY Commentary .01 removes certain options series from market makers' continuous quoting obligations, which the Exchange believes reduces the number of quote messages that the Exchange sends to OPRA; and (3) both the system capacity at the Exchange and at OPRA are more than sufficient to accommodate any additional increase in quote message traffic that might be disseminated if NYSE MKT's quote mitigation plan is eliminated. However, the Exchange has not provided the Commission with sufficient data regarding potential changes in quote message traffic if the Commission approves its proposal.

For example, the Exchange does not provide sufficient data about the number of quote messages that its quote mitigation plan currently suppresses relative to capacity at OPRA. Specifically, the Exchange provided data from May 29, 2015 that purports to show that if all quote messages suppressed by the Exchange were instead sent to OPRA, industry quotes published by OPRA would increase by no more than 1.5%. The Exchange asserts that this increase would use less than .05% of total OPRA capacity across all option exchanges. Importantly, however, the Exchange does not provide data that shows the excess capacity between peak quote message traffic sent from all options exchanges and OPRA's Peak Capacity for the May 29, 2015 sample. If peak quote message traffic sent to OPRA by all the options exchanges was at or approached OPRA's Peak Capacity, then potentially even a small increase in quote message traffic from one exchange could result in OPRA's capacity being exceeded.

In addition, the Exchange does not provide data or analysis demonstrating the potential impact the Exchange's proposal would have on market participants who consume the OPRA and/or the Exchange's quotation message feeds.<sup>60</sup> Nor does the Exchange

below the OPRA's current message per second capacity limit of 2,050,000. *Id.*

<sup>60</sup> See Order Approving Expansion 2, *supra* note 56, at 49421 (The Commission noted that several commenters expressed concerns that increased quotation message traffic imposes costs on exchanges and other market participants to process and store the additional quotations and they questioned the ability of market systems to effectively handle the increased quote message

quantify the number or percentage of quote messages that have been and would continue to be suppressed as a result of the implementation of Exchange Rule 903A<sup>61</sup> or current Exchange Rule 925.1 NY Commentary .01.<sup>62</sup> The Commission notes that the Exchange's comment letter stated its belief that as a result of refined quoting obligations, market makers do not need to quote in approximately 5,000 options series, and that this has resulted in a decrease in message traffic,<sup>63</sup> however, the Exchange did not provide data to quantify the decrease in message traffic for the Commission to consider. Absent sufficient information and data of this type, the Commission is not able to adequately evaluate the Exchange's assertion that "reliance on the OLPP, via Rule 903A, together with the refined market maker obligation, pursuant to Commentary .01 to Rule 925.1 NY, is sufficient as a quote mitigation strategy

traffic that would likely result from the expansion of the Penny Pilot to 363 classes. In approving the expansion, the Commission noted that NYSE Arca "had adopted and [would] continue to utilize quote mitigate strategies that should continue to mitigate the expected increase in quotation traffic." *Id.* at 49422-23.

<sup>61</sup> In 2009, the OLPP Participants, including NYSE MKT, represented that the new strategy they were proposing as Amendment No. 3 to the OLPP (which was subsequently codified as Rule 903A on the Exchange's rulebook) would be "an additional strategy" to be used to address overall capacity concerns in the industry. See Securities Exchange Act Release No. 60365 (July 22, 2009), 74 FR 37266 (July 28, 2009) (Notice of Filing of Amendment No. 3 to the OLPP proposing uniform standards to the range of options series exercise prices available for trading). Although it was anticipated that the exercise price limitation bands set forth in Amendment No. 3 would also have the attendant benefit of further reducing increases in quote message traffic, nothing in the language in the exchanges' OLPP filings suggest that the methodology set forth in Amendment No. 3 (to limit the number of option series available for trading) was intended to replace the options exchanges' quote mitigation strategies, nor does the language in those filings suggest that it was contemplated at the time that the options exchanges would eliminate their existing exchange-specific quote mitigation strategies.

<sup>62</sup> While NYSE MKT stated in its proposed rule change to adopt Commentary .01 to Exchange Rule 925.1 NY that the burden of continuous quoting in adjusted series is counter to efforts to mitigate the number of quotes collected and disseminated, and that the proposal would further the goal of quote mitigation, this was not a basis given for the proposed rule change, and the Exchange did not provide any data on what the impact of the proposal on quote volume would be. See Securities Exchange Act Release No. 65209 (August 26, 2011), 76 FR 54518 (September 1, 2011) (NYSEAmex-2011-61). Additionally, the Commission did not consider the potential impact of the proposal on quote mitigation as a basis for approving the elimination of continuous quoting obligation in certain series. See Securities Exchange Act Release No. 65572 (October 14, 2011), 76 FR 65310 (October 20, 2011) (NYSEAmex-2011-61).

<sup>63</sup> See NYSE MKT Letter 1, *supra* note 6, at 3.

and obviates the need for Rule 970.1.”<sup>64</sup> Other information or data may also be helpful for the Commission’s consideration of the proposed rule change. Without sufficient supporting data and analysis, the Commission is not able to adequately assess the impact of NYSE MKT’s proposed rule change to eliminate its quote mitigation plan and make a determination that the proposed rule change is consistent with the Act.

Given the limitations in the data provided by NYSE MKT, as described above, the Commission cannot find a sufficient basis to conclude that the proposal is consistent with the Act. The Commission notes, however, that the Penny Pilots for each of the options exchanges are anticipated to be extended for an additional year, until June 30, 2016. In connection with any future requests to extend the Penny Pilots after that date, the Commission intends to require each exchange to submit detailed information to allow for permanent approval or disapproval by the Commission. Such proposals should, among other things, provide detailed data and analysis to support the efficacy, or any proposed modification or elimination, of any exchanges’ quote mitigation plan.<sup>65</sup>

For the foregoing reasons, the Commission does not believe that NYSE MKT has met its burden to demonstrate that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder, including that the rules of an exchange be 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.<sup>66</sup>

#### IV. Conclusion

For the reasons set forth above, the Commission does not believe that NYSE MKT has met its burden to demonstrate that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, section 6(b)(5) of the Act.

*It is therefore ordered*, pursuant to section 19(b)(2) of the Act, that the proposed rule change (SR-NYSEMKT-2014-86) be, and hereby is, disapproved.

<sup>64</sup> See Notice, *supra* note 3, at 63010.

<sup>65</sup> In reviewing the quote mitigation plans in this manner, the Commission would be able to consider the market-wide impact of any proposed modification to or elimination of an exchange’s quote mitigation practices.

<sup>66</sup> 15 U.S.C. 78f(b)(5).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>67</sup>

**Brent J. Fields,**

*Secretary.*

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## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-75192; File No. 4-668]

**Joint Industry Plan; Order Approving Amendment No. 1 to the National Market System Plan Governing the Process of Selecting a Plan Processor and Developing a Plan for the Consolidated Audit Trail by BATS Exchange, Inc., BATS-Y Exchange, Inc., BOX Options Exchange LLC, C2 Options Exchange, Incorporated, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., EDGA Exchange, Inc., EDGX Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange, LLC, ISE Gemini, LLC, Miami International Securities Exchange LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX LLC, The NASDAQ Stock Market LLC, National Stock Exchange, Inc., New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc.**

June 17, 2015.

### I. Introduction

On December 12, 2014, BATS Exchange, Inc., BATS-Y Exchange, Inc., BOX Options Exchange LLC, C2 Options Exchange, Incorporated, Chicago Board Options Exchange, Incorporated, Chicago Stock Exchange, Inc., EDGA Exchange, Inc., EDGX Exchange, Inc., Financial Industry Regulatory Authority, Inc., International Securities Exchange, LLC, ISE Gemini, LLC, Miami International Securities Exchange LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX LLC, The NASDAQ Stock Market LLC, National Stock Exchange, Inc., New York Stock Exchange LLC, NYSE MKT LLC, and NYSE Arca, Inc. (collectively, “SROs” or “Participants”) filed with the Securities and Exchange Commission (“Commission” or “SEC”) pursuant to section 11A of the Securities Exchange Act of 1934 (“Act”),<sup>1</sup> and Rule 608 thereunder,<sup>2</sup> an amendment (“Amendment No. 1”) to the National Market System (“NMS”) Plan Governing the Process of Selecting a Plan Processor and Developing a Plan

for the Consolidated Audit Trail (“Selection Plan”).<sup>3</sup> Amendment No. 1 was published for comment in the **Federal Register** on February 11, 2015.<sup>4</sup> The Commission received one comment letter<sup>5</sup> and the SROs submitted a response to that comment letter.<sup>6</sup> This order approves Amendment No. 1 to the Selection Plan.

## II. Background and Description of the Proposal

### A. Background

On July 11, 2012, the Commission adopted Rule 613 to require the SROs to jointly submit an NMS plan to create, implement, and maintain a consolidated audit trail (“CAT NMS Plan”).<sup>7</sup> In response, the SROs engaged in a request for proposal (“RFP”) process to help them develop an NMS Plan proposal and to solicit bids (“Bids”) for the role of Plan Processor<sup>8</sup> to build, operate, administer, and maintain the consolidated audit trail.<sup>9</sup> The Selection Plan, which was approved by the Commission on February 21, 2014, sets forth the process by which the Participants will review, evaluate, and narrow down the Bids, and ultimately select the Plan Processor, following Commission approval of the CAT NMS Plan.<sup>10</sup> Currently, the Participants have narrowed the universe of Bids received to a set of six “Shortlisted Bidders.” Under the Selection Plan, a Shortlisted Bidder is only eligible to revise its Bid following Commission approval of the CAT NMS Plan and approval of a majority of the Selection Committee.<sup>11</sup> Additionally, the Participants are not permitted to narrow the set of

<sup>3</sup> The Selection Plan is an NMS Plan approved by the Commission pursuant to Section 11A of the Act and Rule 608 thereunder. See Securities Exchange Act Release No. 71596 (Feb. 21, 2014), 79 FR 11152 (Feb. 27, 2014) (“Order Approving Selection Plan”); see also Securities Exchange Act Release No. 70892 (Nov. 15, 2013), 78 FR 69910 (Nov. 21, 2013) (“Notice of Selection Plan”).

<sup>4</sup> See Securities Exchange Act Release No. 74223 (Feb. 6, 2015), 80 FR 7654 (“Notice of Amendment No. 1”).

<sup>5</sup> See letter to Brent J. Fields, Secretary, Commission, from Manisha Kimmel, Managing Director, Financial Information Forum (“FIF”), dated March 13, 2015 (“FIF Letter”).

<sup>6</sup> See letter to Brent J. Fields, Secretary, Commission, from the SROs, dated March 27, 2015 (“SRO Response Letter”).

<sup>7</sup> Securities Exchange Act Release No. 67457 (July 18, 2012), 77 FR 45722 (Aug. 1, 2012).

<sup>8</sup> Unless otherwise noted, capitalized terms are used as defined in Rule 613, in the Selection Plan, or in this Order.

<sup>9</sup> See Notice of Amendment No. 1, *supra* note 4, at 7655.

<sup>10</sup> See Order Approving Selection Plan, *supra* note 3.

<sup>11</sup> See *id.* at 11154. The Selection Committee is composed of one senior officer from each SRO and is charged with evaluating the Bids and selecting the Plan Processor. *Id.* at 11153.

<sup>67</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78k-1.

<sup>2</sup> 17 CFR 242.608.

Shortlisted Bidders prior to approval of the CAT NMS Plan, but must proceed with selection of the CAT Plan Processor from among the Shortlisted Bidders in a two-round voting process.<sup>12</sup>

As described in more detail below, Amendment No. 1 would revise the Selection Plan to allow the SROs to accept revised Bids prior to Commission approval of the CAT NMS Plan and allow the SROs to narrow the list of Shortlisted Bids prior to Commission approval of the CAT NMS Plan. The SROs believe that providing the Shortlisted Bidders with an additional opportunity (or opportunities) to revise their Bids prior to the approval of the CAT NMS Plan is critical to the timely and considered selection of the CAT Plan Processor, and more importantly, the adherence to the other timelines for the CAT NMS Plan set forth in Rule 613(a).<sup>13</sup> The SROs state that since the time the Bidders submitted their Bids, the SROs have gathered and evaluated data and information from a variety of market participants, including Bidders, broker-dealers, vendors, regulators and others, and have made progress in developing an optimal solution and formalizing the solution in the proposed CAT NMS Plan and related technical documents.<sup>14</sup> Given these developments, the SROs believe that Bidders should be permitted to revise their Bids using the new information provided in the proposed CAT NMS Plan and technical documents prior to approval of the CAT NMS Plan.<sup>15</sup> The SROs also state that given the passage of time since the Bids were submitted, Bidders have indicated that new technological and other beneficial solutions are now available that may further improve the Bids, and, ultimately, the proposed solutions.<sup>16</sup>

The SROs also explain that given the large amount of information they expect will be included in any revised Bids and the importance of appropriately analyzing such information, the SROs do not believe that two months will be sufficient to select the CAT Plan Processor from as many as six Shortlisted Bidders.<sup>17</sup> However, the SROs believe that if the existing Shortlisted Bidders were able to revise their Bids, including the option to reflect any new technology or other relevant developments, the SROs could further narrow the list of Shortlisted

Bidders to better facilitate the ultimate selection of the CAT Plan Processor within the time limits imposed by Rule 613 in an appropriately thoughtful and deliberative manner.<sup>18</sup>

### B. Description of the Proposal

The SROs propose to amend the Selection Plan to permit the Shortlisted Bidders to revise their Bids one or more times prior to Commission approval of the CAT NMS Plan if the Selection Committee determines, by majority vote, subject to the applicable recusal provisions, that such revisions are necessary and appropriate.<sup>19</sup> Amendment No. 1 would not affect section VI.(D) of the Selection Plan, which states that, following approval of the CAT NMS Plan by the Commission, Shortlisted Bidders for the role of Plan Processor may be permitted to revise their Bids only upon approval by a majority of the Selection Committee, subject to certain recusal provisions in the Selection Plan.<sup>20</sup>

In Amendment No. 1, the Participants also propose to provide the Selection Committee discretion to narrow the set of Shortlisted Bids prior to Commission approval of the CAT NMS Plan. Specifically, Amendment No. 1 would authorize an additional round of voting<sup>21</sup> to narrow the number of Shortlisted Bids, currently six, down to as few as three Bids. This round of voting, which could occur either before or after any revisions to Shortlisted Bids are accepted, would commence upon at least a two-thirds vote of the Selection Committee, and would proceed in a manner similar to the initial round of voting for determining the Shortlisted Bids.<sup>22</sup> Proposed Amendment No. 1 includes a recusal provision providing that no SRO shall vote in the process narrowing the set of Shortlisted Bidders if a Bid submitted by or including the

SRO or an Affiliate of the SRO is a Shortlisted Bid.<sup>23</sup>

### III. Summary of Comment Letter and Response

As noted above, the Commission received one comment letter from FIF. FIF, on behalf of its Consolidated Audit Trail Working Group, supports Amendment No. 1 but offers two recommendations.<sup>24</sup> First, FIF recommends, in the interest of efficiency, that the Participants narrow the list of Bidders before any revision of Bids takes place. FIF believes that in view of the substantial efforts already undertaken by the Participants, there should be sufficient information for the Participants to take action and narrow the list of Bidders. FIF argues that it is unnecessary to require all six of the current Shortlisted Bidders to revise their Bids. Further, FIF argues that narrowing the list of Bidders prior to permitting the revision of Bids would reduce the amount of effort the SROs would need to expend in reviewing the revised Bids.

Second, FIF recommends that once the Participants further narrow the list of Shortlisted Bidders, each of the remaining Bidders should receive detailed information on Order Audit Trail System (“OATS”), electronic blue sheets (“EBS”), and Large Trader so that Bidders can consider all of the required functionality to retire these systems in preparing their revised Bids. FIF notes that the retirement of these systems is critical to managing the cost of CAT’s implementation, and additional information concerning the functionality required to retire these systems would aid in revising Bids. FIF believes that understanding the precise functional requirements for retiring OATS is critical and imperative for a level playing field among Bidders.

The SROs considered FIF’s recommendations, but declined to propose modifications to the Amendment.<sup>25</sup> With regard to FIF’s suggestion that the SROs narrow the list of Bidders before allowing any revisions to the Bids, the SROs state that one of the main purposes of the Amendment is to provide greater flexibility to the SROs to narrow the list of Bidders.<sup>26</sup> The SROs, however, note that they recognize the value of a streamlined process for all

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at 7655, 57.

<sup>14</sup> See Order Approving Selection Plan, *supra* note 3, at 11154.

<sup>15</sup> This additional narrowing round would occur prior to the two-round voting process for selection of the CAT Plan Processor under Section VI.(E) of the Selection Plan. See *id.*

<sup>16</sup> See Notice of Amendment No. 1, *supra* note 4, at 7655, 57. In voting to narrow the list of Shortlisted Bids, the voting representative from each SRO would choose a first, second, and third choice of Shortlisted Bid, with each choice receiving a weight of, respectively, three points, two points, and one point. The three Bids receiving the highest cumulative number of points would constitute the new set of Shortlisted Bids. The Amendment also provides for a tie-breaking process, which could result in more than three Shortlisted Bids continuing in the process for selection of the CAT Plan Processor.

<sup>17</sup> See *id.* The SROs have also submitted, and the Commission is currently considering, a second proposed amendment to the Selection Plan extending this recusal requirement to all selection voting rounds. See Securities Exchange Act Release No. 75193 (June 17, 2015).

<sup>18</sup> See FIF Letter, *supra* note 5.

<sup>19</sup> See SRO Response Letter, *supra* note 6, at 3.

<sup>20</sup> *Id.* at 2.

<sup>12</sup> See *id.* at 11154.

<sup>13</sup> See Notice of Amendment No. 1, *supra* note 4, at 7655.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

parties and intend to consider this factor, among others, in determining when to narrow the list of Shortlisted Bidders.<sup>27</sup>

The SROs concur with FIF in the significance of retiring overlapping and redundant systems, but do not see this as linked to the proposed amendment to the Selection Plan. The SROs reiterate their commitment to the retirement of systems as provided in the CAT NMS Plan,<sup>28</sup> noting that the Plan describes the major data attributes that will be required to retire such systems. Going forward, as additional technical specifications are developed in accordance with milestones included in the CAT NMS Plan, the SROs will provide this information to Bidders.

#### IV. Discussion

After careful review of Amendment No. 1, the comment received, and the SROs' response, the Commission finds that Amendment No. 1 is necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, and to remove impediments to, and perfect the mechanisms of, a national market system. The Commission believes Amendment No. 1 would provide the SROs with additional flexibility with respect to the process of reviewing Shortlisted Bids and selecting the CAT Plan Processor. Such additional flexibility is aimed at allowing the SROs to be more efficient in selecting the CAT Plan Processor, which is particularly important given additional deadlines contained in Rule 613(a)(3).<sup>29</sup> The Commission believes that the SROs' explanation that they prefer to retain flexibility in the process to select the Plan Processor, without any additional conditions or restrictions, in response to FIF's suggestion that they narrow the list of Bidders before allowing Bidders to revise their Bids, is

<sup>27</sup> *Id.*

<sup>28</sup> Rule 613(a)(viii) requires "a plan to eliminate existing audit trail rules and systems (or components thereof) that will be rendered duplicative by the consolidated audit trail, including identification of such audit trail rules and systems (or components thereof); to the extent that any existing audit trail rules or systems provide information that is not rendered duplicative by the consolidated audit trail, an analysis of whether collection of such information continues to be appropriate and, if so, whether such information could instead be incorporated into the consolidated audit trail; the steps the plan sponsors propose to take to seek Commission approval for the elimination of such audit trail rules and systems (or components thereof); and a timetable for such elimination, including a description of how the plan sponsors propose to phase in the consolidated audit trail and phase out such existing audit trail rules and systems (or components thereof).]" 17 CFR 242.613(a)(viii).

<sup>29</sup> 17 CFR 242.613(a)(3).

reasonable. Permitting the SROs to accept revised Bids prior to Commission approval of the CAT NMS Plan, and to narrow the number of Shortlisted Bids prior to Commission approval of the CAT NMS Plan,<sup>30</sup> will allow the SROs to position themselves to avoid any delays in selecting the CAT Plan Processor,<sup>31</sup> thus removing any impediments to meeting the additional deadlines set forth in Rule 613(a)(3).<sup>32</sup>

Regarding FIF's recommendation that, prior to any Bid revisions, the SROs provide Bidders with detailed functional requirements concerning OATS, EBS, and Large Trader to facilitate retirement of those systems, the Commission notes that the SROs' Response Letter outlines the steps taken to date by the SROs to furnish pertinent information to assist in eliminating redundant systems and contains commitments to supplement that material in the future as outlined in the CAT NMS Plan.

#### IV. Conclusion

For the reasons discussed above, the Commission finds that Amendment No. 1 is necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, and to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the Act.

*It is therefore ordered*, pursuant to section 11A of the Act,<sup>33</sup> and the rules thereunder, that Amendment No. 1 to the Selection Plan be, and it hereby is, approved.

By the Commission.

**Brent J. Fields,**

*Secretary.*

[FR Doc. 2015-15365 Filed 6-22-15; 8:45 am]

**BILLING CODE 8011-01-P**

<sup>30</sup> See Notice of Amendment No. 1, *supra* note 4, at 7655, 57.

<sup>31</sup> Rule 613(a)(3)(i) requires the Participants to select the CAT Plan Processor within two months after effectiveness of the CAT NMS Plan. 17 CFR 242.613(a)(3)(i).

<sup>32</sup> See, e.g., Rule 613(a)(3)(iii), which requires Participants to begin providing data to the central repository within one year after effectiveness of the CAT NMS Plan.

<sup>33</sup> 15 U.S.C. 78k-1.

## SECURITIES AND EXCHANGE COMMISSION

[Extension: Form N-5; OMB Control No. 3235-0169, SEC File No. 270-172]

### Submission for OMB Review; Comment Request

*Upon Written Request, Copy Available From:* Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549-2736.

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (the "Commission") has submitted to the Office of Management and Budget ("OMB") a request for extension of the previously approved collection of information discussed below.

Form N-5 (17 CFR 239.24 and 274.5) is the form used by small business investment companies ("SBICs") to register their securities under the Securities Act of 1933 (15 U.S.C. 77a *et seq.*) ("Securities Act") and the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*) ("Investment Company Act"). Form N-5 is the registration statement form adopted by the Commission for use by an SBIC that has been licensed as such under the Small Business Investment Act of 1958 or which has received the preliminary approval of the Small Business Administration ("SBA") and has been notified by the SBA that the company may submit a license application Form N-5 is an integrated registration form and may be used as the registration statement under both the Securities Act and the Investment Company Act. The purpose of Form N-5 is to meet the filing and disclosure requirements of both the Securities Act and Investment Company Act, and to provide investors with information sufficient to evaluate an investment in an SBIC. The information that is required to be filed with the Commission permits verification of compliance with securities law requirements and assures the public availability and dissemination of the information.

The Commission has received one filing on Form N-5 in the last three years, and we therefore estimate that SBICs will file about 0.333 filings on Form N-5 per year. The currently approved burden of Form N-5 is 352 hours per response. Therefore, the number of currently approved aggregate burden hours, when calculated using the current estimate for number of filings is about 117 hours per year. The currently approved cost burden of Form

N-5 is \$30,000 per filing. We continue to believe this estimate for Form N-5's cost burden is appropriate. Therefore, we estimate that the aggregate cost burden, when calculated using the Commission's estimate of 0.333 filings per year, is about \$10,000 in external costs per year.

Estimates of average burden hours and costs are made solely for the purposes of the Paperwork Reduction Act, and are not derived from a comprehensive or even representative survey or study of the costs of Commission rules and forms. Compliance with the collection of information requirements of Form N-5 is mandatory. Responses to the collection of information will not be kept confidential. 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 OMB control number.

The public may view the background documentation for this information collection at the following Web site, [www.reginfo.gov](http://www.reginfo.gov). Comments should be directed to: (i) Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10102, New Executive Office Building, Washington, DC 20503, or by sending an email to: [Shagufta Ahmed@omb.eop.gov](mailto:ShaguftaAhmed@omb.eop.gov); and (ii) Pamela Dyson, Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549 or send an email to: [PRA\\_Mailbox@sec.gov](mailto:PRA_Mailbox@sec.gov). Comments must be submitted to OMB within 30 days of this notice.

Dated: June 18, 2015.

**Brent Fields,**  
*Secretary.*

[FR Doc. 2015-15379 Filed 6-22-15; 8:45 am]  
BILLING CODE 8011-01-P

**SMALL BUSINESS ADMINISTRATION**

[License No. 03/03-0264]

**Boathouse Capital II, L.P.; Notice Seeking Exemption Under Section 312 of the Small Business Investment Act, Conflicts of Interest**

Notice is hereby given that Boathouse Capital II, L.P., 200 West Lancaster

Avenue, Suite 206, Wayne, PA 19087, Federal Licensees under the Small Business Investment Act of 1958, as amended ("the Act"), in connection with the financing of a small concern, has sought an exemption under section 312 of the Act and section 107.730, Financings which Constitute Conflicts of Interest of the Small Business Administration ("SBA") Rules and Regulations (13 CFR 107.730). Boathouse Capital II, L.P. provided financing to AvidXchange, Inc., 4421 Stuart Andrew Boulevard, Suite 200, Charlotte, NC 28217. The financing was contemplated for the acquisition of Strongroom Solutions, Inc. and working capital purposes.

The financing is brought within the purview of § 107.730(a)(1) of the Regulations because Boathouse Capital, L.P., an Associate of Boathouse Capital II, L.P., has the potential to own more than ten percent of AvidXchange. Therefore, this transaction is considered a financing of an Associate requiring an exemption.

Notice is hereby given that any interested person may submit written comments on the transaction within fifteen days of the date of this publication to the Acting Associate Administrator for Investment, U.S. Small Business Administration, 409 Third Street SW., Washington, DC 20416.

**Javier Saade,**  
*Associate Administrator, Office of Investment & Innovation.*

[FR Doc. 2015-15349 Filed 6-22-15; 8:45 am]

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**SOCIAL SECURITY ADMINISTRATION**

[Docket No: SSA-2015-0035]

**Agency Information Collection Activities: Proposed Request and Comment Request**

The Social Security Administration (SSA) publishes a list of information collection packages requiring clearance by the Office of Management and Budget (OMB) in compliance with Public Law 104-13, the Paperwork Reduction Act of 1995, effective October 1, 1995. This notice includes revisions and extensions of OMB-approved information collections.

SSA is soliciting comments on the accuracy of the agency's burden estimate; the need for the information; its practical utility; ways to enhance its quality, utility, and clarity; and ways to minimize burden on respondents, including the use of automated collection techniques or other forms of information technology. Mail, email, or fax your comments and recommendations on the information collection(s) to the OMB Desk Officer and SSA Reports Clearance Officer at the following addresses or fax numbers.

(OMB); Office of Management and Budget, Attn: Desk Officer for SSA, Fax: 202-395-6974, Email address: [OIRA\\_Submission@omb.eop.gov](mailto:OIRA_Submission@omb.eop.gov). (SSA); Social Security Administration, OLCA, Attn: Reports Clearance Director, 3100 West High Rise, 6401 Security Blvd., Baltimore, MD 21235, Fax: 410-966-2830, Email address: [OR.Reports.Clearance@ssa.gov](mailto:OR.Reports.Clearance@ssa.gov).

Or you may submit your comments online through [www.regulations.gov](http://www.regulations.gov), referencing Docket ID Number [SSA-2015-0035].

I. The information collections below are pending at SSA. SSA will submit them to OMB within 60 days from the date of this notice. To be sure we consider your comments, we must receive them no later than August 24, 2015. Individuals can obtain copies of the collection instruments by writing to the above email address.

1. Physician's/Medical Officer's Statement of Patient's Capability to Manage Benefits—20 CFR 404.2015 and 416.615—0960-0024. SSA appoints a representative payee in cases where we determine beneficiaries are not capable of managing their own benefits. In those instances, we require medical evidence to determine the beneficiaries' capability of managing or directing their benefit payments. SSA collects medical evidence on Form SSA-787 to (1) determine beneficiaries' capability or inability to handle their own benefits, and (2) assist in determining the beneficiaries' need for a representative payee. The respondents are beneficiaries' physicians, or medical officers of the institution in which the beneficiary resides.

Type of Request: Revision of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
SSA-787 .....	120,000	1	10	20,000

2. State Supplementation Provisions: Agreement; Payments—20 CFR 416.2095–416.2098, 20 CFR 416.2099–0960–0240. Section 1618 of the Social Security Act (Act) requires those states administering their own supplementary income payment program(s) to demonstrate compliance with the Act by passing Federal cost-of-living increases on to individuals who are eligible for state supplementary payments, and informing SSA of their compliance. In

general, states report their supplementary payment information annually by the maintenance-of-payment levels method. However, SSA may ask them to report up to four times in a year by the total-expenditures method. Regardless of the method, the states confirm their compliance with the requirements, and provide any changes to their optional supplementary payment rates. SSA uses the information to determine each state’s

compliance or noncompliance with the pass-along requirements of the Act to determine eligibility for Medicaid reimbursement. If a state fails to keep payments at the required level, it becomes ineligible for Medicaid reimbursement under Title XIX of the Act. Respondents are state agencies administering supplemental programs.

Type of Request: Extension of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
Total Expenditures .....	7	4	60	28
Maintenance of Payment Levels .....	26	1	60	26
<b>Total .....</b>	<b>33</b>	<b>.....</b>	<b>.....</b>	<b>54</b>

3. Surveys in Accordance with E.O. 12862 for the Social Security Administration—0960–0526. Under the auspices of E. O. 12862, Setting Customer Service Standards, SSA conducts multiple customer satisfaction surveys each year. These voluntary customer satisfaction assessments

include paper, Internet, and telephone surveys; mailed questionnaires; and customer comment cards. The purpose of these questionnaires is to assess customer satisfaction with the timeliness, appropriateness, access, and overall quality of existing SSA services and proposed modifications or new

versions of services. The respondents are recipients of SSA services (including most members of the public), professionals, and individuals who work on behalf of SSA beneficiaries.

Type of Request: Extension of an OMB-approved information collection.

	Number of respondents (burden for all activities within that year)	Frequency of response	Range of response times (minutes)	Burden (burden for all activities within that year; reported in hours)
Year 1 .....	7,094,640	1	3–30	1,173,904
Year 2 .....	7,100,140	1	3–30	1,174,904
Year 3 .....	7,105,640	1	3–30	1,176,004
<b>Totals .....</b>	<b>21,300,420</b>	<b>–</b>	<b>–</b>	<b>5,722,003</b>

1. Application for Circuit Court Law—20 CFR 404.985 & 416.1458—0960–0581. Persons claiming an acquiescence ruling (AR) would change SSA’s prior determination or decision must submit a written readjudication request with specific information. SSA reviews the information in the request to determine if the issues stated in the AR pertain to

the claimant’s case, and if the claimant is entitled to readjudication. If readjudication is appropriate, SSA considers the issues the AR covers. Any new determination or decision is subject to administrative or judicial review as specified in the regulations. This information collection request (ICR) is for the information claimants must

provide to request readjudication. Respondents are claimants for Social Security benefits and Supplemental Security Income (SSI) payments who request readjudication.

Type of Request: Extension of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
AR-based Readjudication Requests .....	10,000	1	17	2,833

2. The Ticket to Work and Self-Sufficiency Program—20 CFR 411–0960–0644. SSA’s Ticket to Work (TTW) Program transitions Social Security Disability Insurance and SSI recipients

toward independence by allowing them to receive Social Security payments while maintaining employment under the auspices of the program. SSA uses service providers, called employment

networks (ENs), to supervise participant progress through the stages of TTW Program participation, such as job searches and interviews, progress reviews, and changes in ticket status.



ENs can be private for-profit and nonprofit organizations, as well as state vocational rehabilitation agencies (VRs). SSA and the ENs utilize the TTW program manager to operate the TTW Program and exchange information about participants. For example, the ENs use the program manager to provide updates on tasks such as selecting a payment system or requesting payments

for helping the beneficiary achieve certain work goals. Since the ENs are not PRA-exempt, the multiple information collections within the TTW program manager require OMB approval, and we clear them under this ICR. Most of the categories of information in this ICR are necessary for SSA to: (1) comply with the Ticket to Work legislation; and (2) provide proper

oversight of the program. SSA collects this information through several modalities, including forms, electronic exchanges, and written documentation. The respondents are the ENs or state VRs, as well as SSDI beneficiaries and blind or disabled SSI recipients working under the auspices of the TTW Program.

Type of Request: Revision of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
a) 20 CFR 411.140(d)(2)—Interactive Voice Recognition Telephone .....	6,428	1	2.5	268
a) 20 CFR 411.140(d)(2)—Portal .....	25,713	1	1.25	536
a) 20 CFR 411.140(d)(3); 411.325(a); 411.150(b)(3)—SSA-1365 .....	948	1	15	237
a) 20 CFR 411.140(d)(3); 411.325(a); 411.150(b)(3)—SSA-1365 Portal .....	3,792	1	11	695
a) 20 CFR 411.140(d)(3); 411.325(a); 411.150(b)(3)—SSA-1370 .....	1,956	1	60	1,956
a) 20 CFR 411.140(d)(3); 411.325(a); 411.150(b)(3)—SSA-1370 Portal .....	5,868	1	10	978
a) 20 CFR 411.166; 411.170(b)—Electronic File Submission .....	40,324	1	5	3,360
b) 20 CFR 411.145; 411.325 .....	2,494	1	15	624
b) 20 CFR 411.145; 411.325—Portal .....	7,481	1	11	1,372
b) 20 CFR 411.535(a)(1)(iii)—Data Sharing/Portal .....	8,505	1	5	709
c) 20 CFR 411.192(b)&(c) .....	6	1	30	3
c) 20 CFR 411.200(b)—SSA-1375 .....	112,362	1	15	28,091
c) 20 CFR 411.200(b)—Portal .....	64,824	1	5	5,402
c) 20 CFR 411.210(b) .....	41	1	30	21
c) 20 CFR 411.200(b) Wise Webinar Registration Page .....	24,000	1	3	1,200
c) 20 CFR 411.200(b) Virtual Job Fair Registration .....	9,500	1	10	1,583
d) 20 CFR 411.365; 411.505; 411.515 .....	6	1	10	1
e) 20 CFR 411.325(d); 411.415 .....	1	1	480	8
f) 20 CFR 411.575—SSA-1389; SSA-1391; SSA-1393; SSA-1396; SSA-1398; SSA-1399 .....	2,805	1	40	1,870
f) 20 CFR 411.575—Portal .....	42,075	1	22	15,428
f) 20 CFR 411.575—Automatic Payments .....	11,220	1	0	0
f) 20 CFR 411.560—SSA-1401 .....	100	1	20	33
g) 20 CFR 411.325(f) .....	1,371	1	45	1,028
h) 20 CFR 411.435; 411.615; 411.625 .....	2	1	120	4
i) 20 CFR 411.320—SSA-1394 .....	52	1	10	9
i) 20 CFR 411.320—SSA-1394 Portal .....	158	1	5	13
Totals .....	372,032	.....	.....	65,429

II. SSA submitted the information collections below to OMB for clearance. Your comments regarding the information collections would be most useful if OMB and SSA receive them 30 days from the date of this publication. To be sure we consider your comments, we must receive them no later than July 23, 2015. Individuals can obtain copies of the OMB clearance packages by writing to [OR.Reports.Clearance@ssa.gov](mailto:OR.Reports.Clearance@ssa.gov).

1. Statement of Claimant or Other Person—20 CFR 404.702 & 416.570—

0960-0045. SSA uses Form SSA-795 in special situations where there is no authorized form or questionnaire, yet we require a signed statement from the applicant, claimant, or other persons who have knowledge of facts, in connection with claims for Social Security benefits or SSI. The information we request on the SSA-795 is of sufficient importance that we need both a signed statement and a penalty clause. SSA uses this information to process, in addition to claims for benefits, issues about continuing

eligibility; ongoing benefit amounts; use of funds by a representative payee; fraud investigation; and a myriad of other program-related matters. The most typical respondents are applicants for Social Security, SSI, or recipients of these programs. However, respondents also include friends and relatives of the involved parties, coworkers, neighbors, or anyone else in a position to provide information pertinent to the issue(s).

Type of Request: Revision of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
SSA-795 .....	305,500	1	15	76,375

2. Disability Report—Adult—20 CFR 404.1512 and 416.912—0960-0579.

State Disability Determination Services (DDS) use the SSA-3368 and its

electronic versions to determine if adult disability applicants' impairments are

severe and, if so, how the impairments affect the applicants' ability to work. This determination dictates whether the DDSs and SSA will find the applicant

to be disabled and entitled to SSI payments. The respondents are applicants for Title II disability benefits or Title XVI SSI payments.

Type of Request: Revision of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
SSA-3368 (Paper form)	7,571	1	90	11,357
Electronic Disability Collection System (EDCS)	2,484,231	1	90	3,726,346
i3368 (Internet)	1,060,360	1	90	1,590,540
<b>Totals</b>	<b>3,552,162</b>			<b>5,328,243</b>

3. Request for Internet Services—Authentication; Automated Telephone Speech Technology—Knowledge-Based Authentication (RISA-KBA)—20 CFR 401.45—0960-0596. The Request for Internet Services and 800# Automated Telephone Services (RISA) Knowledge-Based Authentication (KBA) is one of the authentication methods SSA uses to allow individuals access to their personal information through our Internet and Automated Telephone Services. SSA asks individuals and

third parties who seek personal information from SSA records, or who register to participate in SSA's online business services, to provide certain identifying information. As an extra measure of protection, SSA asks requestors who use the Internet and telephone services to provide additional identifying information unique to those individuals so SSA can authenticate their identities before releasing personal information. The respondents are current beneficiaries who are requesting

personal information from SSA, and individuals and third parties who are registering for SSA's online business services.

This is a correction notice. SSA published this information collection as a revision on April 9, 2015 at 80 FR 19102. Since we are not revising the Privacy Act Statement, this is now an extension of an OMB-approved information collection.

Type of Request: Extension of an OMB-approved information collection.

Modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
Internet Requestors	10,373,917	1	2.5	432,247
Telephone Requestors	1,703,367	1	4	113,558
* Change of Address (on hold)	1			1
<b>Totals</b>	<b>12,077,286</b>			<b>545,806</b>

\* Reducing the burden to a one-hour placeholder burden; Screen Splash and Change of Address applications are on hold.

4. Application for Special Benefits for World War II Veterans—20 CFR 408, Subparts B, C, and D—0960-0615. Title VIII of the Act (Special Benefits for Certain World War II Veterans) allows qualified World War II veterans residing outside the United States to receive

monthly payments. These regulations establish the requirements individuals need to qualify for and become entitled to Special Veterans Benefits (SVB). SSA uses Form SSA-2000-F6 to elicit the information we need to determine entitlement to SVB. This ICR comprises

the relevant regulations and Form SSA-2006-F6. The respondents are individuals applying for SVB under Title VIII of the Act.

Type of Request: Revision of an OMB-approved information collection.

Regulations section and modality of completion	Number of respondents	Frequency of response	Average burden per response (minutes)	Total estimated annual burden (hours)
SSA-7	50	1	20	17
§ 408.420 (a), (b)	35	1	15	9
§§ 408.430 & .432	33	1	30	17
§ 408.435 (a), (b), (c)	35	1	15	9
<b>Totals</b>	<b>153</b>			<b>52</b>

5. Representative Payment Policies Regulation—20 CFR 404.2011(a)(1), 404.2025, 416.611(a)(1), 416.625—0960-0679. Per 20 CFR 404.2011 and 20 CFR 416.611 of the Code of Federal

Regulations, if SSA determines it may cause substantial harm for Title II or Title XVI recipients to receive their payments directly, recipients may dispute that decision. To do so,

recipients provide SSA with information the agency uses to reevaluate its determination. In addition, our regulations state that after SSA selects a representative payee to

receive benefits on a recipient's behalf, the payees provide SSA with information on their continuing relationship and responsibility for the recipients, and explain how they use the

recipients' payments. Sections 20 CFR 404.2025 and 20 CFR 416.625 of the Code of Federal Regulations provide a process to follow up with the representative payee to verify payee

performance. The respondents are Title II and Title XVI recipients, and their representative payees.

Type of Request: Extension of an OMB-approved information collection.

CFR citation	Number of respondents	Frequency of response	Average burden per response (minutes)	Estimated total annual burden (hours)
404.2011(a)(1); .....	250	1	15	63
416.611(a)(1) .....				
404.2025; .....	3,000	1	6	300
416.625 .....				
Totals .....	3,250	.....	.....	363

Faye I. Lipsky,

Reports Clearance Officer, Social Security Administration.

[FR Doc. 2015-15380 Filed 6-22-15; 8:45 am]

BILLING CODE 4191-02-P

**TENNESSEE VALLEY AUTHORITY**

**Renewal of the Regional Energy Resource Council Charter**

AGENCY: Tennessee Valley Authority (TVA).

ACTION: Notice of Charter Renewal.

SUMMARY: Pursuant to the Federal Advisory Committee Act (FACA) (5 U.S.C. Appendix), the TVA Board of Directors has renewed the Regional Energy Resource Council (Council) charter for an additional two-year period beginning on August 1, 2015.

FOR FURTHER INFORMATION CONTACT: Beth A. Keel, 400 West Summit Hill Drive, WT 9D-K, Knoxville, Tennessee 37902-1499, (865) 632-6113.

SUPPLEMENTARY INFORMATION: Pursuant to FACA and its implementing regulations, and following consultation with the Committee Management Secretariat, General Services Administration (GSA), notice is hereby given that the Council has been renewed for a two-year period beginning August 1, 2015. The Council will provide advice to TVA on its energy related resource activities and the priorities among competing objectives and values. The Council was originally

established in 2013 to advise TVA on its energy related resource activities which include the construction and operation of various supply-side resources, including fossil-fueled power plants, nuclear plants, hydroelectric dams, and renewable resources; the development and management of demand-side resources, including energy efficiency; the design, construction and operation of power delivery systems; and the

integration of all of these energy resources into plans for meeting future demands for electricity in the TVA region.

It has been determined that the Council continues to be needed to provide an additional mechanism for public input regarding energy-related issues.

Dated: June 15, 2015.

Joseph J. Hoagland,

Vice President, Stakeholder Relations, Tennessee Valley Authority.

[FR Doc. 2015-15422 Filed 6-22-15; 8:45 am]

BILLING CODE 8120-08-P

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**Policy for Discontinuance of World Aeronautical Chart Series**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of policy to discontinue the World Aeronautical Chart.

SUMMARY: This notice announces the FAA's decision to discontinue providing the World Aeronautical Chart series. Technological advances in aviation navigation capabilities and charting products have made the World Aeronautical Chart series largely obsolete. Charting customers have shifted towards digital chart products. The World Aeronautical Charts are a derivative product from our more detailed Sectional Aeronautical Chart series. With aviators using the more detailed large scale Sectional Aeronautical Charts and often the digital versions in the moving map technology found in modern electronic flight bag system, the World Aeronautical Charts are no longer needed. The discontinuance of this low-demand product allows the FAA to apply those resources to continue to

modernize charting for safe and efficient navigation.

DATES: June 23, 2015.

FOR FURTHER INFORMATION CONTACT: For questions or comments concerning this action, contact Mr. Eric Freed, Aeronautical Information Services, Enroute and Visual Charting Group, Manager, Air Traffic Organization, AJV-5200, Federal Aviation Administration, 1305 East-West HWY, Silver Spring, MD 20910; telephone (301) 427-5080, email eric.freed@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Authority**

Title 49 of the United States Code, section 44721, authorizes the FAA to arrange for the publication of aeronautical maps and charts necessary for the safe and efficient movement of aircraft in air navigation. Specifically, paragraphs (d)(2) and (3) of this section provide that that the Administrator may “. . . (2) compile, print, and disseminate aeronautical charts and related products and services of the United States and its territories and possessions; (3) compile, print, and disseminate aeronautical charts and related products and services covering international airspace as required primarily by United States civil aviation . . .” (See 49 U.S.C. 44721(d)(2) and (3).)

**Background**

The FAA is continuing to expand the availability and capability of modern aeronautical navigation products. At the same time, we must rigorously analyze our suite of products and determine the feasibility and practicability of providing products that are no longer in demand from the public or have become obsolete due to technological advances. Since 2007, unit sales of the World Aeronautical Charts are down 73 percent. (Sales are down 10% year over year 2013/2014.) The cost to develop

this product is independent of the sales. The cost of resources drives a steady and consistent rise in costs associated with the production of the World Aeronautical Chart to the FAA.

The National Geospatial-Intelligence Agency has stopped purchasing the World Aeronautical Chart products for distribution to the military and has advised that electronic flight bag moving map technology and reliance on the larger scale Sectional Aeronautical Chart series have made the World Aeronautical Chart products obsolete for its purposes. General aviation similarly has embraced the readily available and affordable electronic flight bag technology and flight planning applications.

The FAA has obligations to meet International Civil Aviation Organization requirements for the availability of visual air navigation charts. (See Annex 4 to the Convention on International Civil Aviation.) This availability can be met when operational or chart production considerations indicate that operational requirements can be effectively satisfied by Aeronautical Charts at the 1:500,000 scale.

The FAA concludes that maintenance of both VFR series charts (the World Aeronautical Charts at a scale of 1:1,000,000 and the Sectional Aeronautical Charts at a scale of 1:500,000) is unsustainable. As a derivative product, the World Aeronautical Chart does not contain the full aeronautical and base information available to users of the Sectional Aeronautical Charts.

The FAA presented, *Discontinuation of World Aeronautical Charts (WAC) an Initial Discussion*, to attendees of the Aeronautical Charting Forum meeting on May 1, 2014 and to the Air Traffic Procedures Advisory Committee meeting on May 7, 2014. Both of these public forums are attended by a broad segment of the industry and flying public (the military, airlines, airline pilots, air traffic control personnel, general aviation pilots and business pilots, and their representatives) interested in charting specifications, the overall organizational structure, and the management approach of the FAA with respect to charting issues. Initial industry reactions naturally reflected a defense of their niche segments utilization of the WAC product. No substantive support was found to sustain production.

Therefore, the FAA has determined to discontinue the World Aeronautical Chart series.

While no explicit obligation exists for the United States to chart international

areas encompassing sovereign nations in the Caribbean, we recognize that limited independent charting may be available. As a courtesy to those sovereign nations in the Caribbean, the three U.S. WAC charts with Caribbean coverage (CH-25, CJ-26, and CJ-27) will be maintained, marginally longer than other U.S. WAC charts, until the last scheduled edition printing per the Dates of Latest Editions. All other U.S. WAC charts will end upon their last printing previously scheduled in FY 15.

#### Policy

Based on the foregoing, the FAA will discontinue the compilation, printing, and dissemination of the World Aeronautical Chart series and we will continue to maintain the compliment of other comprehensive visual aeronautical charts. Charts: CC-8, CC-9; CD-10, CD-11, CD-12; CE-12, CE-13, CE-15; CF-16, CF-17, CF-18, CF-19; CG-18, CG-19, CG-20, CG-21; CH-22, CH-23, and CH-24 will cease to be printed beyond September 17, 2015. Charts: CH-25; CJ-26, and CJ-27 production will end upon their next scheduled printing dates of December 10, 2015; February 04, 2016, and March 31, 2016 respectively. (See the Dates of Latest Edition).

**Abigail Smith,**

*Director, Aeronautical Navigation Products.*

[FR Doc. 2015-15271 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

[Docket No. FHWA-2015-0014]

#### Agency Information Collection Activities; Request for Comments for a New Information Collection

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice and request for comments.

**SUMMARY:** The FHWA invites public comments about our intention to request the Office of Management and Budget's (OMB) approval for a new information collection, which is summarized below under **SUPPLEMENTARY INFORMATION**. We are required to publish this notice in the **Federal Register** by the Paperwork Reduction Act of 1995.

**DATES:** Please submit comments by August 24, 2015.

**ADDRESSES:** You may submit comments identified by DOT Docket ID 2015-0014 by any of the following methods:

*Web site:* For access to the docket to read background documents or

comments received go to the Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.

*Fax:* 1-202-493-2251.

*Mail:* Docket Management Facility, U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590-0001.

*Hand Delivery or Courier:* U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

#### FOR FURTHER INFORMATION CONTACT:

Mary Jane Daluge, 202-366-2035, [Maryjane.Daluge@dot.gov](mailto:Maryjane.Daluge@dot.gov); Office of Real Estate Services, Federal Highway Administration, Department of Transportation, New Jersey Avenue SE., Washington, DC 20590-0001. Office hours are from 7:45 a.m. to 4:15 p.m., Monday through Friday, except Federal holidays.

#### SUPPLEMENTARY INFORMATION:

*Title:* Fixed Residential Moving Cost Schedule

*OMB Control #:* 2125-0616.

*Background:* Relocation assistance payments to owners and tenants who move personal property for a Federal or federally-assisted program or project is governed by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). 49 Code of Federal Regulations (CFR), part 24, is the implementing regulation for the Uniform Act. 49 CFR 24.301 addresses payments for actual and reasonable moving and related expenses. The fixed residential moving cost schedule is an administrative alternative to reimbursement of actual moving costs. This option provides flexibility for the agency and affected property owners and tenants. The FHWA requests the State Departments of Transportation (State DOTs) to analyze moving cost data periodically to assure that the fixed residential moving cost schedules accurately reflect reasonable moving and related expenses. The regulation allows State DOTs flexibility in determining how to collect the cost data in order to reduce the burden of government regulation. Updated State fixed residential moving costs are submitted to the FHWA electronically.

*Respondents:* State Departments of Transportation (52, including the District of Columbia and Puerto Rico).

*Frequency:* Once every 3 years.

*Estimated Average Burden per Response:* 24 hours per respondent.

*Estimated Total Annual Burden Hours:* 24 hours for each of the 52 State Departments of Transportation. The total is 1,248 burden hours, once every 3 years, or 416 hours annually.

*Public Comments Invited:* You are asked to comment on any aspect of this information collection, including: (1) Whether the proposed collection is necessary for the FHWA's performance; (2) the accuracy of the estimated burdens; (3) ways for the FHWA to enhance the quality, usefulness, and clarity of the collected information; and (4) ways that the burden could be minimized, including the use of electronic technology, without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

**Authority:** The Paperwork Reduction Act of 1995; 44 U.S.C. chapter 35, as amended; and 49 CFR 1.48.

Issued On: June 17, 2015.

**Michael Howell,**

*Information Collection Officer.*

[FR Doc. 2015-15369 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-22-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

#### Notice of Final Federal Agency Actions on Proposed Highways in Colorado

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of Limitation on Claims for Judicial Review of Actions by FHWA and Other Federal Agencies.

**SUMMARY:** This notice announces actions taken by the FHWA and other Federal agencies that are final within the meaning of 23 U.S.C. 139(l)(1). The actions relate to the State Highway 82, Grand Avenue Bridge project located in Glenwood Springs, Colorado. Those actions grant approvals for the project.

**DATES:** By this notice, the FHWA is advising the public of final agency actions subject to 23 U.S.C. 139(l)(1). A claim seeking judicial review of the Federal agency actions on the highway project will be barred unless the claim is filed on or before November 20, 2015. If the Federal law that authorizes judicial review of a claim provides a time period of less than 150 days for filing such claim, then that shorter time period still applies.

**FOR FURTHER INFORMATION CONTACT:** Stephanie Gibson, Environmental Program Manager, Federal Highway Administration Colorado Division,

12300 W. Dakota Avenue, Lakewood, Colorado 80228, 720-963-3013, [Stephanie.gibson@dot.gov](mailto:Stephanie.gibson@dot.gov) normal business hours are 8:30 a.m. to 5:00 p.m. (Mountain time); or Vanessa Henderson, NEPA Program Manager, Colorado Department of Transportation, 4201 E. Arkansas Avenue, Shumate Building, Denver, Colorado 80222, 303-757-9878, [vanessa.henderson@state.co.us](mailto:vanessa.henderson@state.co.us), normal business hours are 7:00 a.m. to 4:30 p.m. (Mountain time).

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the FHWA and other Federal agencies have taken final agency actions by issuing approvals for the following highway project in the State of Colorado: State Highway 82, Grand Avenue Bridge. Project Overview: The project involves the replacement and minor realignment of the existing Grand Avenue Bridge and adjacent pedestrian bridge over the Colorado River. The purpose of the project is to provide a safe, secure, and effective multimodal connection from downtown Glenwood Springs across the Colorado River and I-70 to the historic Glenwood Hot Springs area that will address the functional and structural deficiencies of the old bridges. The actions by the Federal agencies on the project, and the laws under which such actions were taken, are described in the Environmental Assessment (EA) signed on October 20, 2014, in the Finding of No Significant Impact (FONSI) signed June 2, 2015 and in other key project documents. The EA, FONSI and other key documents for the project are available by contacting the FHWA or the Colorado Department of Transportation at the addresses provided above. The EA and FONSI documents can be viewed and downloaded from the project Web sites at [www.codot.gov/projects/sh82grandavenuebridge](http://www.codot.gov/projects/sh82grandavenuebridge).

This notice applies to all Federal agency decisions, actions, approvals, licenses and permits on the project as of the issuance date of this notice, including but not limited to those arising under the following laws, as amended:

1. General: National Environmental Policy Act [42 U.S.C. 4321-4370h]; Federal-Aid Highway Act [23 U.S.C. 109].

2. Air: Clean Air Act, as amended [42 U.S.C. 7401-7671(q)] (transportation conformity).

3. Land: Section 4(f) of the Department of Transportation Act of 1966 [49 U.S.C. 303].

4. Wildlife: Endangered Species Act [16 U.S.C. 1531-1544]; Fish and Wildlife Coordination Act [16 U.S.C. 661-667(e)]; Migratory Bird Treaty Act [16 U.S.C. 703-712].

5. Historic and Cultural Resources: Section 106 of the National Historic Preservation Act of 1966 [54 U.S.C. 306108]; Archaeological Resources Protection Act of 1977 [16 U.S.C. 470aa-470mm]; Archaeological and Historic Preservation Act [16 U.S.C. 469-469c-2]; Native American Grave Protection and Repatriation Act [25 U.S.C. 3001-3013].

6. Social and Economic: Civil Rights Act of 1964 [42 U.S.C. 2000(d)-2000(d)(1)]; American Indian Religious Freedom Act [42 U.S.C. 1996]; the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 [42 U.S.C. 61].

7. Wetlands and Water Resources: Clean Water Act [33 U.S.C. 1251-1387] (Section 404, Section 401, Section 319); Land and Water Conservation Fund Act [16 U.S.C. 460l-4-460l-11]; Safe Drinking Water Act [42 U.S.C. 300f-300j-9.]; Rivers and Harbors Act of 1899 [33 U.S.C. 401-406]; Transportation Equity Act for the 21st Century (TEA-21) [23 U.S.C. 103(b)(6)(m), 133(b)(11)] (wetlands mitigation banking); Flood Disaster Protection Act of 1973 [42 U.S.C. 4001-4129].

8. Hazardous Materials: Comprehensive Environmental Response, Compensation, and Liability Act [42 U.S.C. 9601-9675]; Superfund Amendments and Reauthorization Act of 1986 [PL 99-499]; Resource Conservation and Recovery Act [42 U.S.C. 6901-6992(k)].

9. Executive Orders: E.O. 11990 Protection of Wetlands; E.O. 11988 Floodplain Management; E.O. 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations; E.O. 11593 Protection and Enhancement of Cultural Resources; E.O. 13007 Indian Sacred Sites; E.O. 13175 Preserve America; E.O. 13175 Consultation and Coordination with Indian Tribal Governments; E.O. 11514 Protection and Enhancement of Environmental Quality; E.O. 13112 Invasive Species.

**Authority:** 23 U.S.C. 139(l)(1)

**John M. Cater,**

*Division Administrator, Lakewood, Colorado.*

[FR Doc. 2015-15395 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-22-P**

**DEPARTMENT OF TRANSPORTATION****Federal Highway Administration****Supplemental Environmental Impact Statement, City of Newport News and City of Hampton to the City of Norfolk, City of Portsmouth, City of Suffolk, and City of Chesapeake, Virginia**

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of Intent to prepare a Supplemental Environmental Impact Statement.

**SUMMARY:** The Federal Highway Administration (FHWA) in cooperation with the Virginia Department of Transportation (VDOT) will prepare a Supplemental Environmental Impact Statement (SEIS) to evaluate the Hampton Roads Crossing Study Final Environmental Impact Statement (FEIS). The purpose of the SEIS is to evaluate new information regarding environmental impacts and the alternatives described in the March 2001 FEIS.

**FOR FURTHER INFORMATION CONTACT:** Edward Sundra, Director of Program Development, Federal Highway Administration, 400 North 8th Street, Suite 750, Richmond, VA 23219; email: [Ed.Sundra@dot.gov](mailto:Ed.Sundra@dot.gov); (804) 775-3357.

**SUPPLEMENTARY INFORMATION:**

1. Description of the Proposed Action and Background—In 1991, the Intermodal Surface Transportation Efficiency Act allocated demonstration funds for a number of innovative projects which included the I-64 crossing of Hampton Roads. A Major Investment Study of the crossing was completed in 1997, and the Hampton Roads Crossing Study Draft Environmental Impact Statement (DEIS) was issued in March 1999. The FEIS for the study was issued in March 2001, identifying Candidate Build Alternative (CBA) 9 as the preferred alternative. FHWA selected CBA 9 in a Record of Decision that was issued in June 2001. In 2003, FHWA completed a National Environmental Policy Act (NEPA) re-evaluation after VDOT received unsolicited proposals from the private sector to build the project. Efforts to advance the private sector proposals were eventually terminated, but portions of CBA 9, collectively known as Patriots Crossing, were re-evaluated in 2013 because there was support to move forward on that section. At the time, no federal action was taken in response to the re-evaluation because there was no funding to construct the project in the Hampton Roads Transportation Planning Organization's

fiscally constrained long range transportation plan. FHWA and VDOT also studied separate improvements to the Hampton Roads Bridge Tunnel in a DEIS that was issued in December 2012. A preferred alternative was not selected following the circulation of the DEIS, and the study has not advanced. With a separate notice, the Notice of Intent to prepare an EIS for the Hampton Roads Bridge Tunnel will be cancelled. Regardless, this SEIS will review information from the Hampton Roads Bridge Tunnel DEIS, Hampton Roads Crossing Study FEIS/ROD, and the NEPA re-evaluations referenced above and incorporate relevant information into the SEIS; revisit the purpose and need; update the alternatives and impacts analyses; and assess impacts not previously evaluated in these NEPA documents.

2. Alternatives—Alternatives to be considered for the proposed project will include but not be limited to the No-Build Alternative and the selected alternative from the 2001 FEIS/ROD (CBA-9). The selected alternative, as described in the FEIS/ROD, would begin on the Peninsula at the I-664/I-64 interchange in the City of Hampton and would widen I-664 to the I-64/I-264 interchange in the City of Chesapeake. An interchange with I-664 near the south approach structure of the Monitor Merrimac Memorial Bridge Tunnel would provide a connection to a new roadway and bridge tunnel extending from I-664 over to I-564 in the City of Norfolk. A second interchange on the new facility would provide a connection to a new roadway running south along the eastern side of Craney Island, terminating at Virginia Route 164 (Western Freeway) in the City of Portsmouth. Revisions to the location of the alignment between Craney Island and Virginia Route 164 will be evaluated because of new information regarding the land use in the area.

Consideration will also be given to the alternatives from the 1999 DEIS to improve the Hampton Roads Bridge Tunnel (CBA-1) and an alternative to extend the improvements included in CBA-1 south to I-564 where a new bridge tunnel would cross the Elizabeth River and connect to VA 164 in the City of Portsmouth (CBA-2). Finally, consideration will be given to alternatives based on public and agency feedback during the scoping process. The SEIS will document the alternatives previously eliminated from consideration as well as consider options for tolling.

3. Scoping and Public Review Process—Throughout the development of the Hampton Roads Crossing Study

EIS, a variety of scoping and public involvement opportunities were provided to notify the public about the project, provide information and updates, and solicit feedback. These opportunities included but were not limited to a series of public hearings in the corridor when the Hampton Roads Crossing Study DEIS was issued in 1999. To ensure that a full range of issues related to the project are addressed and all significant issues identified, VDOT will host two Citizen Information/Scoping Meetings in July. Those meetings are scheduled for Tuesday, July 21st at the Academy for Discovery at Lakewood School in Norfolk and Wednesday, July 22nd at St. Mary's Star of the Sea School in Hampton. VDOT will provide additional information for the meetings and notify the public of any changes, including inclement weather dates, through a variety of means including newspaper notices and a project Web site. A separate meeting for the resource, regulatory, and participating agencies is also scheduled for July 21st, and notices will be sent directly to those agencies.

Notification of the availability of the Draft SEIS for public and agency review will be made in the **Federal Register** and using other methods to be jointly determined by FHWA and VDOT. Those methods will identify where interested parties can go to review a copy of the Draft SEIS. For the Draft SEIS, public meetings will be held and a minimum 45-day comment period will be provided. The public meetings will be conducted by VDOT and announced a minimum of 30 days in advance of the meetings. At the appropriate time, VDOT will provide information for the public meetings, including date, time and location through a variety of means including newspaper notice and the project Web site.

4. Issues—Based on coordination between FHWA and VDOT, the issues to be analyzed in the SEIS will include, but are not limited to, purpose and need, alternatives and environmental effects including effects to wetlands and streams, cultural resources, threatened and endangered species, and environmental justice communities.

5. Additional Review and Consultation—The SEIS will comply with other Federal and State requirements including the State water quality certification under Section 401 of the Clean Water Act; protection of water quality under the Virginia/National Pollutant Discharge Elimination System; protection of endangered and threatened species under Section 7 of the Endangered Species Act; and protection of cultural

resources under Section 106 of the National Historic Preservation Act.

**Authority:** 23 U.S.C. 315; 23 CFR 771.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued by:

Dated: June 17, 2015.

**Edward Sundra,**

Director of Program Development, Federal Highway Administration, Richmond, Virginia.

[FR Doc. 2015-15419 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-22-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

[Docket No. FHWA-2015-0013]

#### Agency Information Collection Activities; Notice of Request for Approval of a New Information Collection

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of Request for Approval of a New Information Collection.

**SUMMARY:** The FHWA invites public comments about our intention to request the Office of Management and Budget's (OMB) approval of a new information collection that is summarized below.

**DATES:** Please submit comments by August 24, 2015.

**ADDRESSES:** You may submit comments identified by DOT Docket ID Number 2015-0013 by any of the following methods:

*Web site:* For access to the docket to read background documents or comments received, go to the Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the online instructions for submitting comments.

*Fax:* 1-202-493-2251.

*Mail:* Docket Management Facility, U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

*Hand Delivery or Courier:* U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Michael Nesbitt ([michael.nesbitt@dot.gov](mailto:michael.nesbitt@dot.gov)), 202-366-1179, Office of

Infrastructure, Federal Highway Administration, Department of Transportation, 1200 New Jersey Avenue SE., Washington, DC 20590. Office hours are from 8 a.m. to 5 p.m., Monday through Friday, except Federal holidays.

#### **SUPPLEMENTARY INFORMATION:**

*Title:* National Transportation Performance Management (TPM) Implementation Review, TPM Toolbox, and TPM State-of-Practice Questionnaires.

*Type of request:* New information collection requirement.

*Background:* Moving Ahead for Progress in the 21st Century Act (MAP-21) transformed the Federal-aid highway program by establishing new requirements for transportation performance management to ensure the most efficient investment of Federal transportation funds. Transportation performance management increases the accountability and transparency of the Federal-aid highway program and provides for a framework to support improved investment decision making through a focus on performance outcomes for key national transportation goals. State transportation agencies (STAs) will be expected to use the information and data generated as a result of the new regulations to make better informed transportation planning and programming decisions. The new performance aspects of the Federal-aid program will allow FHWA to better communicate a national performance story and to more reliably assess the impacts of Federal funding investments.

*Overview:* Under the "National Transportation Performance Management (TPM) Implementation Review, TPM State-of-Practice Questionnaires, and TPM Toolbox" information collection request, the FHWA will collect information on the current state of the practice, data, methods, and systems used by state, metropolitan, regional, local, and/or tribal transportation entities to support their TPM processes in accordance with MAP-21 §§ 1106, 1112-1113, 1201-1203; 23 U.S.C. 119, 134-135, and 148-150. This information will also be used to develop and deliver existing and future Federal Highway Programs through successful partnerships, value-added stewardship, and risk-based oversight. Underpinning this effort will be a robust focus on improving FHWA and its partners' capacity to implement performance provisions. The information collected from these activities will translate into having a better skilled workforce, effective supporting systems, and clearly

articulated programs that are optimally positioned and equipped to deliver the FHWA's mission. In general, the components of the "National TPM Implementation Review, TPM State-of-Practice Questionnaires, and TPM Toolbox" will involve questions related to:

1. TPM and MAP-21 related implementation efforts, programs, and activities;

2. Needs for guidance and policy concerning MAP-21's TPM related provisions;

3. TPM capacity building needs;

4. Effectiveness implementing performance based planning and programming and TPM processes. The most consequential activity covered by the ICR is the "National TPM Implementation Review," which will be conducted twice. The first National TPM Implementation Review is scheduled to be administered in the spring of 2016 and will establish a baseline to assess:

1. FHWA and its partners progress implementing MAP-21 performance provisions and related TPM best practices; and

2. The effectiveness of performance-based planning and programming processes and transportation performance management.

The second National TPM Implementation Review will be conducted several years later and will be used to assess FHWA and its partners' progress addressing any gaps or issues identified during the first review.

The findings from the first review will be used in a pair of statutory reports to Congress due in 2017 on the effectiveness of performance-based planning and programming processes and transportation performance management (23 U.S.C. 119, 134(l)(2)-135(h)(2)). The findings from the second review will be used in a subsequent follow-up report. *It is important to note that this is not a compliance review.* The overall focus of the National TPM Implementation Review is on the TPM and performance-based planning processes used by STAs and Metropolitan Planning Organizations (MPOs), not the outcomes of those processes. Due to the sensitivity of the collected information, FHWA will only report aggregated information to the general public and in its report to Congress. However, information from individual reviews will be made readily available to the respective respondent (*i.e.*, STA, MPOs, etc), FHWA staff for internal uses, and a limited number of FHWA partners and associations who sign nondisclosure agreements.



In addition to the more formal National TPM Implementation Review, FHWA will conduct yearly informal voluntary TPM State-of-Practice questionnaires related to TPM policy and guidance, technical assistance, and capacity needs. These voluntary information collection actions will occur 1 to 2 times per year. The information will be collected from state, metropolitan, regional, local, and/or tribal transportation agencies via internet-based questionnaires or web applications and used to help FHWA:

- Strategically plan to meet ever growing demand for TPM technical assistance needs;
- Develop and refine TPM policy and guidance based on stakeholder feedback;
- Channel resources to meet capacity development and training needs; and
- Identify and prioritize TPM research needs.

Lastly, as part of FHWA's ongoing technical assistance efforts, a TPM Toolbox is being created to help FHWA's partners self-assess and benchmark their TPM implementation progress, capabilities, and gaps. The TPM Toolbox also helps FHWA streamline the integration and administration of all the efforts described above. To maximize the effectiveness and efficiency of the TPM Toolbox, FHWA will collect business contact and organizational demographic (size of organization, location, etc.) information along with the responses submitted as part of the TPM Toolbox's self-assessment applications.

**Respondents:** The 975 respondents estimate is based on soliciting input from all 52 state transportation agencies, 409 MPOS, and a sampling of transit agencies, RPOs, and other transportation entities.

**Frequency:** Each State, MPO, RPO, and a sampling of transit agencies will be solicited to provide information up to 4 times per year. This is dependent on whether information is being collected on the National Transportation Performance Management Implementation Review and the frequency of state-of-practice questionnaires.

**Estimated Average Burden per Response:** Up to 2 hours per response or 8 hours per year for all responses (4 questionnaires per year times up to 2 hours per questionnaire).

**Estimated Total Annual Burden Hours:** The total annual burden for all respondents is estimated to be 7,800 burden hours per year (8 burden hours per respondent times 975 respondents). The annual number of burden hours (professional and clerical staff) per

respondent to answer questions on the current state of the practice, data, methods, and systems used by state, metropolitan, regional, local, and/or tribal transportation entities to support their required TPM processes is estimated to be up to 8 (4 questionnaires per year times up to 2 hours per questionnaire). This annual burden per respondent consists of the staff time of each respondent. The burden was determined as follows:

*Professional Staff Time:*

1.5 hour/respondent × 975 respondents × 4 questionnaires per year = 5850 hours

*Clerical staff time:*

0.5 hours/respondent × 975 respondents × 4 questionnaires per year = 1,950 hours

The total annual associated salary cost to respondents is estimated to be \$257,400 based on an average salary of \$38 per hour (approximately \$79,000 per year) for professional staff and \$18 per hour (approximately \$37,000 year) for clerical staff.

*Professional staff cost for preparation of work programs:*

5,850 hours × \$38 per hour = \$222,300

*Clerical staff time:*

1,950 hours × \$18 per hour = \$35,100

*Total annual costs:*

Subtotal Direct Salaries \$257,400

Overhead/fringe benefits at 33%: \$84,942

Total annual respondent cost: \$342,342

**Public Comments Invited:** You are asked to comment on any aspect of this information collection, including: (1) Whether the proposed collection of information is necessary for the U.S. DOT's performance, including whether the information will have practical utility; (2) the accuracy of the U.S. DOT's estimate of the burden of the proposed information collection; (3) ways to enhance the quality, usefulness, and clarity of the collected information; and (4) ways that the burden could be minimized, including the use of electronic technology, without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

**Authority:** The Paperwork Reduction Act of 1995; 44 U.S.C. chapter 35, as amended; and 49 CFR 1.48.

Issued On: June 15, 2015.

**Michael Howell,**

*Information Collection Officer.*

[FR Doc. 2015-15371 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-22-P**

**DEPARTMENT OF TRANSPORTATION**

**Maritime Administration**

[Docket No. MARAD-2015-0076]

**Requested Administrative Waiver of the Coastwise Trade Laws: Vessel VELA ANDATO; Invitation for Public Comments**

**AGENCY:** Maritime Administration, Department of Transportation.

**ACTION:** Notice.

**SUMMARY:** As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

**DATES:** Submit comments on or before July 23, 2015.

**ADDRESSES:** Comments should refer to docket number MARAD-2015-0076. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at <http://www.regulations.gov>. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:**

Linda Williams, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23-453, Washington, DC 20590. Telephone 202-366-0903, Email [Linda.Williams@dot.gov](mailto:Linda.Williams@dot.gov).

**SUPPLEMENTARY INFORMATION:**

As described by the applicant the intended service of the vessel VELA ANDATO is:

*Intended Commercial Use of Vessel:* “2, 4, 8 Hour Sails to include sunset Sails”

*Geographic Region:* “Florida”

The complete application is given in DOT docket MARAD–2015–0076 at <http://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD’s regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter’s interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD’s regulations at 46 CFR part 388.

#### Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

By Order of the Maritime Administrator.

Date: June 15, 2015.

**Thomas M. Hudson, Jr.,**

*Acting Secretary, Maritime Administration.*

[FR Doc. 2015–15457 Filed 6–22–15; 8:45 am]

**BILLING CODE 4910–81–P**

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## DEPARTMENT OF TRANSPORTATION

### Maritime Administration

[Docket No. MARAD–2015–0080]

#### Requested Administrative Waiver of the Coastwise Trade Laws: Vessel FORCE; Invitation for Public Comments

**AGENCY:** Maritime Administration, Department of Transportation.

**ACTION:** Notice.

**SUMMARY:** As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for

such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

**DATES:** Submit comments on or before July 23, 2015.

**ADDRESSES:** Comments should refer to docket number MARAD–2015–0080. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at <http://www.regulations.gov>. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at <http://www.regulations.gov>.

#### FOR FURTHER INFORMATION CONTACT:

Linda Williams, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–0903, Email [Linda.Williams@dot.gov](mailto:Linda.Williams@dot.gov).

**SUPPLEMENTARY INFORMATION:** As described by the applicant the intended service of the vessel FORCE is:

*Intended Commercial Use of Vessel:* “Carry passengers for pleasure, day and possibly overnight charter.”

*Geographic Region:* “Virginia, Maryland, Delaware, Florida”

The complete application is given in DOT docket MARAD–2015–0080 at <http://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD’s regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter’s interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD’s regulations at 46 CFR part 388.

#### Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

By Order of the Maritime Administrator.

Dated: June 15, 2015.

**Thomas M. Hudson, Jr.,**

*Acting Secretary, Maritime Administration.*

[FR Doc. 2015–15437 Filed 6–22–15; 8:45 am]

**BILLING CODE 4910–81–P**

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## DEPARTMENT OF TRANSPORTATION

### Maritime Administration

[Docket No. MARAD–2015 0078]

#### Requested Administrative Waiver of the Coastwise Trade Laws: Vessel PARADIGM SHIFT; Invitation for Public Comments

**AGENCY:** Maritime Administration, Department of Transportation.

**ACTION:** Notice.

**SUMMARY:** As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

**DATES:** Submit comments on or before July 23, 2015.

**ADDRESSES:** Comments should refer to docket number MARAD–2015–0078. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at <http://www.regulations.gov>. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:**

Linda Williams, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23-453, Washington, DC 20590. Telephone 202-366-0903, Email [Linda.Williams@dot.gov](mailto:Linda.Williams@dot.gov).

**SUPPLEMENTARY INFORMATION:** As described by the applicant the intended service of the vessel Paradigm Shift is:

*Intended Commercial Use of Vessel:* "Private Crewed Charter"

*Geographic Region:* "Maine, Massachusetts, Rhode Island, New York, Maryland, Virginia, North Carolina, South Carolina, Florida"

The complete application is given in DOT docket MARAD-2015-0078 at <http://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

**Privacy Act**

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78).

By Order of the Maritime Administrator.

Dated: June 15, 2015.

**Thomas M. Hudson, Jr.,**

*Acting Secretary, Maritime Administration.*

[FR Doc. 2015-15439 Filed 6-22-15; 08:45 am]

**BILLING CODE 4910-81-P**

**DEPARTMENT OF TRANSPORTATION****Maritime Administration**

[Docket No. MARAD-2015 0079]

**Requested Administrative Waiver of the Coastwise Trade Laws: Vessel SIREN; Invitation for Public Comments**

**AGENCY:** Maritime Administration, Department of Transportation.

**ACTION:** Notice.

**SUMMARY:** As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

**DATES:** Submit comments on or before July 23, 2015.

**ADDRESSES:** Comments should refer to docket number MARAD-2015-0079. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at <http://www.regulations.gov>. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:**

Linda Williams, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23-453, Washington, DC 20590. Telephone 202-366-0903, Email [Linda.Williams@dot.gov](mailto:Linda.Williams@dot.gov).

**SUPPLEMENTARY INFORMATION:** As described by the applicant the intended service of the vessel SIREN is:

*Intended Commercial Use of Vessel:* "This boat is to be used as a camera boat for use in documentary film and feature film production as well as six passenger Whale watching."

*Geographic Region:* "California"

The complete application is given in DOT docket MARAD-2015-0079 at <http://www.regulations.gov>. Interested parties may comment on the effect this

action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

**Privacy Act**

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78).

By Order of the Maritime Administrator

Dated: June 15, 2015.

**Thomas M. Hudson, Jr.,**

*Acting Secretary, Maritime Administration.*

[FR Doc. 2015-15420 Filed 6-22-15; 8:45 am]

**BILLING CODE 4910-81-P**

**DEPARTMENT OF TRANSPORTATION****Pipeline and Hazardous Materials Safety Administration**

[Docket No. PHMSA-2015-0140]

**Pipeline Safety: Potential for Damage to Pipeline Facilities Caused by the Passage of Hurricanes**

**AGENCY:** Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

**ACTION:** Notice; Issuance of Advisory Bulletin.

**SUMMARY:** PHMSA is issuing this advisory bulletin to remind owners and operators of gas and hazardous liquid pipelines of the potential for damage to pipeline facilities caused by the passage of hurricanes.

**ADDRESSES:** This document can be viewed on the Office of Pipeline Safety (OPS) home page at: <http://ops.dot.gov>.

**FOR FURTHER INFORMATION CONTACT:** Pipeline operators regulated by PHMSA should contact the appropriate PHMSA Regional Office. PHMSA's Regional

Offices and their contact information are as follows:

- Eastern Region: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia, call 609-989-2171.
- Southern Region: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, and Tennessee, call 404-832-1140.
- Central Region: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin, call 816-329-3800.
- Southwest Region: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas, call 713-272-2859.
- Western Region: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming, call 720-963-3160.

Intrastate pipeline operators should contact the appropriate State pipeline safety authority. A list of State pipeline safety authorities is provided at: [http://www.napsr.org/managers/napsr\\_state\\_program\\_managers2.htm](http://www.napsr.org/managers/napsr_state_program_managers2.htm).

For general information about this notice, contact David Lehman, Director for Emergency Support and Security, 202-366-4439 or by email at [PHMSA.OPA90@dot.gov](mailto:PHMSA.OPA90@dot.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Background

The purpose of this advisory bulletin is to remind owners and operators of gas and hazardous liquid pipelines, particularly those with facilities located in offshore and inland areas, about the serious safety-related issues that can result from the passage of hurricanes. Potential damage can occur to offshore platforms and pipelines, onshore pumping stations, compressor stations, and terminals.

Operators have a general obligation to identify any conditions that can adversely affect the operation of their pipelines and to take appropriate corrective measures upon discovering such conditions. Specifically, § 192.613 of the gas pipeline safety regulations states that “[e]ach operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning . . . unusual operating and maintenance conditions,” and “[i]f a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, the operator shall initiate a program to recondition or phase out the segment involved, or, if

the segment cannot be reconditioned or phased out, reduce the maximum allowable operating pressure in accordance with § 192.619(a) and (b).” Section 195.401(b)(1) of the hazardous liquid pipeline safety regulations states that “[w]hen an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it must correct the condition within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.” Section 195.401(b)(2) further states that “[w]hen an operator discovers a condition on a pipeline covered under [the integrity management requirements in] § 195.452, the operator must correct the condition as prescribed in § 195.452(h).”

Operators of shallow-water gas and hazardous liquid pipelines in the Gulf of Mexico and its inlets have a specific obligation to “prepare and follow a procedure to identify [their] pipelines . . . that are at risk of being an exposed underwater pipeline or a hazard to navigation . . . [and to] conduct appropriate underwater inspections . . . [of those pipelines] based on the identified risk[;]” and upon discovering that “its pipeline is an exposed underwater pipeline or poses a hazard to navigation,” to promptly report the location of that pipeline to the National Response Center, to mark its location, and to ensure its reburial within a specified time. 49 CFR 192.612, 195.413.

Hurricanes can adversely affect the operation of a pipeline and require corrective action under §§ 192.613 and 195.401. Hurricanes also increase the risk of underwater pipelines in the Gulf of Mexico and its inlets becoming exposed or constituting a hazard to navigation under §§ 192.612 and 195.413. The concentration of U.S. oil and gas production, processing, and transportation facilities in the Gulf of Mexico and onshore Gulf Coast means that a significant percentage of domestic oil and gas production and processing is prone to disruption by hurricanes.

In 2005, Hurricanes Katrina and Rita caused significant damage to the oil and gas production structures. The onshore damage caused a significant impact in the ability of the oil and gas industry to respond due to the lack of resources, personnel, and infrastructure, as well as significant damage to onshore processing facilities and power supplies. There were significant competing resource needs with the impacts caused by the devastation of

New Orleans and western Louisiana/eastern Texas shore communities that normally provide the services and supplies for the industry.

##### II. Advisory Bulletin (ADB-2015-02)

To: Owners and operators of gas and hazardous liquid pipeline systems.

Subject: Potential for damage to pipeline facilities caused by hurricanes.

Advisory: All owners and operators of gas and hazardous liquid pipelines are reminded that pipeline safety problems can occur from the passage of hurricanes. Pipeline operators are urged to take the following actions to ensure pipeline safety:

1. Identify persons who normally engage in shallow-water commercial fishing, shrimping, and other marine vessel operations and caution them that underwater offshore pipelines may be exposed or constitute a hazard to navigation. Marine vessels operating in water depths comparable to a vessel's draft or when operating bottom dragging equipment can be damaged and their crews endangered by an encounter with an underwater pipeline.

2. Identify and caution marine vessel operators in offshore shipping lanes and other offshore areas that deploying fishing nets or anchors and conducting dredging operations may damage underwater pipelines, their vessels, and endanger their crews.

3. After a disruption, operators need to bring offshore and inland transmission facilities back online, check for structural damage to piping, valves, emergency shutdown systems, risers and supporting systems. Aerial inspections of pipeline routes should be conducted to check for leaks in the transmission systems. In areas where floating and jack-up rigs have moved and their path could have been over the pipelines, review possible routes and check for sub-sea pipeline damage where required.

4. Operators should take action to minimize and mitigate damages caused by flooding to gas distribution systems, including the prevention of overpressure of low pressure and high pressure distribution systems.

PHMSA would appreciate receiving information about any damage to pipeline facilities caused by hurricanes. The Federal pipeline safety regulations require that operators report certain incidents and accidents to PHMSA by specific methods. Damage not reported by these methods may be reported to David Lehman, Director for Emergency Support and Security, 202-366-4439 or by email at [PHMSA.OPA90@dot.gov](mailto:PHMSA.OPA90@dot.gov).

Chapter 601; 49 CFR 1.97.

Issued in Washington, DC, on June 18, 2015.

Jeffrey D. Wiese,

Associate Administrator for Pipeline Safety.

[FR Doc. 2015-15401 Filed 6-22-15; 08:45 am]

BILLING CODE 4910-60-P

## DEPARTMENT OF TRANSPORTATION

### Surface Transportation Board

[Docket No. EP 290 (Sub-No. 5) (2015-3)]

#### Quarterly Rail Cost Adjustment Factor

**AGENCY:** Surface Transportation Board, DOT.

**ACTION:** Approval of rail cost adjustment factor.

**SUMMARY:** The Board approves the third quarter 2015 Rail Cost Adjustment Factor (RCAF) and cost index filed by the Association of American Railroads. The third quarter 2015 RCAF (Unadjusted) is 0.829. The third quarter 2015 RCAF (Adjusted) is 0.354. The third quarter 2015 RCAF-5 is 0.334.

**DATES:** *Effective Date:* July 1, 2015.

**FOR FURTHER INFORMATION CONTACT:** Pedro Ramirez, (202) 245-0333. Federal Information Relay Service (FIRS) for the hearing impaired: (800) 877-8339.

#### SUPPLEMENTARY INFORMATION:

Additional information is contained in the Board's decision, which is available on our Web site, <http://www.stb.dot.gov>. Copies of the decision may be purchased by contacting the Office of Public Assistance, Governmental Affairs, and Compliance at (202) 245-0238. Assistance for the hearing impaired is available through FIRS at (800) 877-8339.

This action will not significantly affect either the quality of the human environment or energy conservation.

By the Board, Acting Chairman Miller and Vice Chairman Begeman.

Decided: June 17, 2015.

Kenyatta Clay,  
Clearance Clerk.

[FR Doc. 2015-15356 Filed 6-22-15; 8:45 am]

BILLING CODE 4915-01-P

## DEPARTMENT OF VETERANS AFFAIRS

### Homeless Providers Grant and Per Diem Program; Notice of Funding Availability

**AGENCY:** Veterans Health Administration, VA Homeless Providers Grant and Per Diem Program, Department of Veterans Affairs.

**ACTION:** Notice of Funding Availability (NOFA).

**SUMMARY:** The Department of Veterans Affairs (VA) is announcing the availability of 1-year renewal funding in fiscal year (FY) 2015 for the 21 currently operational FY 2014 VA Grant and Per Diem (GPD) Special Need Grant Recipients and their collaborative VA Special Need partners (as applicable) to make re-applications for assistance under the Special Need Grant Component of VA's Homeless Providers GPD Program. The focus of this NOFA is to encourage applicants to continue to deliver services to the homeless Special Need Veteran population as outlined in their current Special Need application. This NOFA contains information concerning the program, application process, and amount of funding available.

**DATES:** An original signed and dated request for re-application letter, on agency letterhead, for assistance under the VA's Homeless Providers GPD Program and associated documents, must be received by the GPD Program Office by 4:00 p.m. Eastern Time on Tuesday, July 28, 2015 (see application requirements below).

Applications may not be sent by facsimile. In the interest of fairness to all competing applicants, this deadline is firm as to date and time, and VA will treat any application that is received after the deadline as ineligible for consideration. Applicants should make early submission of their materials to avoid any risk of loss of eligibility as a result of unanticipated delays or other delivery-related problems.

**ADDRESSES:** An original signed, dated, completed, and collated grant re-application letter and all required associated documents must be submitted to the following address: VA Homeless Providers GPD Program Office, 10770 N. 46th Street, Suite C-200, Tampa, Florida 33617. Applications must be received by the application deadline. Applications must arrive as a complete package. Materials arriving separately *will not* be included in the application package for consideration and may result in the application being rejected or not funded.

**FOR FURTHER INFORMATION CONTACT:** Mr. Jeffery L. Quarles, Director, VA Homeless Providers GPD Program, Department of Veterans Affairs, 10770 N. 46th Street, Suite C-200, Tampa, FL 33617; (toll-free) 1-(877) 332-0334.

**SUPPLEMENTARY INFORMATION:**

### Funding Opportunity Description

This NOFA announces the availability of FY 2015 funds to renew assistance provided under VA's Homeless Providers GPD Program for the 21 FY 2014 operational GPD Special Need recipients and their collaborative VA partners (as applicable). Eligible applicants may obtain grant assistance to cover additional operational costs that would not otherwise be incurred but for the fact that the recipient is providing supportive housing beds and services for the following special needs homeless Veteran populations:

- (1) Women;
- (2) Frail elderly;
- (3) Terminally ill;
- (4) Chronically mentally ill; or
- (5) Individuals who have care of minor dependents.

Definitions of these populations are contained in 38 CFR 61.1 Definitions. Eligible applicants should review these definitions to ensure their proposed populations meet the specific requirements.

VA is pleased to issue this NOFA for the Homeless Providers GPD Program as a part of the effort to end homelessness among our Nation's Veterans. Funding applied for under this NOFA may be used for the provision of service and operational costs to facilitate the following for each targeted group:

#### Women

- (1) Ensure transportation for women, especially for health care and educational needs; and
- (2) Address safety and security issues including segregation from other program participants if deemed appropriate.

#### Frail Elderly

- (1) Ensure the safety of the residents in the facility, including preventing harm and exploitation;
- (2) Ensure opportunities to keep residents mentally and physically agile to the fullest extent through the incorporation of structured activities, physical activity, and plans for social engagement within the program and in the community;
- (3) Provide opportunities for participants to address life transitional issues and separation and/or loss issues;
- (4) Provide access to assistance devices such as walkers, grippers, or other devices necessary for optimal functioning;
- (5) Ensure adequate supervision, including supervision of medication and monitoring of medication compliance; and
- (6) Provide opportunities for participants either directly or through

referral, for other services particularly relevant for the frail elderly, including services or programs addressing emotional, social, spiritual, and generative needs.

#### *Terminally Ill*

(1) Help participants address life-transition and life-end issues;

(2) Ensure that participants are afforded timely access to hospice services;

(3) Provide opportunities for participants to engage in “tasks of dying,” activities of “getting things in order” or other therapeutic actions that help resolve end-of-life issues and enable transition and closure;

(4) Ensure adequate supervision, including supervision of medication and monitoring of medication compliance; and

(5) Provide opportunities for participants, either directly or through referral, for other services that are particularly relevant for the terminally ill, such as legal counsel and pain management.

#### *Chronically Mentally Ill*

(1) Help participants join in and engage with the community;

(2) Facilitate reintegration with the community and provide services that may optimize reintegration, such as life-skills education, recreational activities, and follow-up case management;

(3) Ensure that participants have opportunities and services for re-establishing relationships with family;

(4) Ensure adequate supervision, including supervision of medication and monitoring of medication compliance; and

(5) Provide opportunities for participants, either directly or through referral, to obtain other services particularly relevant for a chronically mentally ill population, such as vocational development, benefits management, fiduciary or money, management services, medication compliance, and medication education.

#### *Individuals Who Have Care of Minor Dependents*

(1) Ensure transportation for individuals who have care of minor dependents, and their minor dependents, especially for health care and educational needs;

(2) Provide directly or offer referrals for adequate and safe child care;

(3) Ensure children’s health care needs are met, especially age-appropriate wellness visits and immunizations; and

(4) Address safety and security issues, including segregation from other

program participants if deemed appropriate.

#### **Award Information**

*Overview:* This NOFA announces the availability of one year renewal funding in FY 2015 for the 21 currently operational FY 2014 VA GPD Special Need Grant Recipients in conjunction with their collaborative VA Special Need partners (as applicable) to make re-applications for assistance under the Special Need Grant Component of VA’s Homeless Providers GPD Program.

*Funding Priorities:* None

*Allocation of Funds:* Approximately \$4 million is available for the current Special Need grant component of VA’s Homeless Providers GPD Program. Funding will be for a period beginning on October 1, 2015, and ending on September 30, 2016. Special Need payment will be the lesser of:

1. One hundred percent of the daily cost of care estimated by the special need recipient for furnishing services to homeless Veterans with special need that the special need recipient certifies to be correct, minus any other sources of income; or

2. Two times the current VA State Home Program per diem rate for domiciliary care.

Special need awards are subject to: Funds availability; the recipient meeting the performance goals as stated in the grant application; statutory and regulatory requirements; and annual inspections.

Applicants should ensure their funding requests and operational costs are based on the 12-month period above and should be approximately in line with prior-year expenditures. Requests cannot exceed the amount obligated under the FY 2014 award.

Based on GPD funding availability, approximately \$2.5 million is expected to be made available over the specified time (internally) for the current VA collaborative partners. The goal is, to the maximum extent possible, to ensure a continuation of Special Need services to homeless Veterans and their VA collaborative partners.

*Funding Actions:* Conditionally selected applicants may be asked to submit additional information under 38 CFR 61.15. Following receipt and confirmation that this information is accurate and in acceptable form, the applicant will execute an agreement with VA in accordance with 38 CFR 61.61. Upon signature by the Secretary or designated representative, final selection will be completed and the grant funds will be obligated.

*Grant Award Period:* Applicants that are selected will have a maximum

award of one year beginning on October 1, 2015, and ending on September 30, 2016, to utilize the special need funding. Funds unexpended after the September 30, 2016, deadline will be de-obligated.

#### **Eligibility Information**

In order to be eligible, an applicant must be a current operational FY 2014 VA GPD Special Need Grant Recipient in conjunction with their collaborative VA Special Need partner, or a currently operational VA GPD Special Need Grant Recipient that does not involve a collaborative effort to make re-application for assistance under the Special Need Grant Component of VA’s Homeless Providers GPD Program.

**Note:** If the applicant currently has a collaborative project and its VA partner no longer wishes to continue, its agency will be ineligible for an award under this NOFA.

*Cost Sharing or Matching:* None.

*Application and Submission Information:*

*Address To Request Renewal Agreement for Grant Application:* Grant Renewal Agreements may be obtained by contacting the National GPD Office at 1 (877) 332-0334. The additional documents that must also be included with the application are listed below in the Content and Form of Application section of this NOFA. Questions should be referred to the GPD Program Office at (toll-free) 1 (877) 332-0334.

*Content and Form of Application:* An application package is not needed for this NOFA. Applicants submitting a letter requesting re-application on their agency’s letterhead agree to VA using their previously awarded FY 2009 Special Need application for scoring purposes. Applicants must contact the National GPD Program Office for a copy of the Grant Renewal Agreement, which must be signed, initialed, and dated by an agency official who is authorized to sign grant agreements on behalf of their organization. The signed Grant Renewal Agreement and the letter of intent must be submitted for reapplication of your Special Needs Grant.

Applicants should ensure that they include all required documents in their application and carefully follow the format described below. Submission of an incorrect, incomplete, or incorrectly formatted application package will result in the application being rejected at the beginning of the process.

*Application Documentation Required:*

- Letter from Applicant: Letter from the renewal applicant on agency-signed letterhead, stating the applicant agrees, as a condition of funding under this NOFA, that the FY 2009 application

will be used, that they will provide the services as outlined in that application along with any VA-approved changes in scope, and that the applicant's FY 2009 required forms and certifications still apply for the period of this award.

- **Grant Renewal Agreement:**

Document must be requested from the National GPD Program Office, prior to application, so it can be signed, initialed, and dated by the applicant agency official who is authorized to sign grant agreements for the applicant agency.

- **Performance Goals:** Documentation of the recipient meeting the performance goals as stated in the FY 2009 original grant application as evidenced by their last VA project inspection.

- **Letter from VA Collaborative Partner (if applicable):** If the FY 2009 Special Need grant was a collaborative grant, the renewal request must include an updated letter of commitment or an updated Memorandum of Agreement (MOA) from the VA collaborative partner, stating that VA will continue to meet its objectives or provide its duties as outlined in the original MOA in FY 2009. Note: If the applicant currently has a collaborative project and its VA partner no longer wishes to continue then the agency will be ineligible for application under this NOFA.

Applicants with questions regarding the funding from previous Special Need awards should contact the GPD Program Office prior to application for renewal funding. Selections will be made based on criteria described in the FY 2009 application and additional information as specified in this NOFA.

Applicants who are selected will be notified of any additional information needed to confirm or clarify information provided in the application. Applicants will then be notified of the deadline to submit such information. If an applicant is unable to meet any conditions for grant award within the specified time frame, VA reserves the right to not award funds and to use the funds available for other Special Need applicants.

**Submission Dates and Times:** An original signed and dated request for re-application letter on agency letterhead and associated required documents for assistance under the VA's Homeless Providers GPD Program must be received by the GPD Program Office, by 4:00 p.m. Eastern Standard Time on Tuesday, July 28, 2015; this includes applications submitted through Grants.gov.

In the interest of fairness to all competing applicants, this deadline is firm as to date and hour, and VA will

treat any application that is received after the deadline as ineligible for consideration. Applicants should take this firm deadline into account and make early submission of their materials to avoid any risk of loss of eligibility as a result of unanticipated delays or other delivery-related problems.

For applications physically delivered (e.g., in person, or via United States Postal Service, FedEx, United Parcel Service, or any other type of courier), the VA GPD Program Office staff will accept the application and date stamp it immediately at the time of arrival. This is the date and time that will determine if the deadline is met for those types of delivery. DO NOT fax or email the application as it will be treated as ineligible for consideration.

**Funding Restrictions:** No part of a Special Need grant may be used for any purpose that would significantly change the scope of the specific GPD project for which a capital GPD was awarded. As a part of the review process, VA will review the original project and subsequent approved program changes of the previous FY 2009 Special Need applications to ensure significant scope changes have not occurred, displacing other homeless Veteran populations. VA will not allow any changes under this renewal NOFA.

Special Need funding may not be used for capital improvements or to purchase vans or real property. However, the leasing of vans or real property may be acceptable. Questions regarding acceptability should be directed to VA's National GPD Program Office at the number listed in Contact Information. Applicants may not receive Special Need funding to replace funds provided by any Federal, state or local Government agency or program to assist homeless persons.

A full copy of the regulations governing the GPD Program is available at the GPD Web site at <http://www.va.gov/HOMELESS/GPD.asp>.

**Award Notice:** Although subject to change, the GPD Program Office expects to announce grant awards during the late fourth quarter of FY 2015 (September). The initial announcement will be made via news release which will be posted on VA's National GPD Program Web site at [www.va.gov/homeless/gpd.asp](http://www.va.gov/homeless/gpd.asp). Following the initial announcement, the GPD Office will mail notification letters to the grant recipients. Applicants who are not selected will be mailed a declination letter within two weeks of the initial announcement.

**Administrative And National Policy:** It is important to be aware that VA places great emphasis on responsibility

and accountability. VA has procedures in place to monitor services provided to homeless Veterans and outcomes associated with the services provided in grant and per diem-funded programs. Applicants should be aware of the following:

Awardees will be required to support their request for payments with adequate fiscal documentation as to project income and expenses.

All awardees that are selected in response to *this NOFA* must meet the requirements of the current edition of the Life Safety Code of the National Fire Protection Association as it relates to their specific facility. Applicants should note that all facilities are to be protected throughout by an approved automatic sprinkler system unless a facility is specifically exempted under the Life Safety Code. Applicants should consider this when submitting their grant applications, as no additional funds will be made available for capital improvements under this NOFA.

Each program receiving Special Need funding will have a liaison appointed from a nearby VA medical facility to provide oversight and monitor services provided to homeless Veterans in the program.

Monitoring will include at a minimum, a quarterly review of each per diem program's progress toward meeting performance goals, including the applicant's internal goals and objectives in helping Veterans attain housing stability, adequate income support, and self-sufficiency as identified in each per diem program's original application. Monitoring will also include a review of the agency's income and expenses as they relate to this project to ensure payment is accurate.

Each funded program will participate in VA's national program monitoring and evaluation as these monitoring procedures will be used to determine successful accomplishment of these housing outcomes for each per diem-funded program.

**FOR FURTHER INFORMATION CONTACT:** Mr. Jeffery L. Quarles, Director, VA Homeless Providers Grant and Per Diem Program, Department of Veterans Affairs, 10770 N. 46th Street, Suite C-200, Tampa, FL 33617; (toll-free) 1 (877) 332-0334.

#### Signing Authority

The Secretary of Veterans Affairs, or designee, approved this document and authorized the undersigned to sign and submit the document to the Office of the Federal Register for publication electronically as an official document of the Department of Veterans Affairs.



Robert L. Nabors II, Chief of Staff, approved this document on June 17, 2015 for publication.

**Authority:** Homeless Veterans Comprehensive Assistance Act of 2001,"

Public Law 107-95, § 5, codified as amended by Public Law 112-154, at 38 U.S.C. 2011, 2012, 2013, 2061, and in regulation at 38 CFR 61.

Approved: June 18, 2015.

**William F. Russo,**

*Acting Director, Office of Regulation Policy & Management, Office of General Counsel.*

[FR Doc. 2015-15397 Filed 6-22-15; 8:45 am]

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Part II

## Department of Transportation

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National Highway Traffic Safety Administration

49 CFR Part 571

Federal Motor Vehicle Safety Standards; Electronic Stability Control  
Systems for Heavy Vehicles; Final Rule

**DEPARTMENT OF TRANSPORTATION****National Highway Traffic Safety Administration****49 CFR Part 571**

[Docket No. NHTSA–2015–0056]

RIN 2127–AK97

**Federal Motor Vehicle Safety Standards; Electronic Stability Control Systems for Heavy Vehicles**

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** This document establishes a new Federal Motor Vehicle Safety Standard No. 136 to require electronic stability control (ESC) systems on truck tractors and certain buses with a gross vehicle weight rating of greater than 11,793 kilograms (26,000 pounds). ESC systems in truck tractors and large buses are designed to reduce untripped rollovers and mitigate severe understeer or oversteer conditions that lead to loss of control by using automatic computer-controlled braking and reducing engine torque output.

In 2018, we expect that, without this rule, about 34 percent of new truck tractors and 80 percent of new buses affected by this final rule would be equipped with ESC systems. We believe that, by requiring that ESC systems be installed on the rest of truck tractors and large buses, this final rule will prevent 40 to 56 percent of untripped rollover crashes and 14 percent of loss-of-control crashes. As a result, we expect that this final rule will prevent 1,424 to 1,759 crashes, 505 to 649 injuries, and 40 to 49 fatalities at \$0.1 to \$0.6 million net cost per equivalent life saved, while generating positive net benefits.

**DATES:** The effective date of this rule is August 24, 2015. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of August 24, 2015.

*Petitions for reconsideration:* Petitions for reconsideration of this final rule must be received not later than August 7, 2015.

**ADDRESSES:** Petitions for reconsideration of this final rule must refer to the docket and notice number set forth above and be submitted to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** For technical issues, you may contact Patrick Hallan, Office of Crash

Avoidance Standards, by telephone at (202) 366–9146, and by fax at (202) 493–2990. For legal issues, you may contact David Jasinski, Office of the Chief Counsel, by telephone at (202) 366–2992, and by fax at (202) 366–3820. You may send mail to both of these officials at the National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590.

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**I. Executive Summary**

This final rule establishes a new Federal Motor Vehicle Safety Standard (FMVSS) No. 136, *Electronic Stability Control Systems for Heavy Vehicles*, to reduce rollover and loss of directional control of truck tractors and large buses. The standard requires that truck tractors and certain large buses with a gross vehicle weight rating (GVWR) of greater than 11,793 kilograms (26,000 pounds) to be equipped with an electronic stability control (ESC) system that meets the equipment and performance criteria of the standard. ESC systems use engine torque control and computer-controlled

braking of individual wheels to assist the driver in maintaining control of the vehicle and maintaining its heading in situations in which the vehicle is becoming roll unstable (*i.e.*, wheel lift potentially leading to rollover) or experiencing loss of control (*i.e.*, deviation from driver's intended path due to understeer, oversteer, trailer swing or any other yaw motion leading to directional loss of control). In such situations, intervention by the ESC system can assist the driver in maintaining control of the vehicle, thereby preventing fatalities and injuries associated with vehicle rollover or collision.

This final rule is made pursuant to the authority granted to NHTSA under the National Traffic and Motor Vehicle Safety Act ("Motor Vehicle Safety Act"). Under 49 U.S.C. Chapter 301, Motor Vehicle Safety (49 U.S.C. 30101 *et se.*), the Secretary of Transportation is responsible for prescribing motor vehicle safety standards that are practicable, meet the need for motor vehicle safety, and are stated in objective terms. The responsibility for promulgation of Federal motor vehicle safety standards is delegated to NHTSA. This rulemaking also completes NHTSA's rulemaking pursuant to a directive in the Moving Ahead for Progress in the 21st Century Act (MAP-21) that the Secretary consider requiring stability enhancing technology on motorcoaches.<sup>1</sup>

There have been two types of stability control systems developed for heavy vehicles. A roll stability control (RSC) system is designed to prevent rollover by decelerating the vehicle using braking and engine torque control. The other type of stability control system is ESC, which includes all of the functions of an RSC system plus the ability to mitigate severe oversteer or understeer conditions by automatically applying brake force at selected wheel-ends to help maintain directional control of a vehicle. To date, ESC and RSC systems for heavy vehicles have been developed for air-braked vehicles. Truck tractors and buses covered by today's final rule make up a large proportion of air-braked heavy vehicles and a large proportion of the heavy vehicles involved in both rollover crashes and total heavy vehicle crashes.

As a result of the data analysis research, we determined that ESC systems can be 40 to 56 percent effective in reducing first-event untripped rollovers and 14 percent effective in eliminating loss-of-control crashes caused by severe oversteer or understeer

conditions. This estimate is based on an update of the estimate presented in a 2011 research note analyzing the effectiveness of ESC systems discussed in the Final Regulatory Impact Analysis (FRIA) accompanying this final rule.<sup>2</sup>

The agency considered requiring truck tractors and large buses to be equipped with RSC systems. When compared to the ESC requirement in this final rule, RSC systems would cost less than ESC systems, be slightly more cost-effective, but would produce net benefits that are much lower than the net benefits from this final rule. This is because RSC systems are less effective at preventing rollover crashes and much less effective at preventing loss-of-control crashes. We also considered requiring trailers to be equipped with RSC systems. However, this alternative would save many fewer lives, would not be cost-effective, and would not result in net benefits.

This final rule requires ESC systems to meet both definitional criteria and performance requirements. It is necessary to include definitional criteria and require compliance with them because developing separate performance tests to cover the wide array of possible operating ranges, roadways, and environmental conditions would be impractical. The definitional criteria are consistent with those recommended by SAE International and used by the United Nations (UN) Economic Commission for Europe (ECE), and similar to the definition of ESC in FMVSS No. 126, the agency's stability control standard for light vehicles. This definition describes an ESC system for heavy vehicles as one that will enhance both the roll and yaw stability of a vehicle using a computer-controlled system that can receive inputs such as the vehicle's lateral acceleration and yaw rate, and use the information to apply brakes individually, including trailer brakes, and modulate engine torque.

This final rule is applicable to all new typical three-axle truck tractors manufactured on or after August 1, 2017. We believe that two years of lead time is sufficient for these vehicles to be equipped with ESC, given that this is a common platform for which ESC systems are readily available today. We are allowing four years of lead time for all other truck tractors. These vehicles include two-axle vehicles, which have been more recently required to satisfy new, reduced minimum stopping

distance requirements, and severe-service tractors, for which we believe two additional years of lead time is necessary to design and test ESC systems.

This final rule is applicable to buses over 14,969 kilograms (33,000 pounds) GVWR manufactured more than three years after the date of this final rule. Although we proposed a two-year lead time for buses in the NPRM, the Motorcoach Enhanced Safety Act mandates that new rules, including stability enhancing technology, be applicable to all buses manufactured more than three years after publication of a final rule. However, for buses with a GVWR greater than 11,793 kilograms (26,000 pounds) but not more than 14,969 kilograms (33,000 pounds), we believe that three years of lead time is not feasible. Some of these buses include vehicles with body-on-frame construction and hydraulic brakes, for which ESC system availability is not as widespread. Therefore, we are allowing four years of lead time for buses with a GVWR greater than 11,793 kilograms (26,000 pounds) but not more than 14,969 kilograms (33,000 pounds). We believe that including buses with body-on-frame construction and hydraulic brakes in this final rule will spur development of ESC systems for other hydraulic-braked vehicles, including vehicles with a GVWR of greater than 4,536 kilograms (10,000 pounds) but not more than 11,793 kilograms (26,000 pounds), which are not covered by this rulemaking.

We have chosen an alternative performance test to demonstrate an ESC system's ability to mitigate roll instability to what was proposed. After considering the public comments and conducting additional track testing, we have determined that a 150-foot-radius J-turn test maneuver is an efficient means to ensure vehicles maintain roll stability. Like the test maneuver in the NPRM, the J-turn test maneuver is among those available to manufacturers to demonstrate compliance with the UNECE mandate for ESC on trucks and buses.

The J-turn test maneuver, based on an alternative test discussed in the NPRM, involves accelerating to a constant speed on a straight stretch of high-friction track before entering into a 150-foot radius curve. After entering the curve, the driver attempts to maintain the lane. At a speed that is up to 1.3 times the speed at which the ESC system activates, but in no case below 48.3 km/h (30 mph), an ESC system must activate the vehicle's service brakes to slow the vehicle's speed to 46.7 km/h (29 mph) within 3 seconds

<sup>2</sup> See Wang, Jing-Shiam, "Effectiveness of Stability Control Systems for Truck Tractors" (January 2011) (DOT HS 811 437); Docket No. NHTSA-2010-0034-0043.

<sup>1</sup> Pub. L. 112-141 (July 6, 2012).

after entering the curve and 45.1 km/h (28 mph) within 4 seconds after entering the curve. Additional J-turn tests are conducted to ensure that an ESC system is able to reduce engine torque.

The performance metric for the J-turn (reduction in forward speed) is easy to obtain and serves as a proxy for absolute lateral acceleration. Lateral acceleration on a fixed-radius curve is a function of forward velocity. On a 150-foot radius curve, a forward speed of 48.3 km/h (30 mph) corresponds to a lateral acceleration of approximately 0.4g. Based on prior NHTSA testing, we have found that 0.4g represents the margin of lateral stability on a typical fully loaded truck tractor with the loads having a high center of gravity (CG). That is, lateral acceleration levels greater than 0.4g (or forward speeds on a 150-foot radius curve of greater than 48.3 km/h (30 mph)) on a typical truck tractor are likely to lead to lateral instability, wheel lift, and possible rollover. However, lateral acceleration levels less than 0.4g (or forward speeds on a 150-foot radius curve of less than 48.3 km/h (30 mph)) on a typical truck tractor are unlikely to lead to lateral instability, wheel lift, and rollover.

This final rule includes a requirement proposed in the NPRM that an ESC system be able to mitigate yaw instability. This requirement is similar to one proposed in the NPRM, and adopted in this final rule, requiring an ESC system be able to mitigate understeer. However, this final rule does not include any performance test to evaluate the ability of an ESC system to mitigate yaw instability. Although the NPRM included the sine with dwell (SWD) maneuver to test both roll and yaw instability, we have decided not to include it in this final rule. The SWD maneuver is only a partial test of the ability to mitigate yaw instability. It tests an ESC system's ability to mitigate loss of control resulting from oversteer conditions, but not its ability to mitigate understeer, which is the most common loss-of-control scenario for heavy vehicles. NHTSA has been unable to develop a test for understeer mitigation. As argued by many commenters, performing the SWD maneuver entails substantial time and instrumentation burdens. We do not believe that this additional time and cost is justified solely to test an ESC system's ability to mitigate yaw instability caused by oversteer conditions when a majority of the benefits of this final rule are derived from rollover prevention and the majority of benefits attributed to prevented loss-of-control crashes in heavy vehicles are derived from understeer mitigation, which would not

have been tested in the SWD maneuver. However, we are continuing to examine possible yaw performance maneuvers, including the SWD maneuver, to test yaw stability performance in the future.

The decision to adopt the J-turn test maneuver as the performance test in this final rule has caused us to reconsider test conditions and equipment. However, many aspects of testing remain identical to the proposal. For example, we will conduct performance testing on a high-friction surface. We believe that the potential for variance in surface friction on a low-friction surface may introduce variabilities in ESC testing that may lead to inconsistent results. We are still equipping all test vehicles with outriggers and truck tractors with anti-jackknife systems for the safety of test drivers.

On the other hand, many proposed aspects of testing had to be modified to accommodate the J-turn test maneuver. Because the J-turn test maneuver is a path-following maneuver, we are not using a steering wheel controller that was proposed in the NPRM. We noted potential variabilities in the proposed specification for the control trailer. However, because the performance metric for the J-turn test maneuver is different than the proposed SWD requirements, those variabilities identified in the NPRM that were related to the SWD maneuver are no longer relevant. We have modified the loading condition to load the vehicle to its GVWR because that is the most severe test condition with the J-turn test maneuver. Finally, the number of sensors used in testing is substantially reduced because the vehicle's actual lateral acceleration throughout the maneuver does not need to be measured.

We have considered comments on the issue of allowing ESC system disablement. This final rule does not allow the driver to disable the ESC system at speeds higher than 20 km/h (12.4 mph), which we have defined as the minimum speed at which an ESC system must operate. Many of the comments we received arguing in favor of allowing ESC system disablement were, in fact, arguing for disablement of traction control to allow a vehicle to start moving on certain surfaces with low friction such as on snow, ice, or off-road conditions. However, we do not believe that an ESC system would prevent a heavy vehicle from moving in these circumstances. Rather, we believe that manufacturers may wish to disable an automatic traction control system to allow the vehicle to move. NHTSA does not require traction control systems, nor does NHTSA prohibit the installation of

an on/off switch for a traction control system. We understand that traction control systems are related to ESC systems in that they can control engine torque output and activate the brakes on individual wheel ends. However, we do not find these arguments to be a compelling reason to allow an ESC system deactivation switch or automatic deactivation of ESC systems at speeds above 20 km/h (12.4 mph).

This final rule requires that an ESC system be able to detect a malfunction and provide a driver with notification of a malfunction by means of a telltale. This requirement is similar to the malfunction detection and telltale requirements for light vehicles in FMVSS No. 126. After considering public comments, we have changed the vehicle depicted on the telltale to better represent the profile of a combination vehicle or bus rather than a passenger car.

Based on the agency's effectiveness estimates, this final rule will prevent 1,424 to 1,759 crashes per year resulting in 505 to 649 injuries and 40 to 49 fatalities. This final rule will also result in significant monetary savings as a result of the prevention of property damage and travel delays.

Without this final rule, we project that, in 2018, manufacturers would have equipped 33.9 percent of truck tractors with ESC systems, 21.3 percent of truck tractors would be equipped with RSC systems, and 80.0 percent of large buses would be equipped with ESC systems. Based on the agency's cost teardown study, the average ESC system cost is estimated to be \$585 for truck tractors and \$269 for large buses. The incremental cost of installing an ESC system in place of an RSC system on a truck tractor is estimated to be \$194. Based upon the agency's estimate that 150,000 truck tractors and 2,200 buses covered by this final rule will be manufactured annually, the agency estimates the total technology cost of this final rule to be approximately \$45.6 million.

This final rule is highly cost effective and beneficial. The net benefits of this final rule are estimated to range from \$412 to \$525 million at the 3 percent discount rate and \$312 to \$401 million at the 7 percent discount rate. The agency estimates that this rule will result in societal economic savings resulting from preventing crashes, reducing congestion, and preventing property damage, such that the net cost of this final rule range from \$3.6 to \$12.3 million at a 3 percent discount rate and from \$12.3 to \$19.2 million at 7 percent discount rate. As a result, the net cost per equivalent life saved ranges

from \$0.1 to \$0.3 million at the 3 percent discount rate and from \$0.3 to \$0.6 million at the 7 percent discount

rate. The costs and benefits of this rule are summarized in Table 1.

TABLE 1—ESTIMATED ANNUAL COST, BENEFITS, AND NET BENEFITS OF THE FINAL RULE  
[In millions of 2013 dollars]

	Vehicle costs	Societal economic savings	VSL savings	Total monetized savings	Cost per equivalent live saved	Net benefits
At 3% Discount .....	\$45.6	\$33.3–\$42.1	\$424–\$528	\$458–\$571	\$0.1–\$0.3	\$412–\$525
At 7% Discount .....	45.6	26.4–33.3	332–413	358–446	0.3–\$0.6	312–401

**II. Statutory Authority**

NHTSA is issuing this final rule under the National Traffic and Motor Vehicle Safety Act (“Motor Vehicle Safety Act”). Under 49 U.S.C. Chapter 301, Motor Vehicle Safety (49 U.S.C. 30101 *et seq.*), the Secretary of Transportation is responsible for prescribing motor vehicle safety standards that are practicable, meet the need for motor vehicle safety, and are stated in objective terms. “Motor vehicle safety” is defined in the Motor Vehicle Safety Act as “the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of accidents occurring because of the design, construction, or performance of a motor vehicle, and against unreasonable risk of death or injury in an accident, and includes nonoperational safety of a motor vehicle.” “Motor vehicle safety standard” means a minimum performance standard for motor vehicles or motor vehicle equipment. When prescribing such standards, the Secretary must consider all relevant, available motor vehicle safety information. The Secretary must also consider whether a standard is reasonable, practicable, and appropriate for the types of motor vehicles or motor vehicle equipment for which it is prescribed and the extent to which the standard will further the statutory purpose of reducing traffic accidents and associated deaths. The responsibility for promulgation of Federal motor vehicle safety standards is delegated to NHTSA.

On July 6, 2012, President Obama signed MAP–21, which incorporated in Subtitle G the “Motorcoach Enhanced Safety Act of 2012.” Section 32703(b)(3) of the Act states that, not later than two years after the date of enactment of the Act, the Secretary shall consider requiring motorcoaches to be equipped with stability enhancing technology, such as electronic stability control and torque vectoring, to reduce the number and frequency of rollover crashes of

motorcoaches. The Secretary was directed to prescribe regulations that address stability enhancing technology if the Secretary determines that such standards meet the requirements and considerations set forth in subsections (a) and (b) of 49 U.S.C. 30111. These requirements are discussed in the preceding paragraph.

The Motorcoach Enhanced Safety Act directs the Secretary to consider various other motorcoach rulemakings, in provided timeframes, related to safety belts,<sup>3</sup> improved roof support standards, advanced glazing standards and other portal improvements to prevent partial and complete ejection of motorcoach passengers, tire pressure monitoring systems, and tire performance standards. The Act also includes provisions on fire research, interior impact protection, enhanced seating designs, and collision avoidance systems, and the consideration of rulemaking based on such research. There also are provisions in the Motorcoach Enhanced Safety Act relating to improved oversight of motorcoach service providers, including enhancements to driver licensing and training programs and motorcoach inspection programs.

In section 32702, “Definitions,” of the Motorcoach Enhanced Safety Act, the Act states at section 32702(6) that “the term ‘motorcoach’ has the meaning given the term ‘over-the-road bus’ in section 3038(a)(3) of the Transportation Equity Act for the 21st Century (TEA–21) (49 U.S.C. 5310 note), but does not include a bus used in public transportation provided by, or on behalf of, a public transportation agency; or a school bus, including a multifunction school activity bus.” Section 3038(a)(3) states: “The term ‘over-the-road bus’ means a bus characterized by an

elevated passenger deck located over a baggage compartment.”

Under section 32703(e)(1) of the Motorcoach Enhanced Safety Act, any regulation prescribed in accordance with section 32703(b) (and several other subsections) shall apply to all motorcoaches manufactured more than three years after the date on which the regulation is published as a final rule, take into account the impact to seating capacity of changes to size and weight of motorcoaches and the ability to comply with State and Federal size and weight requirements, and be based on the best available science.

Prior to enactment of the Motorcoach Enhanced Safety Act, the agency’s May 23, 2012 NPRM proposed requiring truck tractors and large buses with a GVWR of greater than 11,793 kg (26,000 lb.) to be equipped with stability enhancing technology. Thus, the agency had already considered requiring motorcoaches to have stability enhancing technology, and had proposed requiring the same, prior to the enactment of the Motorcoach Enhanced Safety Act.

The agency does not interpret the Motorcoach Enhanced Safety Act on its own as a mandate to require stability enhancing technology on over-the-road buses. With respect to rollover crash avoidance, section 32703(b)(3) of the Motorcoach Enhanced Safety Act directs the agency to “consider requiring” stability enhancing technology such as electronic stability control or torque vectoring on over-the-road buses. However, the agency was also directed in section 32703(b) to prescribe a regulation if the Secretary determines that such standards meet the requirements and considerations for issuing a motor vehicle safety standard under the Motor Vehicle Safety Act. The Motorcoach Enhanced Safety Act does not provide independent statutory authority to require stability enhancing technologies on over-the-road buses.<sup>4</sup>

<sup>3</sup> Pursuant to the Motor Vehicle Safety Act and the Motorcoach Enhanced Safety Act, NHTSA published a final rule requiring lap/shoulder seat belts for each passenger seating position on all new over-the-road buses, and in new buses other than over-the-road buses with a GVWR greater than 11,793 kilograms (26,000 pounds) beginning on November 26, 2016. 78 FR 70415 (Nov. 25, 2013).

<sup>4</sup> In contrast, the Motorcoach Enhanced Safety Act specifically mandated that the agency prescribe

Thus, any mandate requiring stability enhancing technology pursuant to the Motorcoach Enhanced Safety Act is dependent on satisfying the considerations and requirements of the Motor Vehicle Safety Act.

In issuing this final rule, we took into account the considerations of section 32703(e)(1) of the Motorcoach Enhanced Safety Act regarding the implementation of regulations prescribed in accordance with subsection (b)(3). Unlike subsection (b)(3), subsection (e)(1) does not use permissive language. Because this final rule is issued in accordance with subsection (b)(3), we believe the considerations regarding the application of regulations in subsection (e)(1) must be addressed in this rulemaking. Nonetheless, because the Motorcoach Enhanced Safety Act contains no independent statutory authority in support of a mandate for stability enhancing technology, the considerations in subsection (e)(1) are constrained by the agency's authority to issue standards under the Motor Vehicle Safety Act. Therefore, where the considerations in subsection (e)(1) conflict with any requirements and considerations set forth in subsections (a) and (b) of 49 U.S.C. 30111, the requirements of the Motor Vehicle Safety Act supersede the Motorcoach Enhanced Safety Act.<sup>5</sup>

This final rule is practicable, meets a need for motor vehicle safety, and is stated in objective terms. With respect to the considerations of the Motorcoach Enhanced Safety Act, we believe that Congress intended that a final rule based on the 2012 NPRM would complete the rulemaking proceeding specified in section 32703(b)(3) of the Act. Electronic stability control will reduce the number and frequency of rollover crashes of motorcoaches. This rulemaking is based on the best available science. Further, we have considered the impact to seating capacity and changes to size and weight of motorcoaches, and we believe that this rule will have no effect on these considerations. ESC systems will add less than 10 pounds of additional weight to over-the-road buses.<sup>6</sup>

Although the Motorcoach Enhanced Safety Act also suggested torque vectoring as a possible technology to consider requiring on motorcoaches, we did not propose requiring torque vectoring in the May 2012 NPRM, and it is beyond the scope of this rulemaking

proceeding. Even if it was within scope to require torque vectoring, the agency would not do so in this rulemaking. The agency's understanding of torque vectoring is that it is a technology that allows a vehicle's differential or brakes to vary the power supplied to the drive axle wheel end. In contrast, ESC systems activate the vehicle's service brakes to vary the braking on each wheel end combined with the ability to reduce engine torque (which reduces power on drive axle wheel ends). In the May 2012 NPRM, we noted that, all things being equal, a vehicle entering a curve at a higher speed is more likely to roll over than a vehicle entering a curve at a lower speed.<sup>7</sup> Once a vehicle is about to enter a curve at a high enough speed that would generate sufficient lateral acceleration to cause a possible rollover, the most effective manner to vary the individual wheel speeds in an attempt to prevent the rollover is primarily through the activation of a vehicle's service brakes along with the decrease in engine power and the use of engine braking. Torque vectoring systems that are differential-based would not provide adequate braking power and would be less effective than ESC at slowing a vehicle down to allow it to maneuver a curve without rolling over. Likewise, brake-based torque vectoring systems would be less effective than ESC for braking in a curve. In brake-based systems, the inside wheels are braked during cornering in order to prevent any loss of traction, which could result because there is less weight on those wheel during cornering. ESC provides braking to both the inside and outside wheels of the vehicle resulting in better brake performance.

### III. Background

In the NPRM, we provided a detailed explanation of how rollovers occur, how stability control technologies such as roll stability control and electronic stability control function and reduce rollover, examples of situations in which stability control systems may not be effective, and the differences between stability enhancing technology on light vehicles and heavy vehicles.<sup>8</sup> This section is a summary of that information.

A turning maneuver initiated by the driver's steering input results in a vehicle response that can be broken down into two phases. As the steering

wheel is turned, the displacement of the front wheels generates a slip angle at the front wheels and a lateral force is generated. That lateral force leads to vehicle rotation, and the vehicle starts rotating about its center of gravity. Then, the vehicle's yaw causes the rear wheels to experience a slip angle. That causes a lateral force to be generated at the rear tires, which causes vehicle rotation. All of these actions establish a steady-state turn in which lateral acceleration and yaw rate are constant. In combination vehicles, which typically consist of a tractor towing a trailer, an additional phase is the turning response of the trailer, which is similar to, but slightly delayed, when compared to the turning response of the tractor.

If the lateral forces generated at either the front or the rear wheels exceed the friction limits between the road surface and the tires, the result will be a vehicle loss-of-control in the form of severe understeer (loss of traction at the steer tires) or severe oversteer (loss of traction at the rear tires). In a combination vehicle, a loss of traction at the trailer wheels would result in the trailer swinging out of its intended path. Conversely, rollover conditions occur on a vehicle when high lateral forces are generated at the tires from steering or sliding and result in a vehicle lateral acceleration that exceeds the rollover threshold of the vehicle.

High lateral acceleration is one of the primary causes of rollovers. Figure 1 depicts a simplified untripped rollover condition. As shown, when the lateral force (*i.e.*, lateral acceleration) is sufficiently large and exceeds the roll stability threshold of the tractor-trailer combination vehicle, the vehicle will roll over. Many factors related to the drivers' maneuvers, heavy vehicle loading conditions, vehicle handling characteristics, roadway design, and road surface properties would result in various lateral accelerations and influences on the rollover propensity of a vehicle. For example, given other factors are equal, a vehicle entering a curve at a higher speed has a higher lateral acceleration and, as a result, is more likely to roll than a vehicle entering the curve at a lower speed. Also, transporting a high-CG load would increase the rollover probability more than transporting a relatively lower CG load.

regulations requiring safety belts to be installed at each designated seating position on all over-the-road buses.

<sup>5</sup> See section IX.B below for such a finding with respect to the application of this final rule to buses

with a GVWR of 14,969 kilograms (33,000 pounds) or less.

<sup>6</sup> "Report: Cost and Weight Analysis of Electronic Stability Control (ESC) and Roll Stability Control

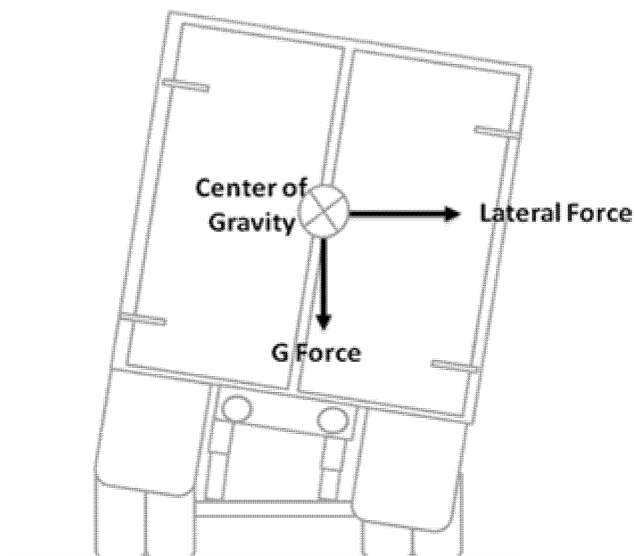
for Heavy Trucks," Docket No. NHTSA-2011-0066-0034.

<sup>7</sup> 77 FR 30771.

<sup>8</sup> 77 FR 30771-74.



Figure 1: Rollover Condition



Stability control technologies help a driver maintain directional control and help to reduce roll instability. Two types of heavy vehicle stability control technologies have been developed. One such technology is roll stability control or RSC. RSC systems are available for truck tractors and for trailers. A tractor-based RSC system consists of an electronic control unit (ECU) that is mounted on a vehicle and continually monitors the vehicle's speed and lateral acceleration based on an accelerometer, and estimates vehicle mass based on engine torque information.<sup>9</sup> The ECU continuously estimates the roll stability threshold of a vehicle, which is the lateral acceleration above which a combination vehicle will roll over. When the vehicle's lateral acceleration approaches the roll stability threshold, the RSC system intervenes. Depending on how quickly the vehicle is approaching the estimated rollover threshold, the RSC system intervenes by one or more of the following actions: Decreasing engine power, using engine braking, applying the tractor's drive-axle brakes, or applying the trailer's brakes. When RSC systems apply the trailer's brakes, they use a pulse modulation protocol to prevent wheel lockup because tractor stability control systems

cannot currently detect whether or not the trailer is equipped with ABS.

An RSC system can reduce rollovers, but is not designed to help to maintain directional control of a truck tractor. Nevertheless, RSC systems may provide some additional ability to maintain directional control in some scenarios, such as in a low-center-of-gravity scenario, where an increase in a lateral acceleration may lead to yaw instability rather than roll instability.

In comparison, a trailer-based RSC system has an ECU mounted on the trailer, which typically monitors the trailer's wheel speeds, the trailer's suspension to estimate the trailer's loading condition, and the trailer's lateral acceleration. A trailer-based RSC system works similarly to a tractor-based system. However, a trailer-based RSC system can only apply the trailer brakes to slow a combination vehicle, whereas a tractor-based RSC system can apply brakes on both the tractor and trailer.

The other type of stability control systems available for truck tractors and large buses is an ESC system. An ESC system incorporates all of the inputs of an RSC system. However, it also has two additional sensors to monitor a vehicle for loss of directional control, which may result due to either understeer or oversteer. The first additional sensor is

a steering wheel angle sensor, which senses the driver's steering input.<sup>10 11</sup> The other is a yaw rate sensor, which measures the actual turning movement of the vehicle. These system inputs are monitored by the system's ECU, which estimates when the vehicle's directional response begins to deviate from the driver's steering command, either by oversteer or understeer. An ESC system intervenes to restore directional control by taking one or more of the following actions: Decreasing engine power, using engine braking, selectively applying the brakes on the truck tractor to create a counter-yaw moment to turn the vehicle back to its steered direction, or applying the brakes on the trailer. An ESC system enhances the RSC functions because it has the added information from the steering wheel angle and yaw rate sensors, as well as more braking power because of its additional capability to apply the tractor's steer axle brakes.<sup>12</sup>

Figure 2 illustrates the oversteering and understeering conditions. While Figure 2 may suggest that a particular vehicle loses control due to either oversteer or understeer, it is quite possible that a vehicle could require both understeering and oversteering interventions during progressive phases of a complex crash avoidance maneuver such as a double lane change.

<sup>9</sup>RSC systems are not presently available for large buses.

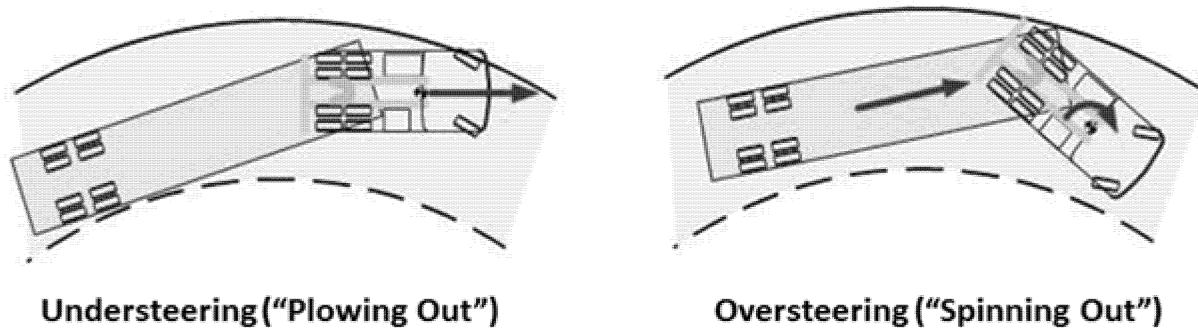
<sup>10</sup>Because ESC systems must monitor steering inputs from the tractor, ESC systems are not available for trailers.

<sup>11</sup>Some RSC systems also use a steering wheel angle sensor, which allows the system to identify potential roll instability events earlier.

<sup>12</sup>This is a design strategy to avoid the unintended consequences of applying the brakes on

the steering axle without knowing where the driver is steering the vehicle.

Figure 2: Loss-of-Control Conditions



**Understeering.** The left side of Figure 2 shows a truck tractor whose driver has lost directional control during an attempt to drive around a right curve. The ESC system momentarily applies the right rear brake, creating a clockwise rotational force, to turn the heading of the vehicle back to the correct path. It will also reduce engine power to gently slow the vehicle and, if necessary, apply additional brakes (while maintaining the uneven brake force to create the necessary yaw moment).

**Oversteering.** The right side of Figure 2 shows that the truck tractor whose driver has lost directional control during an attempt to drive around a right curve. In a vehicle equipped with ESC, the system immediately detects that the vehicle's heading is changing more quickly than appropriate for the driver's intended path (*i.e.*, the yaw rate is too high). To counter the clockwise rotation of the vehicle, it momentarily applies the left front brake, thus creating a counter-clockwise counter-rotational force and turning the heading of the vehicle back to the correct path. It will also reduce engine power to gently slow the vehicle and, if necessary, apply additional brakes (while maintaining the uneven brake force to create the necessary yaw moment). The ESC activation can be so subtle that the driver does not perceive the need for steering corrections.

A stability control system will not prevent all rollover and loss-of-control crashes. A stability control system has the capability to prevent many untripped on-road rollovers and first-event loss-of-control events. Nevertheless, there are real-world situations in which stability control systems may not be as effective in avoiding a potential crash. Such situations include:

- Off-road maneuvers in which a vehicle departs the roadway and encounters a steep incline or an unpaved surface that significantly

reduces the predictability of the vehicle's handling

- Entry speeds that are much too high for a curved roadway or entrance/exit ramp
- Cargo load shifts or liquid sloshing within the trailer during a steering maneuver
- Vehicle tripped by a curb or other roadside object or barrier
- Truck rollovers that are the result of collisions with other motor vehicles
- Inoperative antilock braking systems—the performance of stability control systems depends on the proper functioning of ABS
- Brakes that are out-of-adjustment or other defects or malfunctions in the ESC, RSC, or brake system.
- Maneuvers during tire tread separation or sudden tire deflation events.

On April 6, 2007, the agency published a final rule that established FMVSS No. 126, *Electronic Stability Control Systems*, which requires all passenger cars, multipurpose passenger vehicles, trucks and buses with a GVWR of 4,536 kg (10,000 lb.) or less to be equipped with an electronic stability control system beginning in model year 2012.<sup>13</sup> The system must be capable of applying brake torques individually at all four wheels, and must comply with the performance criteria established for stability and responsiveness when subjected to the sine with dwell steering maneuver test. For light vehicles, the focus of the FMVSS No. 126 is on addressing yaw instability, which can assist the driver in preventing the vehicle from leaving the roadway, thereby preventing fatalities and injuries associated with crashes involving tripped rollover, which often occur when light vehicles run off the road. The standard does not include any equipment or performance requirements for roll stability.

The dynamics of light vehicles and heavy vehicles differ in many respects.

First, on light vehicles, the yaw stability threshold is typically lower than the roll stability threshold. This means that a light vehicle making a crash avoidance maneuver, such as a lane change on a dry road, is more likely to reach its yaw stability threshold and lose directional control before it reaches its roll stability threshold and rolls over. On a heavy vehicle, however, the roll stability threshold is lower than the yaw stability threshold in most operating conditions, primarily because of its higher center-of-gravity height.<sup>14</sup> As a result, there is a greater propensity for a heavy vehicle, particularly in a loaded condition, to roll during a severe crash avoidance maneuver or when negotiating a curve, than to become yaw unstable, as compared with light vehicles.

Second, a tractor-trailer combination unit is comprised of a power unit and one or more trailing units with one or more articulation points. In contrast, although a light vehicle may occasionally tow a trailer, a light vehicle is usually a single rigid unit. The tractor and the trailer have different center-of-gravity heights and different lateral acceleration threshold limits for rollover. A combination vehicle rollover frequently begins with the trailer where the rollover is initiated by trailer wheel lift.

Third, due to greater length, mass, and mass moments of inertia of heavy vehicles, they respond more slowly to steering inputs than do light vehicles. The longer wheelbase of a heavy vehicle, compared with a light vehicle, results in a slower response time, which gives the stability control system the opportunity to intervene and prevent rollovers.

Finally, the larger number of wheels on a heavy vehicle, as compared to a light vehicle, makes heavy vehicles less

<sup>14</sup> One instance where a heavy vehicle's yaw stability threshold might be higher than its roll stability threshold is in an unloaded condition on a low-friction road surface.

likely to become yaw unstable on dry road surface conditions.

#### IV. Safety Need

##### A. Heavy Vehicle Crash Problem

This section presents data on the safety problem associated with rollover and loss of control of heavy vehicles. The information has been updated from similar information contained in the NPRM. For the specific target population used to support the agency's system effectiveness and estimated benefits, see Section XIV.

The *Traffic Safety Facts 2012* reports that tractor trailer combination vehicles are involved in about 72 percent of the fatal crashes involving large trucks, annually.<sup>15</sup> According to FMCSA's *Large Truck and Bus Crash Facts 2011*, these vehicles had a fatal crash involvement rate of 1.46 crashes per 100 million vehicle miles traveled during 2011, whereas single-unit trucks had a fatal crash involvement rate of 1.00 crashes per 100 million vehicle miles traveled.<sup>16</sup> Combination vehicles represent about 24 percent of large trucks registered but travel 61 percent of the large truck miles, annually. Traffic tie-ups resulting from loss-of-control and rollover crashes also contribute to in millions of dollars of lost productivity and excess energy consumption each year.

According to *Traffic Safety Facts 2012*, the overall crash problem for tractor trailer combination vehicles in that year was approximately 180,000 crashes, 42,000 of which involve injury. The overall crash problem for single-unit trucks is nearly as large—in 2012, there were approximately 154,000 crashes, 35,000 of which were injury crashes. However, the fatal crash involvement for truck tractors is much higher. In 2011, there were 2,736 fatal combination truck crashes and 1,066 fatal single-unit truck crashes.

The rollover crash problem for combination trucks is much greater than for single-unit trucks. In 2011, there were approximately 8,000 crashes involving combination truck rollover and 5,000 crashes involving single-unit truck rollover. As a percentage of all crashes, combination trucks are involved in rollover crashes at a higher rate compared to single-unit trucks. Approximately 4.6 percent of all combination truck crashes were rollovers, but 3.2 percent of single-unit truck crashes were rollovers.

<sup>15</sup> DOT HS 812 032, available at <http://www.nrd.nhtsa.dot.gov/Pubs/812032.pdf>.

<sup>16</sup> FMCSA–RRA–13–049 (Oct. 2013), available at <http://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/LargeTruckandBusCrashFacts2011.pdf>.

Combination trucks were involved in 3,000 injury crashes and 373 fatal crashes, and single-unit trucks were involved in 3,000 injury crashes and 194 fatal crashes.

According to FMCSA's *Large Truck and Bus Crash Facts 2011*, cross-country intercity buses were involved in 39 of the 242 fatal bus crashes in 2011. The bus types presented in the crash data include school buses, cross-country intercity buses, transit buses, van-based buses, and other buses. From 2002 to 2011, cross-country intercity buses, on average, accounted for approximately 12 percent of all buses involved in fatal crashes, whereas transit buses and school buses accounted for 34 percent and 40 percent, respectively, of all buses involved in fatal crashes. However, most of the transit bus and school bus crashes are not rollover or loss-of-control crashes that ESC systems are capable of preventing. Fatal rollover and loss-of-control crashes are a subset of these crashes.

There are many more fatalities in buses with a GVWR greater than 11,793 kg (26,000 lb.) compared to buses with a GVWR between 4,536 kg and 11,793 kg (10,000 lb. and 26,000 lb.).<sup>17</sup> In the 10-year period between 2000 and 2009, there were 42 fatalities on buses with a GVWR between 4,536 kg and 11,793 kg (10,000 lb. and 26,000 lb.) compared to 209 fatalities on buses with a GVWR greater than 11,793 kg (26,000 lb.). Among buses with a GVWR of greater than 11,793 kg (26,000 lb.), over 70 percent of the fatalities were cross-country intercity bus occupants, "other buses," and "unknown buses."<sup>18</sup> Thus, although these buses are only involved in 12 percent of fatal crashes involving buses, they represent the majority of fatalities from bus crashes.

Furthermore, the size of the rollover crash problem for cross-country intercity buses is greater than in other buses. According to FARS data from 2000 to 2009, there were 114 occupant fatalities as a result of rollover events on cross-country intercity buses, "other buses," and "unknown buses" with a GVWR of greater than 11,793 kg (26,000 lb.), which represents 55 percent of bus fatalities on those bus types.

<sup>17</sup> This data was taken from the FARS database and was presented in the final rule requiring that seat belts be installed on certain buses. See 78 FR 70415, 70423–26 (Nov. 25, 2013).

<sup>18</sup> The FARS database has five bus body type categories: (1) Cross-country/intercity bus, (2) transit bus, (3) school bus, (4) other bus, and (5) unknown bus. Transit bus and school bus body types were excluded from the analysis because they are easily recognized and categorized as such by crash investigators and those coding the FARS data. Thus, those vehicles are unlikely to be miscoded as other buses.

##### B. Contributing Factors in Rollover and Loss-of-Control Crashes

Many factors related to heavy vehicle operation, as well as factors related to roadway design and road surface properties, can cause heavy vehicles to become yaw unstable or to roll. Listed below are several real-world situations in which stability control systems may prevent or lessen the severity of such crashes.

- Speed too high to negotiate a curve—The entry speed of vehicle is too high to safely negotiate a curve. When the lateral acceleration of a vehicle during a steering maneuver exceeds the vehicle's roll or yaw stability threshold, a rollover or loss of control is initiated. Curves can present both roll and yaw instability issues to these types of vehicles due to varying heights of loads (low versus high, empty versus full) and road surface friction levels (e.g., wet, dry, icy, snowy).

- Road design configuration—Some drivers may misjudge the curvature of ramps and not brake sufficiently to negotiate the curve safely. This includes driving on ramps with decreasing radius curves as well as operating on curves and ramps with improper signage. A vehicle traveling on a curve with a decrease in super-elevation (banking) at the end of a ramp where it merges with the roadway causes an increase in vehicle lateral acceleration, which may increase even more if the driver accelerates the vehicle in preparation to merge.

- Sudden steering maneuvers to avoid a crash—The driver makes an abrupt steering maneuver, such as a single- or double-lane-change maneuver, or attempts to perform an off-road recovery maneuver, generating a lateral acceleration that is sufficiently high to cause roll or yaw instability. Maneuvering a vehicle on off-road, unpaved surfaces such as grass or gravel may require a larger steering input (larger wheel slip angle) to achieve a given vehicle response, and this can lead to a large increase in lateral acceleration once the vehicle returns to the paved surface. This increase in lateral acceleration can cause the vehicle to exceed its roll or yaw stability threshold.

- Loading conditions—A loss of yaw stability due to severe over-steering is more likely to occur when a vehicle is in a lightly loaded condition and has a lower center-of-gravity height than it would have when fully loaded. Heavy vehicle rollovers are much more likely to occur when the vehicle is in a fully loaded condition, which results in a high center of gravity for the vehicle.

Cargo placed off-center in the trailer may result in the vehicle being less stable in one direction than in the other. It is also possible that improperly secured cargo can shift while the vehicle is negotiating a curve, thereby reducing roll or yaw stability. Sloshing can occur in tankers transporting liquid bulk cargoes, which is of particular concern when the tank is partially full because the vehicle may experience significantly reduced roll stability during certain maneuvers.

- Road surface conditions—The road surface condition can also play a role in the loss of control a vehicle experiences. On a dry, high-friction asphalt or concrete surface, a tractor trailer combination vehicle executing a severe turning maneuver is likely to experience a high lateral acceleration, which may lead to roll or yaw instability. However, a similar maneuver performed on a wet or slippery road surface is not as likely to experience the high lateral acceleration because of less available tire traction. Hence, the vehicle is more likely to be yaw unstable than roll unstable.

#### C. NTSB Safety Recommendations

The National Transportation Safety Board (NTSB) has issued several safety recommendations relevant to ESC systems on heavy and other vehicles. One is H-08-15, which addresses ESC systems and collision warning systems with active braking on commercial vehicles. Recommendations H-11-07 and H-11-08 specifically address stability control systems on commercial motor vehicles and buses with a GVWR above 10,000 pounds. Two other safety recommendations, H-01-06 and H-01-07, relate to adaptive cruise control and collision warning systems on commercial vehicles and are indirectly related to ESC on heavy vehicles because these technologies require the ability to apply brakes without driver input.

- H-08-15: Determine whether equipping commercial vehicles with collision warning systems with active braking<sup>19</sup> and electronic stability control systems will reduce commercial vehicle accidents. If these technologies are determined to be effective in reducing accidents, require their use on commercial vehicles.

- H-11-07: Develop stability control system performance standards for all commercial motor vehicles and buses with a gross vehicle weight rating greater than 10,000 pounds, regardless

of whether the vehicles are equipped with a hydraulic or pneumatic brake system.

- H-11-08: Once the performance standards from Safety Recommendation H-11-07 have been developed, require the installation of stability control systems on all newly manufactured commercial vehicles with a GVWR greater than 10,000 pounds.

#### D. Motorcoach Safety Plan

In November 2009, the U.S. Department of Transportation Motorcoach Safety Action Plan was issued.<sup>20</sup> Among other things, the Motorcoach Safety Action Plan includes an action item for NHTSA to assess the safety benefits for stability control on large buses and develop objective performance standards for these systems.<sup>21</sup> Consistent with that plan, NHTSA made a decision to pursue a stability control requirement for large buses.

In March 2011, NHTSA issued its latest Vehicle Safety and Fuel Economy Rulemaking and Research Priority Plan (Priority Plan).<sup>22</sup> The Priority Plan describes the agency plans for rulemaking and research for calendar years 2011 to 2013. The Priority Plan includes stability control on truck tractors and large buses, and states that the agency plans to develop test procedures for a Federal motor vehicle safety standard on stability control for truck tractors, with the countermeasures of roll stability control and electronic stability control, which are aimed at addressing rollover and loss-of-control crashes.

#### E. International Regulation

The United Nations (UN) Economic Commission for Europe (ECE) Regulation 13, Uniform Provisions Concerning the Approval of Vehicles of Categories M, N and O with Regard to Braking, has been amended to include Annex 21, *Special Requirements for Vehicles Equipped with a Vehicle Stability Function*. Annex 21's requirements apply to trucks with a GVWR greater than 3,500 kg (7,716 lb.), buses with a seating capacity of 10 or more (including the driver), and trailers with a GVWR greater than 3,500 kg (7,716 lb.). Trucks and buses are required to be equipped with a stability system that includes rollover control and directional control, while trailers are required to have a stability system that includes only rollover control. The directional control function must be

demonstrated in one of eight tests, and the rollover control function must be demonstrated in one of two tests. For compliance purposes, the ECE regulation requires a road test to be performed with the function enabled and disabled, or as an alternative, accepts results from a computer simulation. No test procedure or pass/fail criterion is included in the regulation, but it is left to the discretion of the Type Approval Testing Authority in agreement with the vehicle manufacturer to show that the system is functional. The implementation date of Annex 21 was 2012 for most vehicles, with a phase-in based on the vehicle type.

#### V. Summary of the May 2012 NPRM

Since 2006, the agency has been involved in testing truck tractors and large buses with stability control systems. To evaluate these systems, NHTSA sponsored studies of crash data in order to examine the potential safety benefits of stability control systems. NHTSA and industry representatives separately evaluated data on dynamic test maneuvers. At the same time, the agency launched a three-phase testing program to improve its understanding of how stability control systems in truck tractors and buses work and to develop dynamic test maneuvers to challenge roll propensity and yaw stability. By combining the studies of the crash data with the testing data, the agency is able to evaluate the potential effectiveness of stability control systems for truck tractors and large buses.

The agency conducted a three-phase testing program for truck tractors and large buses that was described at length in the NPRM and in published reports in order to develop one or more test maneuvers to ensure that ESC systems can reduce vehicle instability. As a result of the agency's testing program and the test data received from industry, the agency was able to develop reliable and repeatable test maneuvers that could demonstrate a stability control system's ability to prevent rollover and loss of directional control among the varied configurations of truck tractors and buses in the fleet.

After considering and evaluating several test maneuvers, the agency proposed using two test maneuvers for performance testing: The slowly increasing steer (SIS) maneuver and the sine with dwell (SWD) maneuver. The SIS maneuver is a characterization maneuver used to determine the amount of steering input required by the SWD maneuver. By determining the relationship between a vehicle's steering wheel angle and the lateral acceleration,

<sup>19</sup> Active braking involves using the vehicle's brakes to maintain a certain, preset distance between vehicles.

<sup>20</sup> See *supra*, note 6.

<sup>21</sup> *Id.* at 28–29.

<sup>22</sup> See Docket No. NHTSA-2009-0108-0032.

the SIS maneuver normalizes the severity of the SWD maneuver. The SIS maneuver was also proposed to be used to ensure that the system has the ability to reduce engine torque.

Using a steering wheel angle derived from the SIS maneuver, the agency proposed conducting the sine with dwell maneuver. The SWD test maneuver challenges both roll and yaw stability by subjecting the vehicle to a sinusoidal input. This maneuver would be repeated for two series of test runs (first in the counterclockwise direction and then in the clockwise direction) at several target steering wheel angles from 30 to 130 percent of the angle derived in the SIS maneuver.

We proposed measuring, recording, and processing lateral acceleration, yaw rate, and engine torque data derived from the SIS and SWD maneuvers to determine four performance metrics: Lateral acceleration ratio (LAR), yaw rate ratio (YRR), lateral displacement, and engine torque reduction. The LAR and YRR metrics ensure that the system reduces lateral acceleration and yaw rate, respectively, after an aggressive steering input, thereby preventing rollover and loss of control, respectively. The lateral displacement metric ensures that the stability control system is not set to intervene solely by making the vehicle nonresponsive to driver input. The engine torque reduction metric ensures that the system has the capability to automatically reduce engine torque in response to high lateral acceleration and yaw rate conditions.

The agency also considered several test maneuvers based on its own work and that of industry. In particular, the agency's research included both a J-turn maneuver and a ramp steer maneuver (RSM) for evaluating roll stability. The J-turn maneuver is a path-following maneuver where a vehicle is driven on a test course consisting of a straight lane

followed by a fixed radius curve. The steering wheel angle is determined by the driver making adjustments and corrections to maintain the fixed path. In the RSM maneuver, a vehicle is driven at a constant speed and a steering wheel input that is based on the steering wheel angle derived from the SIS maneuver. The steering wheel angle is then held for a period of time before it is returned to zero. In both the J-turn and RSM maneuvers, a stability control system acts to reduce lateral acceleration, and thereby wheel lift and roll instability, by applying selective braking. A vehicle without a stability control system being tested with these maneuvers would exhibit high levels of lateral acceleration and potentially experience wheel lift or rollover.

The NPRM also set forth the test conditions that the agency would use to ensure safety and demonstrate sufficient performance. All vehicles were proposed to be tested using outriggers for the safety of the test driver. The agency proposed using an automated steering controller for the RSM, SIS, and SWD maneuvers to ensure reproducible and repeatable test execution performance. The agency proposed testing truck tractors with an unbraked control trailer to eliminate the effect of the trailer's brakes on testing. The agency also proposed a test to ensure that system malfunction is detected.

The NPRM proposed that a final rule would take effect for most truck tractors and applicable buses produced two years after publication of a final rule. We stated that two years of lead time would be necessary to ensure sufficient availability of stability control systems from suppliers of these systems and to complete necessary engineering on all vehicles. For three-axle tractors with one drive axle, tractors with four or more axles, and severe service tractors, we proposed allowing two years of additional lead time. We stated this

additional time would be necessary to develop, test, and equip these vehicles with ESC systems. Although the agency has statutory authority to require retrofitting of in-service truck tractors, trailers, and large buses, the agency did not propose to require retrofitting, but sought comment on its feasibility, given the integrated aspects of a stability control system.

**VI. Overview of the Comments**

This section presents a brief overview of the comments received in response to the NPRM. The comments are addressed in detail in the section related to the subject of the comment. However, those comments that merely advocated the adoption or rejection of the proposal or some aspect thereof without any underlying explanation are not addressed further.

We also conducted a public hearing on July 24, 2012 in Washington, D.C.<sup>23</sup> Summaries of the oral testimony and a transcript of the hearing are both available in the docket.<sup>24</sup> Although we have considered the public hearing testimony as if it was a written comment received in the docket, much of the testimony was duplicated in the written comments. We have discussed public hearing testimony below only where that testimony was not reflected in written comments received by the agency.

In addition to the comments received at the public hearing, we received written comments from 43 individuals or entities. The commenters represented wide-ranging interests, including individuals, truck drivers, truck fleet operators, vehicle component manufacturers, truck and bus manufacturers, and safety advocacy organizations. The identity of the 46 commenters, their self-identified interest or affiliation, if given, where the comments can be located in the docket are cited in Table 2.<sup>25</sup>

TABLE 2—LIST OF COMMENTERS AND LOCATION OF COMMENTS IN THE DOCKET

Commenter	Docket Number
Vehicle Manufacturers:	
Blue Bird Body Company (Blue Bird) .....	NHTSA-2012-0065-0034
Daimler Trucks North America LLC (Daimler) .....	NHTSA-2012-0065-0028
EvoBus GmbH .....	NHTSA-2012-0065-0027
Fire Apparatus Manufacturer's Association .....	NHTSA-2012-0065-0014
Navistar, Inc. ....	NHTSA-2012-0065-0039
Schneider National Inc. (Schneider) .....	NHTSA-2012-0065-0033
Temsa Global (Temsa) .....	NHTSA-2012-0065-0019
Truck & Engine Manufacturers Association (EMA) .....	NHTSA-2012-0065-0044
Volvo Group .....	NHTSA-2012-0065-0031

<sup>23</sup> Notice of the hearing was published in the Federal Register on July 2, 2012. 77 FR 39206.

<sup>24</sup> Summaries of the oral testimony provided by the presenters are contained in Docket No. NHTSA-

2012-0065-0049. A transcript of the public hearing is contained in Docket No. NHTSA-2012-0065-0056.

<sup>25</sup> Three commenters presented comments only at the public hearing.

TABLE 2—LIST OF COMMENTERS AND LOCATION OF COMMENTS IN THE DOCKET—Continued

Commenter	Docket Number
<b>Component Manufacturers:</b>	
Bendix Commercial Vehicle Systems .....	NHTSA-2012-0065-0046
	NHTSA-2012-0065-0048
	NHTSA-2012-0065-0055
Heavy Duty Brake Manufacturers Council (HDBMC) .....	NHTSA-2012-0065-0041
Meritor WABCO .....	NHTSA-2012-0065-0035
Robert Bosch LLC (Bosch) .....	NHTSA-2012-0065-0036
<b>Drivers and Fleet Operators:</b>	
American Trucking Associations, Inc. (ATA), including report of the American Transportation Research Institute (ATRI) .....	NHTSA-2012-0065-0016
	NHTSA-2012-0065-0030
	NHTSA-2012-0065-0057
Associated Logging Contractors—Idaho .....	NHTSA-2012-0065-0042
John Boyle .....	NHTSA-2012-0065-0017
Jim Burg, James Burg Trucking Company .....	NHTSA-2012-0065-0056
	(public hearing)
John H. Hill, The Hill Group .....	NHTSA-2012-0065-0056
	(public hearing)
Alexander J. MacDonald .....	NHTSA-2012-0065-0005
National Ready Mixed Concrete Association .....	NHTSA-2012-0065-0038
National School Transportation Association .....	NHTSA-2012-0065-0037
Owner-Operator Independent Drivers Association (OOIDA) .....	NHTSA-2012-0065-0024
Skagit Transportation Inc .....	NHTSA-2012-0065-0006
Bob Waterman .....	NHTSA-2012-0065-0052
<b>Safety Organizations:</b>	
AAA Public Affairs (AAA) .....	NHTSA-2012-0065-0043
Advocates for Highway and Auto Safety (Advocates) .....	NHTSA-2012-0065-0047
American Highway Users Alliance .....	NHTSA-2012-0065-0040
Commercial Vehicle Safety Alliance (CVSA) .....	NHTSA-2012-0065-0050
Consumers Union .....	NHTSA-2012-0065-0053
Insurance Institute for Highway Safety (IIHS) .....	NHTSA-2012-0065-0021
Kentucky Injury Prevention and Research Center .....	NHTSA-2012-0065-0007
National Association for Pupil Transport (NAPT) .....	NHTSA-2012-0065-0023
National Transportation Safety Board (NTSB) .....	NHTSA-2012-0065-0015
Road Safe America .....	NHTSA-2012-0065-0004
<b>Other Organizations and Private Individuals:</b>	
American Association for Justice (AAJ) .....	NHTSA-2012-0065-0020
American Trauma Society .....	NHTSA-2012-0065-0009
Justin C. Barriault .....	NHTSA-2012-0065-0010
Robert M. Chin .....	NHTSA-2012-0065-0011
Jerry R. Curry .....	NHTSA-2012-0065-0018
Jerry J. Evans .....	NHTSA-2012-0065-0003
Fried Rogers Goldberg, LLC .....	NHTSA-2012-0065-0025
Nadya V. Gerber .....	NHTSA-2012-0065-0012
The Martec Group, Inc. (Martec) .....	NHTSA-2012-0065-0051
Mercatus Center at George Mason University (Mercatus) .....	NHTSA-2012-0065-0022
Josh A. Sullivan .....	NHTSA-2012-0065-0013
Hon. Betty Sutton .....	NHTSA-2012-0065-0056
	(public hearing)

**VII. Key Differences Between the Final Rule and the NRPM**

This section summarizes the significant differences between the NPRM and this final rule. Less significant changes are noted in the appropriate sections of the preamble.

The most significant change between the NPRM and the final rule is that the agency has chosen an alternative performance test maneuver to demonstrate an ESC system’s ability to maintain vehicle stability. After considering public comments and conducting additional track testing, we have adopted a 150-foot J-turn maneuver as the performance test maneuver in this final rule. In the

NPRM, we proposed using a slowly increasing steer (SIS) maneuver as a characterization maneuver and a sine with dwell (SWD) maneuver as a roll and yaw performance maneuver. The 150-foot J-turn test maneuver is discussed in the NPRM and is a variation of an alternative test maneuver proposed in the NPRM.

Because the 150-foot J-turn test maneuver only tests an ESC system’s ability to mitigate roll instability and the agency lacks any alternative test maneuver to test an ESC system’s ability to mitigate yaw instability, this final rule does not include a performance test to evaluate yaw instability. However, this final rule carries forward the

requirement that an ESC system be capable of mitigating yaw instability.

The 150-foot J-turn maneuver also uses a different performance metric than the SWD maneuver. The SWD maneuver’s performance criteria were the change in lateral acceleration and yaw rate through the maneuver. In this final rule, we are using a simpler metric—reduction in forward speed.

The change in performance test maneuver has also led to changes in the test conditions and equipment. Because the test maneuver in this final rule is conducted over a fixed path, rather than fixed steering used for the SWD maneuver, an automated steering wheel controller will not be used for the J-turn maneuver. We have also modified the

loading condition for vehicles to test them at GVWR. We have also reduced the instrumentation requirements in light of the simpler performance metric.

### VIII. ESC Requirement

#### A. Whether to Require Stability Control

In the May 2012 NPRM, the agency proposed to require that all truck tractors and certain buses with a GVWR of more than 11,793 kg (26,000 lb.) to be equipped with ESC. The agency preliminarily found that the proposed standard met the need for motor vehicle safety.<sup>26</sup> That finding was based upon the safety problem discussed in the NPRM and summarized in section IV above.<sup>27</sup> Moreover, the agency found that requiring ESC systems on truck tractors and certain large buses would be cost-effective.<sup>28</sup>

We received many comments addressing the general question of whether stability control systems should be required on truck tractors and large buses. Several commenters questioned the need for a stability control mandate on truck tractors and certain large buses and recommended against adopting a final rule requiring any type of stability control system. A consistent theme in many of the comments received from private individuals was also expressed in the comment from Yankee Trucks. These commenters argued that the decision to include ESC should be decided by the vehicle's end user.

Other commenters such as Mercatus and OOIDA were concerned that NHTSA failed to look at alternative methods to improve motor vehicle safety problems caused by rollover and loss-of-control crashes. Mercatus suggested that NHTSA failed to look at driver fatigue detection, road condition sensors, improved safety procedures, or driver training, which might be less costly. OOIDA highlighted driver training, enforcement of traffic laws, driver incentives, improved crashworthiness, and road signage as alternative ways to deal with the rollover problem. Several other commenters highlighted driver training and accountability related to both driving and vehicle loading as alternative methods that could prevent rollover and loss-of-control crashes. The Boyle Brothers, OOIDA, and several individual commenters both noted that stability control systems would not prevent crashes caused by driving too fast for conditions. Both Mercatus and OOIDA believe that alternative measures are less costly than a stability

control mandate at preventing rollover and loss-of-control crashes.

Individual commenters, many of whom identified themselves as truck drivers, also questioned the safety of stability control systems and their ability to prevent crashes. One commenter believes that stability control systems are unsafe based on personal experience because it often engaged the service brakes in curves. Another commenter was concerned that drivers would become too dependent on stability control systems and cause them to drive through curves faster with the system than without.

OOIDA and many individual commenters were concerned about the total cost of the rule and whether the benefits justified the costs. Relatedly, several commenters raised concerns that stability control systems would add complexity to the brake system by requiring additional parts, and thus, higher repair costs. Yankee Trucks also raised concerns that if a stability control system malfunctions, ABS would also not function. OOIDA claimed that a stability control requirement would cause drivers and truck companies to keep existing vehicles in service longer or even go out of business due to the added costs of stability control and other regulatory mandates.

Some commenters also expressed concerns that stability control technologies could have negative effects on safety. For example, individual commenters questioned whether it was safe to have stability control systems braking the vehicle automatically in wet conditions or on curves. Associated Logging Contractors opposed a mandate because it believes that a stability control requirement may cause safety issues on forest roads, which are different from highways.

Commenters from a wide variety of backgrounds supported a stability control mandate. These organizations include organizations such as Road Safe America, the Kentucky Injury Prevention and Research Center, the American Trauma Society, the American Association for Justice, Advocates, the American Highway Users Alliance, AAA, the Commercial Vehicle Safety Alliance, and Consumers Union. Business associations representing brake suppliers (HDBMC), truck manufacturers (EMA), and truck fleet operators (ATA) all supported a stability control mandate. Brake suppliers such as Bosch, Bendix, and Meritor WABCO also supported a stability control mandate. Individual truck and bus manufacturers who commented also such as Daimler, Volvo, and Navistar supported a stability

control mandate. Some motor carriers who commented also supported a stability control mandate. The NTSB and a former Member of Congress, Betty Sutton, both supported a stability control mandate. Many individual commenters also supported a stability control mandate.

Although these commenters come from varied backgrounds, their reasons for supporting a stability control mandate were generally consistent. Commenters supporting a mandate generally cited research from NHTSA, the manufacturing industry, and others regarding the effectiveness of stability control systems, and their ability to prevent rollover and loss-of-control crashes and save lives. IIHS, for example, cited its own research suggesting that having ESC systems on all truck tractors could prevent as many as 295 fatal crashes each year. Some individual commenters also cited personal experience with stability control systems. John Hill observed that the cost of a stability control system on a vehicle is comparable to the cost to the government of a single compliance review of a motor carrier's safety practices. These commenters generally agreed that the benefits of a stability control mandate far exceed its costs.

After considering all public comments, the agency is proceeding with adopting FMVSS No. 136 to require all truck tractors and certain large buses with a GVWR of more than 11,793 kg (26,000 lb.) to have stability control systems. This decision is largely driven by the data before the agency. In developing the proposal, the agency analyzed crash data to identify risks not addressed in existing FMVSSs. These safety risks include rollover and loss-of-control crashes that are caused by many factors including traveling at a speed too high to negotiate a curve, sudden steering maneuvers to avoid a crash, loading conditions, road surface conditions, and road design configuration. The agency's research, described at length in the NPRM, shows that stability control technologies could prevent crashes in these situations.

With respect to the comments suggesting that vehicles braking during a curve or on wet conditions could have adverse safety consequences, we observe that an ESC system is designed to slow the vehicle in a curve in order to reduce the lateral acceleration and allow the operator to maintain roll and yaw control of the vehicle only in situations where instability is imminent. After careful qualitative and quantitative assessment, we have concluded that requiring stability

<sup>26</sup> 77 FR 30788.

<sup>27</sup> 77 FR 30769-71.

<sup>28</sup> 77 FR 30791.



control systems will improve the overall safety of the vehicle.

Regarding other possible improvements to reduce crashes, we do not disagree that many of the suggestions regarding driver training, enforcements, and crashworthiness of trucks and buses could improve motor vehicle safety and (except for the latter) reduce vehicle rollover and loss-of-control crashes. However, driver training and enforcement of traffic safety laws are outside of NHTSA's regulatory authority under the Safety Act. Moreover, the commenters advocating these alternative means to address the safety problem did not provide data to support their conclusions that their alternatives would be less costly or more cost-effective than a stability control mandate. Although the issues related to costs and benefits will be addressed more specifically in section XIV below, the agency has concluded that requiring ESC systems on truck tractors and certain large buses is cost-effective and the most effective means to address the safety problem identified in this rulemaking.

#### *B. Whether to Require ESC or RSC*

The agency proposed to require that truck tractors and large buses be equipped with ESC systems rather than RSC systems. An ESC system is capable of all of the functions of an RSC system. In addition, an ESC system has the additional ability to detect yaw instability, provide braking at front wheels, and detect the steering wheel angle. These additions, as demonstrated by NHTSA's testing, allow an ESC system to have better rollover prevention performance than an RSC system in addition to the yaw instability prevention component. This is because the steering wheel angle sensor allows the ESC system to anticipate changes in lateral acceleration based upon driver input and to intervene with engine torque reduction or selective braking sooner, rather than waiting for the lateral acceleration sensors to detect potential instability.

The NPRM stated that mandating ESC systems rather than RSC systems will prevent more crashes, injuries, and fatalities. The additional benefits from ESC systems can be attributed to both the ESC's system's ability to intervene sooner and its ability to prevent yaw instability that would lead to loss-of-control crashes.

The NPRM stated that mandating ESC systems rather than RSC systems will result in higher initial costs to manufacturers. Moreover, while our benefit and cost estimates led to the

preliminary conclusion that mandating RSC systems would be more cost-effective than mandating ESC systems, mandating ESC systems would result in higher net benefits.

Several commenters agreed with NHTSA's proposal to require ESC systems rather than RSC systems. Jerry Curry and Bendix specifically mentioned that ESC systems should be required instead of RSC systems. Mr. Curry and IIHS also commented that RSC systems would not be the best platform to use when considering future technological advances. John Hill similarly observed that ESC systems have the potential to support future collision avoidance and crash mitigation technologies. Mr. Hill also observed that loss-of-control crashes can be difficult to identify and classify. Road Safe America, Mr. MacDonald, and AAA said the agency should require ESC equipment on truck tractors and buses. IIHS and Jim Burg recommended requiring ESC systems over RSC systems because loss-of-control collisions can be reduced using ESC systems. Volvo, while not expressly advocating for an ESC mandate, stated that it had investigated the use of RSC systems, but found they were unable to provide stability control in a wide range of driving conditions and environments that its customers operate.

In its comment, Bendix stated that an ESC system has an effectiveness that is 31% greater than a RSC system. Bendix also commented that ESC systems provide "more information about what the vehicle is doing" because these systems include two additional sensors. Bendix also said that ESC systems provide more effective interventions through selective application of all available vehicle brakes.

Other commenters supported RSC as a minimum requirement rather than ESC. Schneider, for example, asserted that it considered purchasing vehicles with ESC system, but determined that ESC systems would provide a negligible benefit at substantially higher costs when compared to RSC. ATA also asserted that marginal benefit of ESC over RSC is not justified by the added cost based on current information. ATA cited the variability of the truck-tractor industry in four areas: (1) Private trucking vs. for-hire companies; (2) the size of loads; (3) the type of truck and trailer being used (*e.g.*, box, van, refrigerated, liquid and bulk tankers); and by operation (*e.g.*, agricultural, long haul, short haul, over size, overweight, etc.). ATA believes this diversity may warrant choosing ESC or RSC depending on the individual vehicle.

Both Schneider and ATA cited a study by the American Transportation Research Institute (ATRI) that surveyed stability control technology used in the trucking industry. This study collected crash and financial data from the trucking industry, including information regarding whether the vehicle was equipped with an ESC system, an RSC system, or no stability control system at all. The sample included 135,712 trucks, of which 68,647 had RSC systems, 39,529 had ESC systems, and 27,536 had no stability control systems. The study included unit costs of stability systems, average annual miles per tractor, the total number of safety incidents (including rollover crashes), and the average cost of each incident. The crash analysis concluded that industry-wide installation of RSC systems would result in fewer rollover, jackknife, and tow/stuck crashes compared to industry-wide installation of ESC systems.

NHTSA agrees with those commenters recommending ESC systems instead of RSC systems. However, we are not relying on the assertions of Mr. Curry, Mr. Hill and IIHS that ESC systems provide a better platform for future technological advances. We believe the justification for ESC systems is satisfied using benefits estimates for today's ESC systems, without having to consider possible future advances such as forward collision mitigation systems. Similarly, we are not relying on Bendix's assessment of ESC system effectiveness. While Bendix's analysis of the effectiveness of ESC and RSC systems is addressed in more detail in section XIV below, we believe that our own analysis based on an effectiveness study conducted by University of Michigan Transportation Research Institute (UMTRI) and Meritor WABCO is a more accurate assessment of the effectiveness of ESC and RSC systems. Although both NHTSA and Bendix reached the conclusion that ESC systems will be more effective than RSC systems at preventing rollover crashes, we believe that Bendix's method of determining system effectiveness is arbitrarily biased in favor of ESC systems.

Regarding ATA's assertion of the variability of trucks, we agree that truck tractors are varied and that some of those variations affect vehicle stability. However, we believe that variability justifies choosing to require ESC systems rather than RSC systems. In particular, ATA observed that trucks carry various loads, implying that certain kinds of loads may be more suited to ESC systems whereas other

loads may only require RSC systems to achieve equal effectiveness. However, the nature of the trucking industry is such that a truck tractor may end up towing many different types of trailers in its lifetime, including flatbed trailers, box trailers, and tanker trailers. A vehicle manufacturer is unlikely to know at the time of a vehicle's production whether a specific truck tractor is going to be carrying loads that are more likely to cause a rollover or loss-of-control crash because the load has a high center of gravity or has the potential to slosh. The only way to ensure that the vehicles that ATA believes would perform better with ESC systems is to require all truck tractors to be equipped with ESC systems.

The ATRI study will be addressed more specifically in the benefits and costs discussion in section XIV below and in the FRIA accompanying this final rule. However, for the purpose of determining whether to require ESC systems or RSC systems, the ATRI study's suggestion that RSC systems would be more beneficial than ESC systems reflects the specific truck carriers they studied, but does not necessarily constitute a representative sample of the truck fleet. ATRI's conclusion is contrary to NHTSA's own findings that ESC systems are more effective and have greater net benefits than RSC systems. First, as explained above, ESC systems contain all of the functions of RSC systems, plus have additional sensors such as a steering wheel angle sensor, to allow a system to intervene based on a predicted rise in lateral acceleration rather than waiting for the lateral acceleration to rise. Second, ESC systems have the capability to braking all of the vehicle's axles, whereas an RSC system is generally unable to brake the steering axle of the vehicle. Third, although NHTSA's own research found that one RSC system performed as well or slightly better than an ESC system under certain conditions, we attributed the performance difference to that particular RSC system being programmed to brake more aggressively than the ESC system on the same vehicle.<sup>29</sup> For these reasons, we conclude that the ATRI study is not representative of the entire trucking industry or the performance of ESC systems compared to RSC systems.

Based on the foregoing, this final rule will require that truck tractors and certain buses be equipped with ESC systems rather than RSC systems. As discussed in section XIV below, RSC systems are less beneficial than ESC systems in reducing rollover crashes

and much less beneficial in addressing loss-of-control crashes. Although RSC systems are slightly more cost beneficial than ESC systems, ESC systems provide substantially higher net benefits because ESC systems will prevent many more crashes.<sup>30</sup> NHTSA has concluded that the additional safety benefits of ESC systems in both rollover and loss-of-control crashes justify the additional cost of ESC systems compared to RSC systems.

### C. Definition of ESC

The NPRM included definitional criteria in the proposed regulatory text. We reasoned that, relying solely on performance-based tests without mandating any specific equipment may require a battery of tests to cover the complete operating range of the vehicle. Given the wide array of possible configurations and operating ranges for heavy vehicles, the agency did not believe it was practical to develop performance tests that address the full range of possibilities and remain cost-effective. Accordingly, the agency proposed to include definitional criteria in the NPRM, which included equipment that would be required as part of a compliant ESC system.<sup>31</sup> We note that, when developing the ESC requirement for light vehicles, the agency chose to include such a requirement in FMVSS No. 126.

SAE International has a Recommended Practice on *Brake Systems Definitions-Truck and Bus*, J2627 (Aug. 2009), which includes a definition of Electronic Stability Control and Roll Stability Control. SAE International's definition of an ESC system requires that a system have an electronic control unit that considers wheel speed, yaw rate, lateral acceleration, and steering angle and that the system must intervene and control engine torque and auxiliary brake systems to correct the vehicle's path.

The UN ECE Regulation 13 definition for the electronic stability control system, promulgated in Annex 21, includes the following functional attributes for directional control: Sensing yaw rate, lateral acceleration, wheel speeds, braking input and steering input; and the ability to control engine power output. For vehicles with rollover control, the functions required by the stability control include: Sensing

lateral acceleration and wheel speeds; and the ability to control engine power output.

In developing a definition for ESC, the agency reviewed the functional attributes contained in SAE J2627 and the requirements of Annex 21 of UN ECE Regulation 13, and incorporated parts of both of definitions the NPRM. The proposed definition was similar in wording to the definition from FMVSS No. 126, which specifies certain features that must be present, that ESC be capable of applying all the brakes individually on the vehicle, and that it have a computer using a closed-loop algorithm to limit vehicle oversteer and understeer when appropriate. Unlike the light vehicle standard, which focuses on yaw stability, the NPRM proposed to require a stability control system that also helps to mitigate roll instability conditions.

Furthermore, the proposed definition required that the ESC system must be operational during all phases of driving, including acceleration, coasting, deceleration, and braking, except when the vehicle is below a low-speed threshold where loss of control or rollover is unlikely. According to information the agency obtained from vehicle manufacturers and ESC system suppliers, the low speed threshold for a stability control system is 10 km/h (6.2 mph) for yaw stability control and 20 km/h (12.4 mph) for roll stability control. For the purposes of the NPRM, the agency set a single threshold of 20 km/h (12.4 mph) as the speed below which ESC is not required to be operational.

The benefit of an ESC system is that it will reduce vehicle rollovers and loss of control under a wide variety of vehicle operational and environmental conditions. However, the performance tests in the NPRM would only evaluate ESC system performance under very specific conditions. To ensure that a vehicle is equipped with an ESC system that met the proposed definition, we proposed that vehicle manufacturers make available to the agency documentation that would enable NHTSA to ascertain that the system includes the components and performs the functions of an ESC system.

Meritor WABCO, HDBMC, and Bendix recommended a change to the definition of an ESC system. Where the definition required that the system both augment vehicle directional stability and enhance rollover stability by applying and adjusting brake torques, the commenters recommended that the words "having the capability of" be added to each instance. Bendix also recommended that each instance of

<sup>30</sup> Cost-effectiveness is measured in terms of lower cost per equivalent life saved. For more discussion of the costs and benefits of this rule see Section XIV, below, and the Final Regulatory Impact Analysis accompanying this final rule, which has been placed in the docket.

<sup>31</sup> Similar requirements exist in the light vehicle ESC requirements. See 49 CFR 571.126, S4.

“brake torque” should be changed to “deceleration torque.”

We agree with the commenters’ recommendation to change the requirement that ESC systems augment vehicle directional stability and enhance rollover stability by “applying and adjusting vehicle brake torques” to “having the capability of applying and adjusting vehicle brake torques.” The wording in the NPRM could be construed to require brake torques to be applied simultaneously at each wheel position for correcting yaw moment or reduce lateral acceleration. This was not our intention. Rather, we intended to require that brake torque at each wheel position be capable of being applied and adjusted individually. In analogous portions of the ESC system definition, we use the words “has a means,” which is similar in meaning to “capable.”

However, we are not making Bendix’s suggested change of the term “brake torque” to “deceleration torque.” We are not sure that Bendix’s suggested language would be functionally different than the proposal and cannot see how it adds clarity. We are specifically interested in requiring that systems be capable of controlling the brakes independently at each wheel end on at least one front and at least one rear axle of the vehicle.

Bendix also recommended a change to the requirement that the system enhance vehicle directional stability by applying and adjusting the vehicle brake torques. Bendix requested that NHTSA clarify that the “vehicle” referred to in this requirement is the truck tractor or bus and not the trailer. That is, Bendix wanted to ensure that the trailer is omitted from the vehicle directional stability requirements. Bendix noted that the requirements regarding the system’s ability to control trailer brakes is addressed elsewhere.

We agree with Bendix’s recommendation. It was not our intention to include trailers in the requirement that vehicles be capable of maintaining directional stability. Bendix is correct that there could be some confusion with the proposed requirement because a trailer is also a motor vehicle and consequently, the proposed requirement that vehicles have the capability to maintain directional stability and the roll stability may be misinterpreted to apply to a trailer. Therefore, we have revised the ESC definition to specify that truck tractors and buses must have the means to apply and adjust vehicle brake torques on at least one front and at least one rear axle.

Regarding the definitional criteria for mass estimation, Meritor WABCO,

HDBMC, and Bendix suggested an addition to the requirement that a system have a means to estimate the vehicle (or combination vehicle) mass. The commenters request that NHTSA include language allowing a system to automatically obtain the vehicle’s mass.

NHTSA is not making the suggested change. The suggested change would require a system to have a means to estimate or automatically obtain vehicle mass. We do not believe there is a manner in which to automatically obtain the vehicle’s mass short of weighing it on a scale. Any other calculation of the vehicle’s mass is an estimate. We note that the means for obtaining the vehicle’s mass is not prescribed. The requirement is necessary to ensure that the ESC system is capable of using the vehicle mass data in the closed-loop algorithm of its computer to apply and adjust the vehicle brake torques for enhancing rollover stability and inducing correcting yaw moment. Adding “automatically obtain” to the definition does not improve or clarify the requirement to have a means of estimating vehicle mass.

In summary, NHTSA continues to believe that the definitional criteria, including required equipment and system capabilities, are necessary to ensure that ESC systems perform as they are intended and as they currently perform. These criteria are objective in terms of explaining to manufacturers what type of performance is required and the minimal equipment necessary for that purpose.

#### *D. Technical Documentation*

The NPRM proposed requiring that the vehicle manufacturer provide a system diagram that identifies all ESC system hardware; a written explanation, with logic diagrams included, describing the ESC system’s basic operational characteristics; and a discussion of the pertinent inputs to the computer and how its algorithm uses that information to prevent rollover and limit oversteer and understeer. Because the proposed definition for ESC systems on truck tractors included the capability to provide brake pressure to a towed vehicle, the agency proposed requiring that, as part of the system documentation, the manufacturer include the information that shows how the tractor provides brake pressure to a towed trailer under the appropriate conditions.

Volvo questioned the need for manufacturers to submit technical documentation to NHTSA, stating that NHTSA has relied on the manufacturer’s certification that the

system meets the FMVSSs. HDBMC and Bendix requested confirmation that this technical documentation would be considered proprietary information and would not be released to the public. Finally, Bendix was concerned about the acceptance criteria for the evaluation of the submitted technical documentation. Bendix stated that there was no objective acceptance criteria in the proposed standard and recommended that the agency add acceptance criteria.

Upon consideration of the comments, we have decided to remove from the regulatory text references to specific documentation that NHTSA would request from manufacturers. However, NHTSA’s Office of Vehicle of Safety Compliance often requests, as part of its testing to verify compliance with the FMVSSs, certain information from manufacturers. For example, NHTSA may ask how a manufacturer’s system meets the definition of an “ESC System” set forth in this final rule. Information such as the technical documentation that was listed in the regulatory text of the NPRM may be included in or responsive to such a request. Of course, a manufacturer’s inability to demonstrate that its system meets the definition of an “ESC System” could lead to a finding of noncompliance with S5.1 of FMVSS No. 136.

## **IX. Vehicle Applicability and Phase-In**

### *A. Trucks*

#### 1. Summary of the NPRM

Vehicles with a GVWR greater than 10,000 pounds include a large variety of vehicles ranging from medium duty pickup trucks to different types of single-unit trucks, buses, trailers and truck tractors. Vehicles with a GVWR of greater than 10,000 pounds are divided into Classes 3 through 8. Class 7 vehicles are those with a GVWR greater than 11,793 kilograms (26,000 pounds) and up to 14,969 kilograms (33,000 pounds), and Class 8 vehicles are those with a GVWR greater than 14,969 kilograms (33,000 pounds).

About 85 percent of truck tractors sold annually in the U.S. are air-braked three-axle (6×4) tractors with a front axle that has a GAWR of 14,600 pounds or less and with two rear drive axles that have a combined GAWR of 45,000 pounds or less, which we will refer to as “typical 6×4 tractors.” Other truck tractors, including two-axle (4×2) tractors, tractors with four or more axles, and severe service tractors, represent about 15 percent of the truck-tractor market in the U.S.

In the NPRM, the agency proposed that truck tractors with a GVWR greater

than 11,793 kilograms (26,000 pounds) would be required to have ESC systems. The agency did not propose requiring stability control systems on trailers, primarily because trailer-based RSC systems were determined by the agency research to be much less effective than tractor-based RSC or ESC systems in preventing rollover. Trailer-based RSC systems are capable of applying braking only on the trailer's brakes. Tractor-based systems can command more braking authority by using both the tractor and trailer brakes. As a result, trailer-based RSC systems do not appear to provide additional safety benefits when used in combination with tractor-based RSC or ESC systems. In addition, the typical service life of a trailer is 20 to 25 years compared with about 8 to 10 years for a truck tractor. Because new tractors are added to the U.S. fleet at a faster rate than new trailers, the safety benefits from stability control systems would be achieved at a faster rate by requiring stability control systems to be installed on a tractor.

Our proposed rule also excluded certain types of low-volume, highly specialized vehicle types. In these cases, the vehicle's speed capability does not allow it to operate at speeds where roll or yaw instability is likely to occur. These exclusions were drawn from FMVSS No. 121, *Air brake systems*, which exclude any vehicle equipped with an axle that has a gross axle weight rating of 29,000 pounds or more; any truck or bus that has a speed attainable in two miles of not more than 33 mph; and any truck that has a speed attainable in two miles of not more than 45 mph, an unloaded vehicle weight that is not less than 95 percent of its GVWR, and no capacity to carry occupants other than the driver and operating crew.

## 2. Exclusions From ESC Requirement

The Fire Apparatus Manufacturers' Association (FAMA) was generally supportive of the rule. However, they stated that the rule would not be feasible if it is interpreted to apply to a Tractor Drawn Aerial Apparatus. As FAMA explained, this apparatus is a combination vehicle used for firefighting, which are used in many large urban fire departments. The distinguishing feature of this vehicle is that it has two drivers, one in the truck tractor and one in the trailer. FAMA believes that an ESC algorithm on such a vehicle would be very complex because it would need to consider two steering wheels rather than one. FAMA suggested that NHTSA exclude from a final rule any combination vehicle that

requires more than one operator to steer it.

The agency is not adding the exclusion suggested by FAMA. Although FAMA stated that its vehicles would not be subject to the exclusion of vehicles with an axle having a gross axle weight rating of 29,000 pounds or more, it is not clear that this or other exclusions do not apply. Moreover, absent specific information that more fully explains why an exclusion is necessary and not overly broad, NHTSA cannot agree that an exclusion for all combination vehicles that require more than one operator to steer it is necessary.

Furthermore, the scope of the exclusion suggested by FAMA is not consistent with the scope of the rule. Specifically, this final rule, like the NPRM, applies to truck tractors, not trailers. However, the suggested exclusion would apply to combination vehicles, which include both a truck tractor and a trailer. That is, the presence of a trailer would form the basis for the exclusion. If this exclusion was added to the final rule, then the basis for the exclusion would be dependent on the trailer that is attached to the vehicle. This would be confusing and unnecessarily complicate enforcement.

Finally, FAMA has not articulated why its vehicles cannot be equipped with ESC systems. Because the ESC requirement applies only to the truck tractor, the system would only need to take account of one steering wheel input. There would be no requirement that the vehicle respond to any inputs from the trailer. Moreover, NHTSA would conduct compliance testing of the truck tractor using the control trailer specified in the test procedure, not a trailer with a steering wheel.

Several commenters suggested that the agency reduce the scope of the ESC requirement. EMA requested that NHTSA exclude all severe duty trucks from the scope of a final rule. It reasoned that manufacturers offer multiple configurations of truck tractors with different wheelbases, axle, and suspension combinations. Furthermore, it claimed that manufacturers often build only a few vehicles in each configuration and in some cases of severe duty trucks, may only build a single vehicle in a particular configuration.

The agency is not excluding severe duty trucks as EMA suggests. Currently, manufacturers are able to produce products in small volumes that meet all the requirements of the Federal Motor Vehicle Safety Standards (FMVSS). The addition of the ESC rule will not unduly

burden the manufacturers with regard to their small volume products. EMA's actions related to this rulemaking support this conclusion. For example, EMA provided test data to the agency after performing multiple test maneuvers with severe duty trucks equipped with ESC systems. EMA also included the test results from the severe duty trucks to form its recommended test criteria for an alternate roll stability test.

Meritor WABCO requested NHTSA to add the words "pneumatically braked" to the definitions of truck tractors and buses in the ESC rule. Similarly, EMA recommended that NHTSA include the ESC requirements within FMVSS No. 121 rather than in a separate standard.

We are not expressly limiting the scope of the final rule to air braked vehicles. Although Class 8 vehicles typically use pneumatic or air brakes, Class 7 vehicles vary between either air or hydraulic brakes. The scope of the NPRM includes all truck tractors and Class 7 and 8 buses, which showed the greatest rollover problem of all the buses according to our research. In order to address the safety problem with these classes of buses, the ESC rule must include both air and hydraulic brakes. Limiting the scope of this rulemaking to air braked vehicles could provide an incentive for some manufacturers to equip vehicles with hydraulic brakes rather than air brakes to circumvent an ESC system requirement.

## 3. Single-Unit Trucks

The agency did not propose to include single-unit trucks with a GVWR over 4,536 kg (10,000 pounds). Several commenters recommended expanding the scope of the rule to include straight trucks. Skagit, NTSB, IIHS, and NAPT all suggested that ESC should be mandated on all commercial vehicles greater than 10,000 pounds GVWR, including straight trucks. Advocates recommended that NHTSA should consider the FMCSA study stating the number of fatalities by single-unit trucks, based on data from 2008, are 1,147 each year. Bosch stated that the rule should be expanded to cover all vehicles over 10,000 pounds GVWR vehicles, including hydraulic-braked vehicles, because this segment accounts for a large number of commercial and load bearing vehicles on the U.S. roads. Bosch claims that a mandate with a phase-in period is needed to facilitate industry development of ESC systems on these vehicles. On the other hand, Bendix recommended that "[t]he decision by the agency regarding if and when to consider rulemaking on single-unit trucks should be based on the same

level of research undertaken for tractor and coach.”

We are not expanding the scope of this rulemaking to include single-unit trucks. We believe that a level of research closer to what we had to support the NPRM for truck tractors and large buses is necessary before NHTSA would propose to mandate ESC on all single-unit trucks. After publishing the NPRM, we began a research and testing program to study the safety benefits and performance criteria of ESC systems on single-unit trucks. The research is not yet complete. Furthermore, as we stated in the NPRM, the complexity of the single-unit truck population and the limited crash data available present a significant challenge to determining the effectiveness of stability control on these vehicles. At this time, we will not include single-unit trucks in the ESC rule. However, we believe including buses with hydraulic brakes in this final rule will spur development of ESC systems for other hydraulic-braked vehicles, including trucks with a GVWR of greater than 4,536 kilograms (10,000 pounds) but not more than 11,793 kilograms (26,000 pounds).

#### 4. Compliance Dates

The agency proposed that all new typical 6×4 truck tractors would be required to meet the proposed standard beginning two years after a final rule is published. Because there are currently only two suppliers of truck tractor and large bus stability control systems, Bendix and Meritor WABCO, we reasoned that the industry would require lead time to ensure that the necessary production stability control systems are available to manufacturers. NHTSA also proposed a two-year lead time for two-axle tractors.

For severe service tractors and tractors with four axles or more, which represent about 5 percent of annual truck tractor sales, the agency believed additional lead time was necessary to develop, test, and equip these vehicles with a stability control system. Therefore, we proposed to require that severe service tractors and other atypical tractors be equipped with ESC systems beginning four years after the final rule is published.

Four commenters addressed the compliance dates for trucks proposed by the NPRM. Daimler requested an additional lead time for ESC implementation because it said that it only has RSC systems developed on some models and needs more time to design and validate ESC on all of its models.

In its comment, EMA mentioned that this ESC rule should align with the

implementation dates of the new FMVSS No. 121 stopping distance requirements to give manufacturers the opportunity to refine the braking systems prior to the implementation of this ESC rule. EMA said it is impractical for manufacturers to certify compliance tests using the tests in the NPRM for all typical 6×4 tractors within 2 years of the final rule. Moreover, EMA said that tractors with four or more axles and severe service tractors have not been evaluated using the tests in the NPRM and likely would need additional lead time. However, EMA did not specify how much additional lead time was necessary. Finally, EMA and Bendix recommended including two-axle tractors in the longer lead time period because it appears to be an error.

In contrast, HDBMC stated its belief that the suppliers of ESC systems are prepared to meet the anticipated deployment demands by the implementation dates proposed.

We recognize the recent changes to the stopping distance requirements in FMVSS No. 121 affected truck tractors. Truck tractors, other than three-axle truck tractors, were recently subjected to the reduced stopping distance changes that went into effect on August 1, 2013. Manufacturers of these truck tractors were given two additional years beyond the timeframe for three-axle truck tractors to comply with the amendments to FMVSS No. 121. We agree with Daimler and EMA that at least four years of lead time is warranted for all truck tractors other than typical 6×4 tractors (three-axle truck tractors with a front axle that has a GAWR of 6,622 kg (14,600 pounds) or less and with two rear drive axles that have a combined GAWR of 20,412 kg (45,000 pounds) or less). Although HDMA said that its member companies are ready to supply brake components by the implementation dates proposed, we realize that truck tractor manufacturers need extra time to integrate the ESC systems into their products and to perform the necessary testing to ensure compliance. In addition, manufacturers recently made brake system changes to these models of truck tractors in order to comply with the new requirements in the FMVSS No. 121 amendments. We recognize that ESC systems must be integrated into the brake systems, and we expect that manufacturers may need to modify the brake systems for a second time.

#### B. Buses

##### 1. Summary of the NPRM

The NPRM proposed that certain buses would be required to be equipped

with ESC systems. The applicability of the proposal to buses mirrored the applicability of the agency’s proposal that certain large buses be equipped with seat belts.<sup>32</sup> The proposal for seat belts was applicable to buses with a gross vehicle weight rating (GVWR) of 11,793 kilograms (26,000 pounds) or greater, 16 or more designated seating positions (including the driver), and at least 2 rows of passenger seats that are rearward of the driver’s seating position and are forward-facing or can convert to forward-facing without the use of tools.’’ That proposal excluded school buses and urban transit buses sold for operation in urban transportation along a fixed route with frequent stops. The agency proposed a very similar applicability in the NPRM for this rulemaking.<sup>33</sup> We believed that the proposal encompassed the category of “cross-country intercity buses” represented in the FARS and FMCSA data (identified in section II.A above) that had a higher involvement of crashes that ESC systems are capable of preventing.

#### 2. Buses Built on Truck Chassis

##### (a) Summary of NPRM

The agency tested three air-braked buses, all of which had a GVWR over 14,969 kg (33,000 lb.) (Class 8). Nevertheless, the agency included Class 7 buses (buses with a GVWR of more than 11,793 kg (26,000 lb.) but not greater than 14,969 kg (33,000 lb.)). We reasoned that, although many Class 7 buses are built on chassis similar to those of single-unit trucks for which ESC has not been widely developed, and we are not aware of any Class 7 bus that is equipped or currently available with ESC. Class 7 buses represent less than 20 percent of the market. Although the agency was not aware of any Class 7 bus currently available with ESC, we were aware that stability control systems are available on a limited number of Class 8 single-unit trucks, such as concrete trucks, refuse trucks, and other air-braked trucks, and that the same technology could be developed for use on Class 7 buses, which we believed were also air-braked vehicles. We also believed that the manufacturers of Class 7 buses would need additional lead time to have the ESC systems developed, tested and installed on their vehicles. Hence, for large buses, the agency proposed an effective date of two years after the final rule is published,

<sup>32</sup> 75 FR 50958 (Aug. 18, 2010).

<sup>33</sup> The primary difference is that the ESC proposal was not made applicable to buses with a GVWR of exactly 11,793 kilograms (26,000 pounds) in order to exclude Class 6 vehicles from the proposal.

primarily to accommodate manufacturers of Class 7 buses.

However, we sought comment on the feasibility of including Class 7 buses that are built on chassis similar to those of single-unit trucks within two years. We noted that, although we believed that Class 7 buses were primarily air braked and that ESC systems were readily available for air-braked buses, system availability for any hydraulic-braked buses that may be covered may be more limited. We requested that, if hydraulic-braked buses were covered by the proposal, commenters address manners in which hydraulic-braked buses may be differentiated for exclusion or a different phase-in period.

#### (b) Summary of Comments

Several commenters raised issues related to the NPRM's definition for large buses. EMA and Navistar commented that the "large bus" definition should not include commercial buses, which are buses greater than 11,793 kg (26,000 lb.), but are not traditional intercity buses. They claimed that many of these buses are built on truck chassis and are different than the Class 8 buses tested by NHTSA. They stated that these buses are built in multiple stages by multiple manufacturers, which would make compliance certification difficult.

According to Navistar, NHTSA did not "reach out" to Navistar regarding its commercial buses because it claimed NHTSA was not aware of its Class 8 commercial buses from the sole fact that they were not specifically mentioned in list of bus manufacturers included in the NPRM.

In its comments, EMA opined that non-motorcoach buses with a GVWR over 11,793 kg (26,000 lb.) are more closely related to single-unit trucks. It also commented that some of the same issues related to requiring ESC systems on single-unit trucks are also present for large buses.

EMA stated that consistent with the Motorcoach Enhanced Safety Act (part of MAP-21), it considered the term "motorcoach" to have the same meaning as "over-the-road-bus," which "means a bus characterized by an elevated passenger deck located over a baggage compartment."<sup>34</sup> EMA and Daimler also commented that a "motorcoach" has some, if not all, of the following attributes: a GVWR greater than 33,000 pounds (Class 8); air disc brakes; passenger deck floor more than 45 inches above the ground; rear engine

configuration; monocoque<sup>35</sup> construction; 40 or more passenger seats; no provisions for standee passengers; and one passenger entrance and exit door. EMA asserted that NHTSA did not study ESC on other non-motorcoach buses, and therefore, the rule should not apply to those buses.

#### (c) NHTSA's Response to Comments

NHTSA is not changing the general applicability of the ESC requirement to buses. As we stated in the NPRM, we intended the applicability of the ESC requirement to buses to be similar to the applicability of the agency's requirement that buses have seat belts at each passenger seating position. In both rulemakings, the target vehicles were high occupancy buses associated with a known fatality and injury risk. The buses typically carried a large number of passengers and were operated at highway speeds. We examined the involvement of high occupancy buses in fatal crashes over a 10-year period (FARS data files, for the NPRM, 1999–2008). In this examination of high occupancy bus data, we inspected crash data for buses with a GVWR greater than 4,536 kg (10,000 lb.). We analyzed the construction type and various attributes of the vehicles. The 2000–2009 FARS data show that for buses over 4,536 kg (10,000 lb.), there were 49 passenger fatalities in buses with a GVWR less than 11,793 kg (26,000 lb.), but there were 209 in buses with a GVWR greater than 11,793 kg (26,000 lb.).

Moreover, MAP-21, which was enacted after publication of the NPRM, requires the Secretary to consider requiring ESC systems on certain large buses if the Secretary determines that such a requirement is consistent with the requirements of the Motor Vehicle Safety Act. We believe that mandating ESC systems on the buses covered by the NPRM, subject to some minor changes discussed below, is consistent with those requirements. That is, this standard is practicable, meets the need for motor vehicle safety, and may be stated in objective terms. We believe that ESC systems are currently available for most buses covered by this final rule and can be developed for the others. Moreover, the safety problem discussed in Section IV.D above highlights the rollover problem in buses with a GVWR greater than 11,793 kg (26,000 lb.).

NHTSA has decided to adopt the proposal to require all buses with a GVWR over 11,793 kg (26,000 lb.), subject to some modified exclusions for

school buses, transit buses, and perimeter seating buses. In Section V.B.1 of the NPRM, NHTSA mentioned the rationale for not including a requirement for ESC on single-unit trucks with a GVWR over 4,536 kilograms (10,000 pounds) at this time.<sup>36</sup> The rationale was primarily based on the differences between truck tractors and single-unit trucks; it was not intended and did not mention the differences between buses built on truck chassis and buses built with monocoque construction. Although the NPRM stated that single-unit trucks as a whole are more complex and diverse than truck tractors, this does not necessarily apply to buses built on truck chassis. Among the different bodies that could be assembled on a truck chassis, a bus body presents a degree of complexity and diversity that is substantially less than the other truck bodies. For example, a bus body presents a scenario where center-of-gravity height and cargo type are more easily calculated because the bus is limited to transporting people and their luggage rather than varied cargo. The chassis supplier for a bus would be more likely to have knowledge of critical vehicle design parameters that affect ESC calibration.

NHTSA reviewed various definitions used in motorcoach safety legislation including the "over-the-road bus" definition in TEA-21 that was referenced in MAP-21. Similar to the final rule requiring seat belts on certain buses, we are not limiting the applicability of the ESC requirement to TEA-21's definition of over-the-road buses.<sup>37</sup> We believe that the definitions referring to over-the-road buses or over-the-road bus service are too narrow, because a number of intercity transport buses involved in fatal crashes were body-on-chassis buses that lacked an elevated passenger deck over a baggage compartment. Further, definitions based on the intended use of the vehicle could pose difficulties for manufacturers and dealers, because the intended use of a vehicle might not be known at the time of vehicle manufacture or sale. We want to make sure as reasonably possible that the buses we most wanted to affect (high-capacity buses associated with known fatality and injury risks) would meet the "motorcoach" safety standards, without having to depend on the state of knowledge of persons in the manufacturing and distribution chain about the prospective use of the bus.

Currently, there is no common Departmental or industry definition of "motorcoach." FMCSA does not have a

<sup>34</sup> The rulemaking requirements of the Motorcoach Enhanced Safety Act are addressed in section II above.

<sup>35</sup> Monocoque means a type of vehicular construction in which the body is combined with the chassis as a single unit.

<sup>36</sup> 77 FR 30789.

<sup>37</sup> 78 FR 70429.

definition for motorcoach in its regulations, but it considers a “motorcoach” to be an over-the-road bus. As noted above, over-the-road buses are a subset of the buses NHTSA believes should be regulated as “motorcoaches,” encompassing a part of but not enough of the heavy bus safety problem we seek to address.

We reviewed the underlying chassis structure of high-occupancy vehicles involved in fatal crashes. Some had a monocoque structure with a luggage compartment under the elevated passenger deck (“over-the-road buses”). However, an elevated passenger deck over a baggage compartment was not an element common to the buses involved in fatal intercity transport. In FARS data for buses with a GVWR greater than 11,793 kg (26,000 lb.), 36 percent of the fatalities were in the other bus and unknown bus categories, *i.e.*, not in the over-the-road bus category. Some buses were built using body-on-chassis configurations.

We believe that body-on-chassis configurations are newer entrants into the motorcoach services market. They appear to be increasing in number. A cursory review of the types of buses being used in the Washington, DC area for motorcoach services showed that traditional motorcoaches are generally used for fixed-route services between major metropolitan areas. However, for charter, tour, and commuter transportation from outlying areas, many bus types are used. Some are of monocoque structure, while others are of body-on-chassis structure.

The agency tested Class 8 buses, those with a GVWR greater than 14,969 kg (33,000 lb.), because these buses have larger dimensions and masses than Class 7 buses, and it places them on the most severe end of the spectrum. The performance criteria were created based on the testing of the larger Class 8 buses, and the agency has made a reasoned determination that the criteria are applicable for Class 7 buses, as well. If a Class 8 bus with a larger GVWR can pass the minimum performance criteria for ESC systems, a Class 7 bus with a smaller GVWR can reasonably be required to meet the same criteria.

Despite the fact that some of these buses are built in multiple stages by multiple manufacturers, the agency does not agree that compliance with the ESC standard will be very difficult. Presently, manufacturers building buses in various stages must provide an incomplete vehicle document (49 CFR part 568) to subsequent manufacturers listing each standard that applies. One example of a standard that must be documented is FMVSS No. 121, Air

Brake Systems. A number of factors such as GVWR, GAWR, and any other specific conditions given by the manufacturer must be considered when determining if a bus will be compliant with the braking requirements after it is built. Likewise, the agency expects manufacturers to give similar conditions of final manufacture under which the manufacturer specifies that the completed vehicle will conform to the ESC standard. The agency considers that burden of bus manufacturers to comply with the ESC rule will not be more difficult than the current burden of complying with the air brake requirements in FMVSS No. 121.

### 3. Hydraulic-Braked Buses

In the NPRM, we requested comment on manners in which hydraulic-braked buses may be differentiated, such as by exclusion or a different phase-in period for the ESC rule. Six commenters provided statements about hydraulic-braked buses and how they should be excluded. Specifically, Blue Bird opposes an ESC mandate on hydraulic-braked buses with a GVWR of 36,200 pounds and less. It also commented that the agency should wait until ESC systems are developed and fully evaluated for hydraulic-braked medium or heavy buses and not include hydraulic-braked buses as part of the ESC rule at this time. Blue Bird, Daimler, Meritor WABCO, Navistar, and EMA all commented that they are not aware of any ESC systems available for hydraulic-braked buses covered by the NPRM. Meritor WABCO recommended that NHTSA exclude vehicles that are not “pneumatically braked.” Finally, both Daimler and EMA stated that they want the ESC regulation to extend only to motorcoaches over 33,000 pounds.

NHTSA has no convincing evidence to exclude hydraulic-braked buses from this ESC rule. The NPRM proposed to require ESC on both Class 7 and Class 8 buses. The mandate in the Motorcoach Enhanced Safety Act makes no differentiation between Class 7 and Class 8 buses. In order to address the rollover and loss-of-control safety problems with these classes of buses, the ESC rule must include both air and hydraulic brakes.

Based on feedback received from the commenters, we recognize that Class 7 buses are composed of both air- and hydraulic-braked vehicles. We recognize that manufacturers who produce large buses equipped with hydraulic-powered brakes might need extra time to ensure the proper integration between the ESC system and the vehicle’s chassis, engine, and braking system. Rather than exclude hydraulic-braked buses from the rule

entirely, NHTSA will extend the compliance date for buses that may be equipped with hydraulic brakes. NHTSA acknowledges that ESC systems are still in development for large buses with hydraulic-braked buses, and therefore, manufacturers and suppliers need additional time to implement this new technology. However, whether the bus is equipped with air brakes or hydraulic brakes, we expect the performance requirements to apply because they are based on the stability of the bus as defined by its attributes such as geometry, mass, inertia, and center-of-gravity height. There is a negligible change in these attributes between an air-braked and a hydraulic-braked bus.

### 4. School Buses

Six commenters recommended that NHTSA include a requirement that school buses be equipped with ESC systems in the final rule. Consumers Union commented that ESC technology should be required for school buses in order to set a precedent for future crash avoidance technologies. Martec recommended that ESC be required on all buses because it claims that “large school buses satisfy multiple criteria described by NHTSA in its 2011–2013 Rulemaking and Research Priority Plan: the addition of ESC/RSC to school buses would offer large safety benefits, would apply to high-occupancy vehicles, and would apply to a vulnerable population—children.” Skagit, NTSB, and IHS all want ESC to be mandated on all buses greater than 10,000 lb., including school buses.

Conversely, Daimler and NSTA both agreed that NHTSA not include school buses in a final rule mandating ESC systems on large buses. NSTA asserted that, if school buses were subject to an ESC mandate, the costs to purchase school buses would increase. NSTA is concerned that the added costs would reduce the number of school buses on the road, and, consequently, reduce the number of children riding buses to school. NHTSA claims that students riding school buses are eight times safer than riding in the family vehicle because school buses travel at lower speeds and largely in residential areas.

As in the NPRM, we are excluding school buses from the ESC requirement. Each NHTSA rulemaking must address a present safety need and be justified by present safety benefits. We cannot accept Consumers Union’s recommendation to do rulemaking now based on speculative benefits of ESC systems on school buses. According to FARS data between 2000 and 2009, among the large buses, more than 70%



of fatalities on large buses with a GVWR greater than 11,793 kg (26,000 lb.) were related to cross-country intercity bus crashes. Similarly, we stated in the NPRM that FMCSA's Large Truck and Bus Crash Facts 2008 indicates that most of the school bus crashes are not rollover or loss-of-control crashes that ESC systems are capable of preventing. For these reasons, we will not require school buses to be equipped with ESC at this time.

Navistar, EMA, and Daimler requested that the school bus exclusion extend into its line of school bus derivatives. Navistar and EMA reasoned that some commercial buses are built on truck chassis. Because of their similarities to school buses, they reasoned that those buses should be exempted from the ESC rule. According to Daimler, school bus derivatives are vehicles built with hydraulic brakes, and no ESC system is available on these types of hydraulic brakes in the market today.

We disagree with Daimler, EMA, and Navistar that the school bus exception should extend to other buses that are similar or "derivatives" as Daimler stated. If the commenters' reasoning was adopted, any manufacturer could offer a school bus version of a particular bus model and claim that the school bus exception should apply because of the artificially created similarities. This would create an unintended loophole for the ESC requirement and potentially undermine the rule.

#### 5. Transit Buses

The NPRM proposed to exclude from the ESC system requirements urban transit buses sold for operation in urban transportation along a fixed route with frequent stops. EMA and Volvo suggested that we exclude certain buses based on the intended use of the vehicle in public transit. Volvo requested that the agency base the exclusion on the Federal Transit Administration's (FTA) bus procurement guidelines. Volvo suggested excluding "urban transit buses which may be used on suburban express service and general service on urban arterial streets along a fixed route with frequent stops." Similarly, EMA suggested adding to the exclusion for transit buses "urban transit buses used in suburban express service." Conversely, Volvo stated during the public hearing that it was practical and technologically feasible to equip its urban buses with ESC, but it did not want to do so because it did not perceive a safety need.

The Motorcoach Enhanced Safety Act excludes from its mandate to consider requiring ESC systems on large buses a bus used in public transportation

provided by, or on behalf of, a public transportation agency. However, as we explained in the previous section regarding school buses, an exclusion based on the intended use of the vehicle could pose difficulties for manufacturers and dealers, because the intended use of a vehicle might not be known at the time of vehicle manufacture or sale. Consequently, we will not adopt the recommendation suggested by EMA and Volvo to exclude urban transit buses used in suburban express service.

The final rule requiring seat belts at all passenger seating position on certain buses noted that commenters on that NPRM were troubled that the proposed transit bus exclusion was not sufficiently clear. To make the definition more clear, the final rule made clarifications that we believe are also warranted in this final rule requiring ESC systems on certain buses.<sup>38</sup> First, we made the regulatory text clearer in describing a "transit bus" by referring to a structural feature (a stop-request system) that buses must have to be a "transit bus." A "stop-request system" means a vehicle-integrated system for passenger use to signal to a vehicle operator that a stop is requested. Second, we expanded the description of a transit bus by recognizing that a transit bus could be sold for public transportation provided not only by, but also on behalf of, a State or local government, for example, by a contractor.

Finally, we made clear that over-the-road buses, as defined by TEA-21, do not qualify as "transit buses," even if the over-the-road bus has a stop-request system or is sold for public transportation provided by or on behalf of a State or local government. This final clarification ensures both that a manufacturer cannot integrate a simple stop-request system on any bus and make it subject to the transit bus exclusion. We recognize that any over-the-road bus used for public transportation provided by or on behalf of a State or local government is likely to be used as a commuter express bus that would carry large numbers of passengers over long distances at highway speeds. However, this use case is similar to the use of over-the-road buses by private companies in intercity service.

#### 6. Minimum Seating Capacity and Seating Configuration

The NPRM also excluded buses that had fewer than 16 designated seating positions (DSPs), including the driver.

<sup>38</sup> 78 FR 70438.

This reference was included in the seat belt NPRM based on FMCSA's definition of a "commercial motor vehicle," for purposes of FMCSA's commercial driver's license requirements.<sup>39</sup> In the final rule, however, NHTSA noted that FMCSA's regulations state that buses with a GVWR greater than 11,793 kg (26,000 lb.) are commercial vehicles under the commercial driver's license regulations, regardless of the number of DSPs. Accordingly, that exclusion was removed from the final rule.<sup>40</sup>

EMA and Daimler suggested that the rule exclude all buses with fewer than 40 passenger seats, which they imply would exclude buses that are not considered "motorcoaches." However, neither EMA nor Daimler included any explanation for why 40 passenger seats is an appropriate cutoff for an ESC system requirement, and we can perceive none. We do not believe that a minimum number of passenger seats would serve to include or exclude buses that are being driven at long distances or at highway speeds.

The NPRM also proposed to exclude buses with fewer than two rows of passenger seats that are rearward of the driver's seating position and are forward-facing or can convert to forward-facing without the use of tools. This reference was included in the large bus seat belt NPRM to distinguish buses with perimeter seating such as those used to transport passengers in airports between the terminal and locations such as a rental car facility or long term parking.<sup>41</sup> These buses typically have a single forward-facing row of seats in the back of the vehicle and seats along one or both sides of the bus. These buses typically carry people for a relatively short period, often transport standees, generally accommodate baggage and other items, and are designed for rapid boarding and alighting. These buses were excluded because we believed they would be used for relatively short distances on set routes, which are not widely exposed to general traffic.

In the seat belt final rule, the agency simplified the exclusion by defining these vehicles as perimeter seating buses and excluding them from the seat belt requirement rather than specifying the number of rows and seats that a bus has. Second, we referred to the maximum number of forward-facing DSPs that the vehicle may have rather than the number of "rows" it may have. We made this change because there is no definition of "row" generally

<sup>39</sup> 75 FR 50969.

<sup>40</sup> 78 FR 70433.

<sup>41</sup> 78 FR 70434.

applicable to the FMVSSs and it was difficult to define “row” for the purpose of excluding perimeter-seating buses using plain language. Thus, we defined a “perimeter-seating bus” as a bus with 7 or fewer DSPs rearward of the driver’s seating position that are forward-facing or can convert to forward-facing without the use of tools, and excluded perimeter-seating buses from the seat belt requirement.<sup>42</sup>

We believe that this exclusion is similarly applicable to the ESC system requirement, and we are adopting in this final rule the simplified language used in the seat belt final rule. A perimeter-seating bus typically carries people for short distances on set routes and is often less exposed to general traffic than transit buses. However, consistent with the Motorcoach Enhanced Safety Act, we are not excluding from the ESC system requirement perimeter-seating buses that are also over-the-road buses. Some of these buses may include vehicles often referred to as “limo buses” or “party buses.” These vehicles may also be used as touring or entertainment buses with eating and sleeping accommodations that are used by celebrities and entertainers on tour. We expect that these types of buses will be used for intercity travel and driven at highway speeds.

#### 7. Compliance Dates

The NPRM proposed that buses meet the ESC system requirements two years after publication of a final rule implementing the proposal. Although we did not receive any comments specifically addressing the compliance date for large buses, the Motorcoach Enhanced Safety Act specifically states that a stability enhancing requirement shall apply to all motorcoaches manufactured more than 3 years after the date on which the regulation is published as a final rule. Based on the Congressional determination that any enhancing stability technology rulemaking shall apply to all over-the-road buses manufactured more than 3 years after the final rule is published, we will allow bus manufacturers that amount of time inasmuch as a three-year lead time is practical.

With respect to Class 7 buses, the agency has determined that a three-year compliance date is not practical. The scope of this final rule includes buses that are hydraulic-braked. We recognize the manufacturers of hydraulic-braked buses will likely require extra time to ensure system availability and that the ESC system is properly integrated with

the vehicle. Based on the comments received from the bus industry, Class 7 buses are equipped with both air and hydraulic brakes. Rather than differentiate between brake systems of the Class 7 buses, we believe it would be better to base the compliance date requirements on GVWR. This will also address the concerns of manufacturers of buses built on truck chassis, for which ESC systems may not currently be equipped. We believe that at least four years of lead time are necessary to ensure that suppliers have ESC systems available for hydraulic-braked large buses. Accordingly, this final rule allows Class 7 bus manufacturers four years of lead time before the requirements of this final rule become applicable.

#### 8. Class 3 Through 6 Buses

Some of the commenters recommended that we expand the scope to include mid-size buses which are typically built on single-unit truck frames. Skagit, NTSB, IIHS, NAPT, Advocates, and Bosch all suggested that ESC should be mandated on all buses greater than 10,000 pounds. The NTSB estimated that 11,600 mid-size buses (buses with a GVWR between 10,000 pounds and 26,000 pounds) are produced each year. Advocates recommended that NHTSA should consider the NTSB recommendation that all buses over 10,000 pounds GVWR should be equipped with stability control systems. Bosch stated that the agency should develop a performance standard to cover vehicles in Classes 3 through 7 with hydraulic brakes because this segment accounts for a large number of commercial and load bearing vehicles on the U.S. roads. Bosch claims that a standard with a phase-in period is needed to facilitate industry development of ESC systems for these vehicles. Bosch also cites Annex 21 of UN ECE Regulation 13, which requires ESC on buses operating in the European Union.

We are not expanding the scope of this rule to include vehicles with a GVWR of 11,793 kilograms (26,000 pounds) or less. After publishing the NPRM, we began a research program to study the safety benefits and performance criteria of ESC systems on single-unit trucks, which includes mid-size buses. The research is not yet complete on single-unit trucks or smaller buses. However, we believe including buses with hydraulic brakes in this final rule will spur development of ESC systems for other hydraulic-braked vehicles, including buses with a GVWR of greater than 4,536 kilograms

(10,000 pounds) but not more than 11,793 kilograms (26,000 pounds).

#### C. Retrofitting

NHTSA considered proposing to require retrofitting of in-service truck tractors, trailers, and large buses with stability control systems. The Secretary has the statutory authority to promulgate safety standards for “commercial motor vehicles and equipment subsequent to initial manufacture.”<sup>43</sup> The Secretary has delegated authority to NHTSA to promulgate safety standards for commercial motor vehicles and equipment subsequent to initial manufacture when the standards are based upon and similar to an FMVSS promulgated, either simultaneously or previously, under chapter 301 of title 49, U.S.C.<sup>44</sup> Additionally, the Federal Motor Carrier Safety Administration (FMCSA) is authorized to promulgate and enforce vehicle safety regulations, including those aimed at maintaining commercial motor vehicles so they continue to comply with the safety standards applicable to commercial motor vehicles at the time they were manufactured.

Although the NPRM did not propose requiring truck tractors, trailers, or large buses to be equipped with stability control systems “subsequent to initial manufacture,” we requested public comment on several issues related to retrofitting in-service truck tractors, trailers, and buses:

- The extent to which a proposal to retrofit in-service vehicles with stability control systems would be complex and costly because of the integration between a stability control system and the vehicle’s chassis, engine, and braking systems.
- The changes necessary to an originally manufactured vehicle’s systems that interface with a stability control system, such as plumbing for new air brake valves and lines and a new electronic control unit for a revised antilock brake system.
- The additional requirements that would have to be established to ensure that stability control components are at an acceptable level of performance for a compliance test, given the uniqueness of the maintenance condition for vehicles in service, particularly for items such as tires and brake components that are important for ESC performance.
- The original manufacture date of vehicles that should be subject to any retrofitting requirements.

<sup>43</sup> See Motor Carrier Safety Improvement Act of 1999, section 101(f), Pub. L. 106–159 (Dec. 9, 1999).

<sup>44</sup> See 49 CFR 1.50(n).

<sup>42</sup> See 78 FR 70434–35.

- Whether the performance requirements for retrofitted vehicles should be less stringent or equally stringent as for new vehicles, and, if less stringent, the appropriate level of stringency.

- The cost of retrofitting a stability control system on a vehicle, which we believe would exceed the cost of including stability control on a new vehicle.

Several commenters addressed issues related to retrofitting in-service vehicles with ESC systems. We received comments both favoring and opposing retrofitting.

Road Safe America, NTSB, and Advocates supported a requirement for ESC to be retrofitted to existing heavy vehicles. Road Safe America recommended that RSC systems be retrofitted on all existing truck trailers. NTSB cited its recommendation that RSC systems be retrofitted on in-use cargo tank trailers. In its comments, Advocates said that there should be a retrofit requirement to install ESC systems on all in-service vehicles. Advocates stated that the failure to require retrofitting could significantly delay fleet penetration of ESC systems because of the extended service life of the affected vehicles.

Many more commenters were opposed to a retrofit requirement for ESC systems. IIHS stated that ESC systems should not be required to be retrofitted at this time, but that the agency should explore the feasibility creating a requirement in the future. American Highway Users requested that there should be no retrofit requirements for existing vehicles in order to incorporate ESC systems and would oppose any efforts to implement a retrofit requirement. In its comment, ATA did not support a retrofit requirement for ESC systems because it claims there is an average of a 4–5 year turnover for a majority of Class 7 and Class 8 tractors. Volvo commented that there should not be a retrofit of trucks because the changes to the vehicle are too significant, and there is no way to assure the quality of the retrofit.

Meritor WABCO stated that there should not be a retrofit of vehicles because, as a system supplier, it does not offer an ESC system retrofit option. Meritor WABCO also specified that ESC systems must be engineered and validated for each vehicle model and parts must be added, which would be difficult to do on in-service vehicles. Meritor WABCO further stated that an ESC system requires a steering wheel angle sensor, which is difficult to design for in-service vehicles. Meritor WABCO also expressed concern about the

possibility of incomplete or incorrect retrofit installations if retrofits are required.

The National Ready Mix Concrete Association argued that there should not be an ESC system retrofit requirement on single-unit trucks or truck tractors because retrofit costs will be higher on existing trucks than installations on new trucks. They further stated that a variety of improvised techniques are needed when doing retrofit installations, and these techniques result in higher maintenance costs. They were also concerned that a retrofitted system would not work on some older trucks because of unworkable truck designs and interference with safety and electronic features.

HDBMC stated that there should be no retrofit requirement because retrofitting of ESC systems is impractical and difficult. HDBMC cited the challenges of ESC system retrofitting, which include: (1) Compatibility of the vehicle; (2) computer hardware and software issues; (3) issues with new component installation; (4) vehicle downtime to make the conversion; (5) testing and validation; and (6) further unknown variables.

EMA asserted that it would be unsafe to implement a retrofit requirement because ESC systems are not currently installed over existing components. EMA also believes that aftermarket facilities do not have the capability to design, test, and implement ESC systems. EMA stated that rotational sensors, yaw rate, and lateral accelerometers must be mounted close to the vehicle's center of yaw rotation, or complex calculations must be used to compensate for any deviations in the mounting. Finally, EMA commented that the necessary components for an ESC system do not exist for older vehicle models.

Bendix commented that it had, for the purposes of research and development, retrofitted ESC to more than 25 vehicles. Bendix estimated that retrofitting in-service vehicles would take between 80 and 120 person-hours for installation because each installation would have to be customized and there would be little or no OEM support.

After considering the public comments, NHTSA has decided not to include a retrofit requirement in this final rule. NHTSA recognizes that the costs and safety risks of mandating an ESC system retrofit may exceed the benefits. Those commenters supporting an ESC system retrofit did not provide any information to mitigate issues such as: (1) The complexity and cost to retrofit in-service vehicles with ESC systems; (2) the changes necessary to

integrate the ESC system to the vehicle's chassis, engine, and braking system; (3) the changes necessary on the in-service vehicle to interface with the ESC system such as plumbing for new air brake valves and lines and a new electronic control unit for the ABS system; and (4) the additional requirements for in-service vehicles considering the uniqueness of the maintenance condition of the tire and brake components. Considering that the potential safety risks and certain high costs associated with a requirement to retrofit in-service vehicles with ESC systems greatly exceed the benefits, NHTSA has not included a retrofit requirement in this final rule.

## X. Performance Testing

### A. NHTSA's Proposed Performance Tests

The agency's research initially focused on a variety of maneuvers that we could use to evaluate the roll stability performance and the yaw stability performance of truck tractors and large buses. Several of these maneuvers were also tested by industry and some of them are allowed for use in testing for compliance to the UN ECE stability control regulation. The agency's goal was to develop one or more maneuvers that showed the most promise as repeatable and reproducible roll and yaw performance tests for which objective pass/fail criteria could be developed. Based on the agency's own testing and the results from industry-provided test data, two stability performance tests were proposed to evaluate ESC systems on truck tractors and large buses—the SIS test and the SWD test.

#### 1. Characterization Test—SIS

The agency proposed using the slowly increasing steer maneuver (SIS) as a characterization test to determine the unique dynamic characteristics of a vehicle. This maneuver would allow the agency to determine the relationship between the steering wheel angle and lateral acceleration of a vehicle. Also as part of the SIS characterization test, the ability of the ESC system to reduce engine torque is determined. During each of the SIS maneuvers, ESC activation is confirmed by verifying that the system automatically reduces the driver requested engine torque output. The NPRM proposed that, for each of the SIS maneuver test runs, the commanded engine torque and the driver requested torque signals must diverge at least 10 percent for 1.5 seconds after the beginning of ESC system activation. This test

demonstrates that the ESC system has the capability to reduce engine torque, as required in the functional definition. The vehicles that the agency tested were all able to meet this proposed performance level.

## 2. Roll and Yaw Stability Test—SWD

In the NPRM, we proposed using the sine with dwell maneuver (SWD) to test the ability of an ESC system to mitigate conditions that would lead to rollover or loss of control. Conceptually, the steering profile of this maneuver is similar to that expected to be used by real drivers during some crash avoidance maneuvers. As the agency found in the light vehicle ESC research program, the severity of the SWD maneuver makes it a rigorous test, while maintaining steering rates within the capabilities of human drivers. We believed that the maneuver is severe enough to produce rollover or vehicle loss-of-control without a functioning ESC system on the vehicle.

The agency's test program was able to develop test parameters for the SWD maneuver so that both roll stability and yaw stability could be evaluated using a single loading condition and test maneuver. Previously, the SWD maneuver had typically been used to evaluate only the yaw instability of a vehicle. NHTSA evaluated several loading conditions and found that a loading condition of 80 percent of the tractor's GVWR enabled us to evaluate both the yaw and roll stability control of the ESC system.

For a truck tractor, the agency would conduct the SWD test with the truck tractor coupled to an unbraked control trailer and loaded with ballast directly over the kingpin. The combination vehicle would be loaded to 80 percent of the tractor's GVWR. For a bus, the vehicle is loaded with a 68 kilogram (150 pound) ballast in each of the vehicle's designated seating positions, which would bring the vehicle's weight to less than its GVWR. The test vehicles were proposed to be equipped with outriggers to prevent the trailer from rolling over in case the ESC system does not function properly.

The SWD test would be conducted at a speed of 72 km/h (45 mph). An automated steering machine would be used to initiate the steering maneuver. Each vehicle is subjected to two series of test runs. One series uses counterclockwise steering for the first half-cycle, and the other series uses clockwise steering for the first half-cycle. The steering amplitude for the initial run of each series is 0.3A, where A is the steering wheel angle determined from the SIS maneuver. In

each of the successive test runs, the steering amplitude would be increased by increments of 0.1A until a steering amplitude of 1.3A or 400 degrees, whichever is less, is achieved. Upon completion the test runs, the agency would conduct post-processing of the yaw rate and lateral acceleration data to determine the lateral acceleration ratio, yaw rate ratio, and lateral displacement, as discussed below.

The lateral acceleration ratio (LAR) is a performance metric developed to evaluate the ability of a vehicle's ESC system to prevent rollovers. Lateral acceleration is measured on a bus or a tractor and corrected for the vehicle's roll angle. As a performance metric, the lateral acceleration value is normalized by dividing it by the maximum lateral acceleration that was determined at any time between 1.0 seconds after the beginning of steering and the completion of steering. The two proposed performance criteria are described below:

- A vehicle must have a LAR of 30 percent or less 0.75 seconds after completion of steer.
- A vehicle must have a LAR of 10 percent or less at 1.5 seconds after completion of steer.

The yaw rate ratio (YRR) is a performance metric used to evaluate the ability of a vehicle's ESC system to prevent yaw instability. The YRR expresses the lateral stability criteria for the sine with dwell test to measure how quickly the vehicle stops turning, or rotating about its vertical axis, after the steering wheel is returned to the straight-ahead position. The lateral stability criterion, expressed in terms of YRR, is the percent of peak yaw rate that is present at designated times after completion of steer. This performance metric is identical to the metric used in the light vehicle ESC system performance requirement in FMVSS No. 126. The two proposed performance criteria are described below:

- A vehicle must have a YRR of 40 percent or less 0.75 seconds after completion of steer.
- A vehicle must have a YRR of 15 percent or less at 1.5 seconds after completion of steer.

## 3. Lateral Displacement

Lateral displacement is a performance metric used to evaluate the responsiveness of a vehicle, which relates to its ability to steer around objects. Stability control intervention has the potential to significantly increase the stability of the vehicle in which it is installed. However, we believe that these improvements in vehicle stability should not come at the

expense of poor lateral displacement in response to the driver's steering input.

A hypothetical way to pass a stability control performance test would be to make either the vehicle or its stability control system intervene simply by making the vehicle poorly responsive to the speed and steering inputs required by the test. An extreme example of this potential lack of responsiveness would occur if an ESC system locked both front wheels as the driver begins a severe avoidance maneuver that might lead to vehicle rollover. Front wheel lockup would create an understeer condition in the vehicle, which would result in the vehicle plowing straight ahead and colliding with an object the driver was trying to avoid. It is very likely that front wheel lockup would reduce the roll instability of the vehicle since the lateral acceleration would be reduced. This is clearly, however, not a desirable compromise.

Because a vehicle that simply responds poorly to steering commands may be able to meet the stability criteria proposed in the NPRM, a minimum responsiveness criterion was also proposed for the SWD test. The proposed lateral displacement criterion was that a truck tractor equipped with stability control must have a lateral displacement of 2.13 meters (7 feet) or more at 1.5 seconds from the beginning of steer, measured during the sine with dwell maneuver. For a bus, the proposed performance criterion is a lateral displacement of 1.52 meters (5 feet) or more at 1.5 seconds after the beginning of steer. The lateral displacement criteria is less for a bus because a large bus has a longer wheelbase than a truck tractor and higher steering ratio, which makes it less responsive than a truck tractor.

### B. Comments on SIS and SWD Maneuvers

The agency received many comments, particularly from representatives of ESC system, truck tractor, and bus manufacturers specifically addressing the slowly increasing steer and sine with dwell maneuvers proposed in the NPRM. The comments raised issues regarding the relevance of the SWD and SIS tests, the amount of space required to perform the test, and the automated steering machine.

Daimler Trucks North America (DTNA), the ATA, and Navistar claimed the SWD was not representative of a real-world maneuver. EMA stated the no manufacturer to date was using the SWD maneuver to test and validate an ESC system. Navistar claimed the standard width of a highway lane does not allow room for the SWD maneuver

to be completed. EMA shared Navistar's belief that a driver of a truck tractor would require 6 to 8 lanes of road width to perform a SWD maneuver on a roadway, and the SWD test is unlike any maneuver likely to occur on public roads.

DTNA asserted that the SWD test fails to provide adequate pass/fail criteria as an ESC performance test. Similarly, Volvo stated that the SWD performance test criteria is impractical and unnecessary because there are established validation test methods available and in use.

DTNA, Navistar, and EMA suggested that tuning the ESC system to pass the SWD test could compromise the system performance. Navistar reasoned that focusing on the SWD test would diminish the amount of design work done to optimize ESC performance for other conditions. Navistar also speculated that some ESC systems may not comply with the SWD test and may require a lengthy research and development plan to redesign the systems. On the other hand, Bendix Commercial Vehicle Systems (Bendix) assured the agency that tractors equipped with the current Bendix ESC systems could pass the proposed SWD and SIS tests.

DTNA and EMA alleged that there would be additional burdens and restrictions on manufacturers caused by a SWD performance test. DTNA stated that manufacturers have a burden to conduct extensive ESC testing because of the lack of experience with the SWD test. EMA claimed that heavy vehicle options would be restricted to ensure compliance with the SWD test. Neither commenter provided details to support its claims.

We also received comments on the amount of space required to conduct SIS and SWD tests. According to Navistar, EMA, and Bendix, the SWD and SIS tests require a large area in order to perform the tests. Navistar, EMA, DTNA, Volvo, and the HDBMC claimed that the Transportation Research Center (TRC) in Ohio is the only test facility large enough to perform the SWD and SIS tests. Based on this belief, they assume an increase in the number of manufacturers using TRC will limit the test facility availability. Bendix provided data and calculations to support its recommendation for the test area dimensions needed to safely perform the SIS and SWD tests. According to Bendix, the SIS test needs an area of 176 m (563.2 ft.) by 151 m (483.2 ft.), and the SWD test needs a smaller area of 112 m (358.4 ft.) by 58 m (185.6 ft.). Bendix further argued that the ESC performance tests should be

portable, meaning that any test facility that can run FMVSS No. 121 tests should be able to run FMVSS No. 136 tests.

In the NPRM, we proposed using a steering machine to provide the steering wheel inputs for the vehicles during the SIS and SWD tests. Advocates recommended that the SWD and SIS tests should be required along with an automated steering machine. However, Bendix, Volvo, and EMA expressed concern regarding the steering machine and the capabilities of a vehicle's steering system to perform the SWD maneuver. Bendix stated that the steering robot specified in the NPRM is inadequate and suggested that more research needs to be done to find a steering controller more suited for large vehicles. According to Volvo, the same steering machine requirements as those found in FMVSS No. 126 would not be sufficient for heavy vehicles. EMA and Bendix expressed concerns that the SWD requires steering inputs that approach the limit of what a human being can accomplish. EMA also claims the SWD test exceeds the capacity of power steering systems on some tractors, which affects the results of the SWD and exposes the driver to safety risks.

Commenters also addressed the costs of conducting the proposed SIS and SWD tests. ATA and EMA stated that the proposed SWD test would be costly because of the logistics and preparation costs to test at TRC. Navistar said that a new facility would need to be built to conduct the SWD tests at an estimated cost of \$4 to 6 million plus additional costs for maintenance and repair of the facility.

Meritor WABCO, EMA, and Volvo provided estimates regarding the costs and burden of conducting the SWD test. Meritor WABCO commented that the tests are too costly and estimated the costs to be in excess of \$28,000 per tractor. EMA claimed the SWD is too expensive because heavy vehicles have many variations, small volumes, and typically testing is performed on saleable vehicles. EMA estimated that each truck tractor manufacturer would need to run 50 to 80 tests for its 6x4 tractors causing a high cost for the SWD testing, which is spread out over a low production volume of heavy vehicles. EMA further commented that manufacturers might have to redesign steering systems to comply in order to perform the SWD tests, which would further increase the costs. Additionally, EMA claims NHTSA did not test any severe service tractors using SWD testing, and the sample of truck tractors NHTSA tested was too narrow to

support the proposal. Further EMA criticized NHTSA's test program for using only one control trailer and one test facility. Volvo alleged that the proposed performance tests could potentially damage test vehicles, and some manufacturers conduct assurance tests on customer vehicles.

### *C. Alternative Maneuvers Considered in the NPRM*

We considered other test maneuvers besides the SIS and SWD tests in the NPRM. The SWD maneuver was chosen in the NPRM over other maneuvers because our research demonstrated that it has the most optimal set of characteristics, including the severity of the test, repeatability and reproducibility of results, and the ability to address rollover, lateral stability, and responsiveness. However, we left within the scope of the NPRM several other test maneuvers that could be used to test an ESC system's ability to mitigate instability.

With respect to rollover instability mitigation, we discussed the ramp steer maneuver (RSM) and J-turn maneuver. The two tests are similar in that both maneuvers require the tested vehicle to be driven at a constant speed and then the vehicle is turned in one direction for a certain period of time. The test speed and the severity of the turn are designed to cause a test vehicle to approach or exceed its roll stability threshold such that, without a stability control system, the vehicle would exhibit signs of roll instability. Both tests would be performed with the tractor loaded to its GVWR. Furthermore, we do not expect a vehicle that could pass one test to fail the other.

The most notable difference between the J-turn and the RSM maneuvers is that the J-turn is a path-following maneuver. That is, it is performed on a fixed path curve. In contrast, the RSM maneuver is a non-path-following maneuver that is performed with a fixed steering wheel input determined for each vehicle. For example, during the agency's and EMA's testing, the J-turn maneuver was performed on a 150-foot radius curve. In contrast, the RSM is performed based on a steering wheel angle derived from the SIS test. We expect that, with the RSM, the radius of the curve would be close to the fixed radius used in the J-turn maneuver. However, in the RSM, the vehicle would be steered with a steering controller and the driver would not have to make adjustments and corrections to steering to maintain the fixed path.

We included both maneuvers in our roll stability testing. We also included possible performance metrics. For the

RSM, these performance metrics were included in the preamble to the NPRM. For the J-turn maneuver, the performance metrics were included in materials supporting the NPRM that were placed in the docket.<sup>45</sup>

When comparing the J-turn to the RSM in the NPRM, the agency considered the RSM to be a preferable test maneuver because the RSM maneuver can be performed with an automated steering wheel controller. Because the J-turn is a path-following maneuver, a test driver must constantly make adjustments to the steering input for the vehicle to remain in the lane throughout the test maneuver. Moreover, driver variability could be introduced from test to test based upon minor variations in the timing of the initial steering input and the position of the test vehicle in the lane.

In addition, the RSM appeared to be more consistent because it involves a fixed steering wheel angle rather than a fixed path. There is negligible variability based on the timing of the initial steering input because the test is designed to begin at the initiation of steering input, rather than the vehicle's position on a track. Moreover, an automated steering wheel controller can more precisely maintain the required steering wheel input than a driver can. Therefore, we tentatively concluded that the RSM is more consistent and more repeatable than the J-turn, which is critical for agency compliance testing purposes.

Notwithstanding the above observations, we recognized that many manufacturers perform NHTSA's compliance tests in order to certify that their vehicles comply with NHTSA's safety standards. We also recognize that, over time, manufacturers are likely to use other methods such as simulation, modeling, etc., to determine compliance with Federal Motor Vehicle Safety Standards. In this regard, we observed that, because the J-turn and the ramp steer maneuvers are so similar, manufacturers may be able to determine compliance with a stability control standard by using the J-turn maneuver even if the agency ultimately decided to use the RSM for compliance testing. Thus, if a manufacturer sought to certify compliance based upon performance testing, a manufacturer would not necessarily need to perform compliance testing with an automated steering controller.

<sup>45</sup> See "Tractor Semi-Trailer Stability Objective Performance Test Research—Roll Stability," Docket No. NHTSA-2010-0034-0009 Pages xiv, 18, 22-27, 35.

The RSM would use a similar, but not identical lateral acceleration ratio performance metric to evaluate roll stability. As with the SWD maneuver, the LAR used in the RSM would indicate that the stability control system is applying selective braking to lower lateral acceleration experienced during the steering maneuver. In the SWD maneuver, the LAR is the ratio of the lateral acceleration at a fixed point in time to the peak lateral acceleration during the period from one second after the beginning of steer to the completion of steer. In contrast, the LAR metric we would use for the RSM would be the ratio of the lateral acceleration at a fixed point in time to the lateral acceleration at the end of ramp input, which is the moment at which the steering wheel angle reaches the target steering wheel angle for the test. Also, in contrast to the SWD maneuver, the LAR measurements for the RSM would be taken at a time when the steering wheel is still turned. This means that, although the SWD maneuver is a more dynamic steering maneuver, the LAR criteria for the RSM would be greater than the LAR criteria for the SWD maneuver. The performance criteria for the RSM would depend on whether fixed-rate steering or fixed-time steering input is used.

In a March 2012 submission given to the agency prior to the publication of the NPRM, which was revised with additional details in April 2012, EMA suggested that NHTSA use different test speeds and performance criteria for the J-turn maneuver.<sup>46</sup> EMA suggested that a test speed that is 30 percent greater than the minimum speed at which the ESC system intervenes with engine, engine brake, or service brake control. Instead of measuring LAR, EMA suggested that, during three out of four runs, the vehicle would be required to decelerate at a minimum deceleration rate. NHTSA has conducted testing on variations of this EMA maneuver, and we suggested that we would conduct further testing. We requested comments on EMA's suggested test procedure and performance criteria for the J-turn maneuver.

After evaluating several maneuvers on different surfaces, the agency was unable to develop any alternative performance-based dynamic yaw test maneuvers that were repeatable enough for compliance testing purposes. Bendix described two maneuvers intended to evaluate the yaw stability of tractors.<sup>47</sup>

<sup>46</sup> Docket No. NHTSA-2010-0034-0032; Docket No. NHTSA-2010-0034-0040.

<sup>47</sup> These tests are discussed in section IV.E.3. See Docket No. NHTSA-2010-0034-0037 and Docket No. NHTSA-2010-0034-0038.

However, neither of these test maneuvers was developed to a level that would make them suitable for the agency to consider using as yaw performance tests.

In July 2009, EMA provided research information on several yaw stability test maneuvers.<sup>48</sup> One of these maneuvers was the SWD on dry pavement that is similar to what was proposed in the NPRM. The second maneuver was a SWD maneuver conducted on wet Jennite. The third maneuver was a ramp with dwell maneuver on wet Jennite.<sup>49</sup> EMA did not provide any test data on the last two maneuvers. Thus, we considered them to be concepts rather than fully developed maneuvers that we could consider using for yaw stability testing.

We received no other alternative yaw performance tests from industry until EMA's submission of data in late 2010.<sup>50</sup> EMA suggested using a wet Jennite drive through test maneuver demonstrated yaw performance in a curve on a low friction surface. The maneuver is based upon a maneuver the agency currently conducts on heavy vehicles to verify stability and control of antilock braking systems while braking in a curve. As part of the test, a vehicle is driven into a 500-foot radius curve with a low-friction wet Jennite surface at increasing speeds to determine the maximum drive-through speed at which the driver can keep the vehicle within a 12-foot lane. As with the J-turn, we are concerned about the repeatability of this test maneuver because of variability in the wet Jennite test surface and the drivers' difficulty in maintaining a constant speed and steering input in the curve.

In a March 2012 submission, which was revised with additional details in April 2012, EMA provided information about another yaw stability test along with additional information on the J-turn maneuver.<sup>51</sup> This maneuver simulates a single lane change on a wet roadway surface. It is to be conducted within a 3.7 meter (12 foot) wide path. The roadway condition is to be a wet, low friction surface such as wet Jennite with a peak coefficient of friction of 0.5. The other test conditions (*i.e.*, road conditions, burnish procedure, liftable axle position, and initial brake temperatures) are similar to those proposed in the NPRM. In this

<sup>48</sup> Docket No. NHTSA-2010-0034-0035.

<sup>49</sup> This ramp with dwell maneuver is the same one identified by Bendix referenced in the prior paragraph and in section IV.E.3.

<sup>50</sup> Docket No. NHTSA-2010-0034-0022; Docket No. NHTSA-2010-0034-0023.

<sup>51</sup> Docket No. NHTSA-2010-0034-0032; Docket No. NHTSA-2010-0034-0040.

maneuver, the truck enters the path at progressively higher speeds to establish the minimum speed at which the ESC system intervenes and applies the tractor's brakes. The maneuver is then repeated four times at that speed with the vehicle remaining within the lane at all times during the maneuver. EMA suggests, as a performance criterion, that during at least three of the four runs, the ESC system must provide a minimum level (presently unspecified) of differential braking. At the NPRM phase, the agency had not had an opportunity to conduct testing of this maneuver, but we expressed an intention to determine whether this is a viable alternative yaw stability test. The agency requested comment on all aspects of EMA's yaw stability test discussed in its March and April 2012 submissions, including the test conditions, test procedure, and possible performance criteria that would allow the agency to test both trucks and buses with this maneuver.

#### *D. Comments on Alternative Test Maneuvers*

Seven commenters (Daimler, Volvo, Meritor WABCO, Navistar, HDMA, EMA, and Bendix) recommended that NHTSA adopt alternative dynamic performance test maneuvers instead of the SIS and SWD. These alternative maneuvers were either described in the NPRM or included in comments submitted in response to the NPRM.

EMA submitted a comment including general test conditions for a J-turn maneuver to test roll stability and a single lane change on a wet surface to test yaw stability. In a later submission, EMA provided actual test information and suggested performance criteria based on data gathered at two different test facilities using 10 different truck tractors. Daimler, Meritor WABCO, HDMA, EMA, and Bendix supported adopting EMA's J-turn test maneuver as the performance test requirement for testing roll stability.

The J-turn maneuver described in EMA's submissions uses a test course with straight lane connected to a 45.7-meter (150-foot) radius, a lane width of 3.7 meters (12 feet), and a surface coefficient of 0.9. The test speed of the maneuver is determined by driving a vehicle on the test course and identifying the minimum vehicle speed that causes the ESC system to apply the service brakes. That speed is the reference speed. The vehicle is then driven on the test course, entering the curve at 1.3 times the reference speed. The deceleration rate is determined from a time starting at when the ESC system activates the service brakes. The

brakes are considered to be activated when at least 35 kPa (5 psi) is observed at the service brakes. EMA recommended that four test runs be performed and that the deceleration rate must be at least 0.91 m/s<sup>2</sup> (3.0 ft./s<sup>2</sup>) in three of the four test runs.

With respect to the SWD test in the agency's proposal, EMA stated that the SWD maneuver is nearly identical to the maneuver used in FMVSS No. 126. However, in FMVSS No. 126, NHTSA stated that the maneuver was only used to test yaw stability, not roll stability. EMA observed that heavy vehicles are different from light vehicles because they have higher centers of gravity and are more likely to roll over than to lose directional control. Because the SWD test does not test roll stability on light vehicles, EMA reasoned that the maneuver should not be used to test roll stability on heavy vehicles.

Regarding yaw testing, EMA disagreed with NHTSA's assessment in the NPRM that low friction surfaces such as wet Jennite may be too variable to conduct ESC testing, citing NHTSA's use of wet Jennite in testing air brake performance in FMVSS No. 121. EMA recommended using a test course with an overall length of 58.5 meters (192 feet). The vehicle proceeds into the maneuver in a 3.1-meter (10-foot) wide entrance lane. A steering maneuver is made within 28 meters (92 feet), and the vehicle completes the maneuver by entering a second 3.7-meter (12-foot) wide departure lane with a length of 15.2 meters (50 feet). The coefficient of friction of the road surface is 0.5. The maneuver is similar to a single lane change on a wet surface test. The test is conducted at a speed that is 1.6 km/h (1 mph) greater than the reference speed determined in the rollover maneuver. The vehicle is driven on the test course for four test runs at the test speed and the brake pressure is measured at opposite wheel ends. EMA recommended that a differential brake pressure of at least 69 kPa (10 psi) in three of the four test runs as a minimum performance requirement.

Daimler, HDMA, EMA, and Bendix recommended that NHTSA adopt the single lane change maneuver described in EMA's comment for testing yaw stability, if the test is workable. Otherwise, they recommended removing performance requirements related to yaw stability, leaving only an equipment definition requiring yaw stability performance.

Other commenters had similar views on yaw testing. For example, Meritor WABCO recommended that NHTSA should wait to test yaw stability until it could develop a new yaw stability test.

Bendix submitted test data and criteria using a ramp with dwell maneuver, which it suggested could be used for testing both the roll and yaw stability of a vehicle. IIHS did not endorse a particular performance test, but made a general statement that there should be a requirement of performance tests for ESC.

Furthermore, EMA agrees with NHTSA's assessment that it is difficult to test for understeer control. EMA believes that the reasoning for not testing understeer control in FMVSS No. 126 can be carried over to heavy vehicle ESC. In that rulemaking, NHTSA concluded that the understeer prevention requirement that was included in the system capability requirements was objective, even without a performance test.<sup>52</sup>

#### *E. NHTSA Examination and Testing of EMA Maneuvers*

In response to the March and April 2012 submission from EMA and additional data submitted to the agency in June 2012 and November 2012 after the issuance of the NPRM containing results of additional tests discussed by EMA, the agency conducted its own testing in 2013 using EMA's suggested rollover performance maneuver.<sup>53</sup> The results of this testing are summarized in the reports: (1) "2013 Tractor Semitrailer Stability Objective Performance Test Research—150-Foot Radius J-Turn Test Track Research;" (2) "Stability Control System Test Track Research with a 2014 Prevost X3-45 Passenger Motorcoach;" and (3) "Stability Control System Test Track Research with a 2014 Van Hool CX45 Passenger Motorcoach."<sup>54</sup> This section provides a summary of these reports.

These reports do not address the yaw stability performance maneuver suggested by EMA to test yaw stability. EMA's lane change maneuver test is performed on a wet level surface with a peak friction coefficient of 0.5. NHTSA's past test results with this test surface and similar performance maneuvers has shown that ESC systems have the capability to improve vehicle yaw and roll stability performance on low friction surfaces. However, vehicle handling characteristics dictated the performance of the vehicle on low friction surfaces. Test data revealed that, depending on whether the tractor

<sup>52</sup> 72 FR 17261 (Apr. 6, 2007).

<sup>53</sup> Docket No. NHTSA-2010-0034-0032; Docket No. NHTSA-2010-0034-0040; Docket No. NHTSA-2012-0065-0059; Docket No. NHTSA-2012-0065-0060.

<sup>54</sup> Docket No. NHTSA-2012-0065-0062; Docket No. NHTSA-2012-0065-0063; Docket No. NHTSA-2012-0065-0064.



understeered or oversteered with respect to the trailer, the ESC system behavior changed. Under such varying behaviors, measures of performance that were investigated could not be standardized to capture the benefits of an ESC system over the whole range of vehicles tested. We have concluded that objective performance tests for ESC using a low friction surface requires additional data analysis, maneuver design, and test procedure development, which would require further delaying this final rule with no assurance that an acceptable maneuver on a low-friction surface could be developed. Therefore, we have not further tested EMA's suggested yaw performance maneuver. We may investigate this maneuver in the future.

The main objective of NHTSA's truck-tractor testing was to gain additional experience with a the 150-foot radius J-turn maneuver procedures suggested by EMA and to collect test track performance data on air braked truck tractors equipped with stability control system. The agency conducted tests on three class 8 air-braked truck tractors and two control trailers. The three trucks used were a 2006 Freightliner 6x4 equipped with separate RSC and ESC systems, a 2006 Volvo 6x4 equipped with an ESC system, and a 2011 Mack 4x2 equipped with an ESC system.

The test procedures were derived from those EMA submitted in April 2012, which the agency placed in the docket with the NPRM.<sup>55</sup> The test course consisted of a 12-foot wide curved lane with a 150-foot radius measured from the center of the lane and a peak surface friction coefficient of

0.9. The curved lane formed a semicircle, and a straight lane used for bringing the vehicle up to speed was oriented tangentially at both ends of the curved lane. This allowed the same test course to be used in both a clockwise and counterclockwise orientation. The agency placed cones at every 11.25 degrees of arc angle to mark the inner and outer lane boundaries.

Prior to testing, the test tractors were loaded to the GVWR by attaching them to one of the two unbraked control trailers used for testing. The remaining test conditions (*i.e.*, road surface friction, ambient temperature conditions, burnish procedure, liftable axle conditions) largely mirrored those specified in FMVSS No. 121 for testing air brakes, which also generally mirrored the test conditions set forth in the NPRM.

The test driver maneuvered the test vehicle into the straight lane and approached the curve, then traveled through the 180 degrees of arc in the curve. The driver attempted to steer the vehicle in such a manner that it stayed in the lane throughout the maneuver. The brake pressure was measured at each wheel end and was monitored using a computer. All maneuvers were conducted in one direction, and then the entire procedure was completed in the opposite direction, so that vehicles were tested both clockwise and counterclockwise independently. The test sequence was repeated for each of the test vehicles and, for the Freightliner, repeated separately with the ESC and RSC systems enabled.

Each test was conducted at a specified entrance speed, with a tolerance of +/- 1 mph, which the driver would

reach and maintain prior to entering the curve. The test driver released the throttle two or more seconds after the stability control system intervened with either torque reduction or brake application. However, it was discovered that it was easier for the test driver to control speed if throttle was maintained until the stability control system reduced the vehicle's forward speed by 2 to 3 mph.

Initially, vehicles were tested with an entrance speed of 20 mph. Additional test runs were conducted at entrance speeds increased incrementally by 1 mph until a reference speed could be determined. The reference speed was the speed at which the stability system intervened with at least 5 psi of service brake pressure. Additional tests were conducted at speeds incremented by 1 mph until the target test speed was reached, which was 130 percent of the reference speed. Four additional test runs were conducted at the target test speed.

Near the end of testing, the agency conducted four additional test runs at the reference speed, during which the test driver fully depressed the accelerator pedal after crossing the start gate. The purpose of this testing was to evaluate the stability control system's ability to reduce driver-commanded engine torque.

Following this procedure, the agency determined reference speeds and target test speeds for each test vehicle connected to each of the control trailers and run in each direction. All vehicles tested had the ESC systems intervene at entrance speeds not greater than 30 mph. The results are summarized in the following table.

TABLE 3—REFERENCE SPEED, TARGET TEST SPEED, AND LANE VIOLATIONS OBSERVED DURING 150-FOOT J-TURN TESTS

Tractor	Control trailer	Reference speed (mph)		Target test speed (mph) [Reference Speed × 1.3]		Lane violations observed at or below the target test speed	
		Counter-clockwise	Clockwise	Counter-clockwise	Clockwise	Counter-clockwise	Clockwise
Freightliner 6×4 ESC ...	1	28 .....	28 .....	36 .....	36 .....	0	0
	2	27 .....	28 .....	35 .....	36 .....	0	0
Freightliner 6×4 RSC ...	1	30 .....	26 .....	39 .....	34 .....	2	0
	2	Not Tested .....	Not Tested .....	Not Tested .....	Not Tested .....	—	—
Mack 4×2 ESC .....	1	25 .....	24 .....	33 .....	31 .....	0	0
	2	25 .....	24 .....	33 .....	31 .....	0	0
Volvo 6×4 ESC .....	1	26 .....	26 .....	34 .....	34 .....	0	0
	2	26 .....	25 .....	34 .....	33 .....	0	0

EMA suggested, as the performance metric, that the ESC system decelerate the vehicle at a rate greater than 3 ft./

s<sup>2</sup> during three of four test runs at an entrance speed of 130 percent of the reference speed. In addition to

evaluating EMA's suggested performance metric, the agency considered additional performance

<sup>55</sup> Docket No. NHTSA-2010-0034-0040.

metrics for evaluating roll stability performance. In its roll stability test development, the agency had considered lateral acceleration and forward speed as possible roll stability performance metrics.<sup>56</sup>

NHTSA's past test track research showed that tractors pulling trailers with high centers-of-gravity have a high probability of rolling over in a 150-foot radius curve when speeds exceeded 30 mph.<sup>57</sup> Tractors equipped with ESC systems, driven under the same scenario, were slowed down by the ESC systems and consequently, roll instability was mitigated. These observations guided comparisons in performance and allowed the agency to develop speed-based performance metrics relative to the entrance to the 150-foot curve. Specific speed thresholds can be established as a performance metric.

In the agency's testing using a high center-of-gravity load, roll instability (wheel lift) was first observed in tests generating approximately 0.4g of lateral acceleration at the tractor's center of gravity. Wheel lift was generally observed between 3 and 4 seconds after the steering input, which is when 0.4g of lateral acceleration was sustained. Based on these observations, the agency set the tractor lateral acceleration thresholds for roll stability during the 150-foot J-turn maneuver at a maximum of 0.375 g at 3.0 seconds after the vehicle crossed the start gate and 0.350 g at 4.0 seconds after the vehicle crossed the start gate.

However, because the radius of the curved portion of the track is fixed, these lateral acceleration thresholds can be related to speed thresholds using the formula  $A=V^2/R$ , where A is the lateral acceleration, V is the vehicle's forward speed, and R is the radius of the curve. Inserting the specified lateral acceleration levels and the radius of the curve, the agency's lateral acceleration thresholds converted to maximum speed thresholds of 29 mph and 28 mph at 3.0 and 4.0 seconds, respectively.

Each tractor and stability control system tested exceeded EMA's suggested 3 ft./s<sup>2</sup> minimum deceleration test criteria. Each tractor and stability control system tested also exceeded NHTSA's speed and lateral acceleration thresholds.

#### F. Roll Stability Performance Test—J-Turn Test

##### 1. Rationale for Using J-Turn Test

NHTSA has decided to substitute the J-turn maneuver in place of the SIS and SWD maneuvers as the performance test for an ESC system. The J-turn test will be used to evaluate the roll stability of a vehicle. Likewise, the J-turn will also be used to ensure that the ESC system reduces engine torque to the wheels. Because the J-turn is conducted on a fixed curve, longitudinal velocity (speed) directly correlates to lateral acceleration. NHTSA has determined that the J-turn test is the most cost-effective and least burdensome alternative that achieves the objectives of the ESC rule. Moreover, the roll stability mitigation performance requirements associated with the J-turn maneuver are comparable to the minimum performance requirements associated with the SWD maneuver proposed in the NPRM.

To be clear, however, the agency rejects much of the criticism of the SWD maneuver in the comments from truck manufacturers. Although we are abandoning the proposed SIS and SWD maneuver in favor of a J-turn maneuver to test roll stability in this final rule, NHTSA still considers the SWD test to be a viable test to measure the minimum performance of an ESC system on a heavy vehicle.

We do not agree with the commenters' assertions about the relevance of the SWD maneuver. The lack of voluntary adoption of the SWD test by vehicle manufacturers does not, by itself, make the SWD test irrelevant.

Likewise, the comments regarding the width of public roads and how the maneuver is not likely to occur on public roads are inapposite. The purpose of the performance test is to determine the minimum performance requirements of ESC systems using an objective and repeatable test. The fact that the SWD test will not be performed on public roads and must be performed on a test track, which can be 6 to 8 lanes of public road width or larger, is not by itself a persuasive argument that the test is irrelevant.

Nor does the agency agree with the commenters suggesting that additional design work would be necessary in order for vehicles to meet SWD performance requirement. None of the commenters suggesting additional design work was necessary submitted information to justify the assertion. Moreover, Bendix, a system supplier, asserted that current ESC systems could pass the proposed SWD test. NHTSA's own testing using two typical 6x4

tractors each equipped with ESC systems consistently met the proposed performance requirements using the SWD test. In addition, no commenter submitted supporting information describing any specific design compromises that would occur as a result of complying with the SWD test.

Likewise, the agency does not characterize the testing of saleable vehicles as an unnecessary cost increase. Contrarily, performing the tests on saleable vehicles, as opposed to manufacturing a vehicle solely for testing purposes, reduces the amount of cost to a manufacturer. The manufacturers have provided no basis for their assertions that they could not resell vehicles after conducting SWD tests. Although they have asserted that the vehicles may be damaged during testing, NHTSA has not experienced any vehicle damage during its own testing. In response to Volvo's claim of potential damage to vehicles being tested, the agency recognizes that any performance test, if done unsafely, could potentially damage the vehicle being tested.

Nevertheless, NHTSA believes the J-turn test maneuver is more efficient than the SWD test for assessing the roll instability mitigation of ESC systems. The J-turn test can demonstrate roll stability using only a single test. There is no need to analyze and extrapolate data between two separate test maneuvers as there is using the SIS and SWD tests. This will allow the agency to complete a compliance test more quickly using the J-turn than using the SIS and SWD tests.

We did not receive any estimate from EMA or its members regarding the costs to perform the J-turn test. However, EMA and its members did not object to the cost of its suggested performance test, nor did any commenter discuss the difference in cost of the J-turn test versus the SWD and SIS tests. Instead, the agency received a recommendation from dozens of commenters to adopt the J-turn test. The agency estimates that it would cost approximately \$13,400 per truck tractor and \$20,100 per large bus to conduct the full series of J-turn test maneuvers contained in this final rule.

We also note that the J-turn maneuver is similar to the Ramp Steer Maneuver (RSM), which was discussed at length in the NPRM. Both maneuvers use a test course with a straight lane connected to a curved lane. However, the RSM maneuver is an open loop type test, uses an automated steering controller, and requires conducting an SIS maneuver to determine the appropriate steering wheel angle for testing. The J-turn is a path-following maneuver and the vehicle is steered by the driver. We have

<sup>56</sup> See Docket No. NHTSA-2010-0034-0009.

<sup>57</sup> See "Tractor Semi-Trailer Stability Objective Performance Test Research—Roll Stability," Docket No. NHTSA-2010-0034-0009; "Tractor Semitrailer Stability Objective Performance Test Research—Yaw Stability," Docket No. NHTSA-2010-0034-0046.

chosen a path-following maneuver over the fixed-steering RSM because of track space concerns regarding the SIS maneuver. We believe that the amount of track space necessary to conduct the SIS maneuver may only be available at one or two test facilities in the United States. While one of these facilities is readily available to NHTSA for compliance testing purposes, we recognize that manufacturers may wish to test their own vehicles as part of their compliance certification.

We emphasize that the adoption of the J-turn maneuver should not in any way diminish the roll stability performance we have observed from ESC systems. The performance criteria associated with the J-turn test maneuver in this final rule have been chosen to ensure a level of roll instability mitigation performance similar to that required to satisfy the SWD maneuver. Although the test is conducted at a lower speed, the radius of the curve will increase lateral acceleration to a level that would generate roll instability in vehicles without ESC systems. We believe that all large trucks and buses equipped with current generation ESC systems will meet the minimum performance requirements just as we believe they would have met the minimum performance requirements associated with the SWD maneuver. Therefore, we do not believe that the use of a different test maneuver will change the expected performance of ESC systems.

We also observe that, like the sine with dwell maneuver, the J-turn maneuver that is one of the demonstration tests in Annex 21 of UN ECE Regulation 13. If a manufacturer chooses the J-Turn test as a demonstration test to show compliance with Annex 21 and can achieve the performance criteria established in this final rule, then there would be compatibility between the performance tests of FMVSS No. 136 and UN ECE Regulation 13.

NTSB provided comments indicating that rollover performance standards should be measured by static rollover stability. NHTSA does not agree with the NTSB's suggestion. NHTSA developed test methods that could evaluate an ESC system's performance dynamically. The goal is to create a measure of performance that will ensure that an ESC system could prevent a rollover. A static stability test would not measure how an ESC system reduces lateral acceleration to reduce untripped rollovers.

## 2. Test Procedure and Performance Requirements

The J-turn test procedure developed based on EMA's suggestion is a sequential procedure in which the test vehicle is repeatedly driven through a 150-foot radius curve. The test is conducted on the same test course and is generally performed in the manner suggested by EMA with only minor changes added to test lateral responsiveness and to test the ESC system's ability to reduce engine output. We have also modified the minimum performance criteria to use forward speed rather than deceleration rate. We found that using deceleration rate as a minimum performance criteria would not address vehicle wheel lift and subsequent rollover, especially when the vehicle has a load with a high center-of-gravity. EMA's suggestion only measures the braking rate, but it does not measure the ESC system's capability to lower vehicle lateral acceleration to an acceptable threshold.

A diagram of the curve is included in the regulatory text to clarify any ambiguities in the description of the course. Although the lane markings are depicted with dots on the figure, there is no specification for how the lane is marked. It may, for example, be marked with cones or painted lines. Although the figure depicts a counter-clockwise layout, the test is conducted in both directions.

The start gate is placed at the point of the test course where the straight lane section intersects with the curved section of the lane. An end gate is placed on the curved portion of the lane at 120 degrees of arc angle from the start gate. It will take a test vehicle more than 4 seconds to pass through the end gate. Therefore, all of the necessary data will be collected by that point.

For truck tractors, the lane width is 3.7 meters (12 feet) for both the straight section and curved section of the course. However, large buses require additional lane width on the curved section of the course because buses have longer wheelbases, which make it substantially more difficult to maintain a narrower lane within the curve. The large buses that the agency tested did not physically fit in the curved section of the 12-foot lane because of their long wheelbases. During testing, the rear wheels of the buses departed the lane even at very low entrance speeds because of the geometry of the buses, not because of a lack of stability. Therefore, for buses, the lane width on the curved section of the course is 4.3 meters (14 feet).

Each is subjected to multiple J-turn test runs with a test speed starting at 32 km/h (20 mph) and increased in 1.6 km/h (1 mph) increments until ESC service brake activation is observed. The test driver will not apply the service brakes or the engine exhaust braking during the maneuver. For air-braked vehicles, ESC service brake activation occurs when the ESC system causes the pressure in the service brake system to reach at least 34 kPa (5 psi) for a continuous duration of at least 0.5 second. For vehicles with hydraulic brakes, ESC service brake application occurs when the ESC system causes the pressure in the service brake system to reach at least 172 kPa (25 psi) for a continuous duration of at least 0.5 second. This speed is considered the Preliminary Reference Speed. This procedure is conducted separately using clockwise and counterclockwise steering.

The J-turn maneuver is then repeated four times at the Preliminary Reference Speed to confirm that this is the speed at which ESC service brake activation occurs. To do this, four test runs are performed and ESC service brake application is verified. If ESC service brake application is verified, this speed is considered the Reference Speed. If ESC service brake activation does not occur during at least two of the four test runs, the Preliminary Reference Speed is incremented by 1.6 km/h (1 mph) and ESC service brake application is again verified. Again, the Reference Speed is determined for both the clockwise and counterclockwise direction.

Once the Reference Speed is determined, the ESC system's ability to reduce engine torque is verified. Two series of four test runs (one series clockwise, the other series counterclockwise) are conducted at the Reference Speed. During these maneuvers, the driver will fully depress the accelerator pedal after entering the curve and throughout the curve. NHTSA will verify that the engine torque output is less than the driver-requested output. This ensures that the driver's attempt to accelerate the vehicle does not override the ESC service brake application and verifies the system's ability to mitigate instability by reducing engine torque.

Thereafter, the vehicle is subjected to multiple series of test runs (both clockwise and counterclockwise) at an entrance speed up to a maximum test speed, which is up to 1.3 times the Reference Speed, but no less than 48 km/h (30 mph). At a speed between 48 km/h (30 mph) and the maximum test speed, the vehicle is subjected to eight maneuvers, during which ESC service brake activation is verified. The vehicle must be able to meet the roll stability

performance criteria discussed below at any speed between 48 km/h (30 mph) and the maximum test speed.

### 3. System Responsiveness

The NPRM described the need for a lateral displacement performance metric because of the possibility of a manufacturer making the vehicle poorly responsive to the speed and steering inputs required by the SWD test. The risk of poor lateral displacement in response to the driver's steering input was mitigated by a minimum responsiveness criterion. Although the SWD test is being replaced with the J-turn test, we still need to account for vehicle responsiveness. The nature of the J-turn test provides two criteria for ensuring vehicle responsiveness: Maintaining the lane within the fixed radius curve and a minimum test speed.

The first responsiveness criterion is the requirement that the vehicle maintain the lane during at least six of eight runs in the roll performance test series or at least two of four runs in any other test series. This requirement ensures that, during J-turn test runs at increasing speeds, the ESC system actually activates before the vehicle becomes unstable. We are not imposing this requirement for each test run within a series to account for driver variability and possible driver error in conducting the maneuver. Absent driver error, we do not expect any vehicle equipped with current-generation ESC systems to leave the lane during any J-turn test.

The other responsiveness criterion in this final rule is the minimum vehicle entry speed of 48 km/h (30 mph) for the roll performance test. This will discourage a manufacturer from designing a system that will intervene only at very low speeds, thus artificially decreasing the speed at which the vehicle will enter the curve during the roll performance test.

### 4. Engine Torque Reduction

As proposed in the NPRM, there must be at least a 10 percent reduction in engine torque when measured 1.5 seconds after the activation of the ESC system. The percent reduction is measured between the actual engine torque output and the driver-requested torque input. This measurement was to be taken during the slowly increasing steer maneuver. However, now that the agency has adopted the J-turn test as its performance test, the SIS test is no longer necessary.

Accordingly, the agency has modified the engine torque reduction test in the NPRM so that it can be used with the J-turn test. The reference speed, which is the lowest test speed at which the

ESC system activated the vehicle's service brakes, is determined as part of the J-turn test sequence. An additional two test series (one using clockwise steering and the other using counterclockwise steering) are conducted after the reference speed is calculated. The driver then fully depresses the accelerator pedal after the vehicle crosses the start gate. After ESC activation occurs, data is collected to determine the difference between the actual engine torque output and the driver requested torque. After analyzing research data from the J-turn testing, we have determined that the ESC system must reduce the driver requested engine torque by at least 10 percent for at least 0.5 second during the time period between 1.5 seconds after the vehicle passes the start gate and when it travels through the end gate. We are not considering reduced engine torque before 1.5 seconds after the vehicle crosses the start gate (and the driver fully depresses the accelerator pedal) because our testing has shown that there is a lag between when the operator of the vehicle requests full throttle and when the vehicle responds by providing full throttle.

### 5. Roll Stability Performance Requirements

Based on NHTSA's research, for a typical combination vehicle, an ESC system must reduce the heavy vehicle's lateral acceleration to less than 0.4g to prevent wheel lift and possible vehicle rollover.<sup>58</sup> NHTSA considered how to measure lateral acceleration during the J-turn maneuver. However, lateral acceleration is a function of longitudinal velocity. Using the equation  $A=V^2/R$ , where A is lateral acceleration, V is longitudinal velocity, and R is the radius of the curve, when driven in a fixed radius curve, with a 45.7-meter (150-foot) radius, 0.4g of lateral acceleration would be achieved at a forward velocity of approximately 48 km/h (30 mph). That is, at speeds below 30 mph, a vehicle would generate less than 0.4g of lateral acceleration and would be unlikely to roll over. This was confirmed in the agency's testing, where the test vehicles remained stable at speeds below 30 mph.

NHTSA track testing has shown that the minimum test speed for effectively testing the ESC system is 48 km/h (30 mph). However, where the ESC system activates at a speed such that 1.3 times the minimum activation speed is greater than 48 km/h (30 mph), the vehicle may be tested at a speed up to 1.3 times the minimum activation speed. A

multiplication factor of 1.3 will be used to ensure that ESC systems operate over a range of speeds. A factor of 1.3 allows the vehicle's ESC system to reach a level where maximum brake force is applied by the system, and, as a result, ensures the ESC system reduces the longitudinal velocity and lateral acceleration of the vehicle are below the threshold values. At factors below 1.3, our testing has shown that ESC systems have not yet achieved their maximum braking force. At factors above 1.3, we have concerns about the safety of testing because the ESC systems have achieved their maximum braking force and the lateral acceleration of the vehicle could remain high.

In contrast, using a performance requirement such as EMA's suggested minimum deceleration metric provides no assurance that the deceleration will be sufficient to prevent rollover. For example, using EMA's suggested procedure, if a vehicle is able to enter a curve at a relatively high rate of speed before an ESC system activates, the performance requirement will be more stringent than if a system is tuned to activate at lower rates of speed. Particularly, if a test is conducted at an entrance speed of less than 48 km/h (30 mph), the system's ability to prevent rollover is not challenged because the vehicle is unlikely to experience lateral forces that have the potential to cause instability, even if the vehicle was not equipped with an ESC system.

We considered, but rejected, using the lateral acceleration ratio, which was the proposed performance criteria for both the SWD maneuver and the alternative RSM, rather than the reduction in absolute lateral acceleration. Using the J-turn maneuver, it was sufficient to ensure that the absolute lateral acceleration was below the threshold for wheel lift after the vehicle has begun its turn. Furthermore, unlike the SWD and RSM maneuver where the beginning of steer can be determined, the beginning of the J-turn maneuver occurs when the vehicle crosses the start gate. At this point, the lateral acceleration of the vehicle is zero or close to zero because the vehicle is traveling in a straight line. After the vehicle crosses the start gate, the driver has some discretion for steering the vehicle and maintaining the lane. The low initial lateral acceleration and the driver variation both make the lateral acceleration ratio an inappropriate performance metric for the J-Turn test. Instead, we found that reduction in the absolute lateral acceleration of a vehicle, which on a fixed curve is a function of velocity, was sufficient to determine the performance

<sup>58</sup> See 77 FR 30776-78.

of an ESC system with respect to roll stability control.

Thus, the minimum performance requirement to demonstrate roll stability performance in this final rule is expressed in terms of a vehicle's forward speed (longitudinal velocity) at two points in time. The specific requirements are:

- The longitudinal velocity measured at 3.0 seconds after vehicle passes through the start gate to the J-turn maneuver must not exceed 47 km/h (29 mph).
- The longitudinal velocity measured at 4.0 seconds after vehicle passes through the start gate to the J-turn maneuver must not exceed 45 km/h (28 mph).

NHTSA's research indicates that an ESC system's ability to maintain an absolute lateral acceleration below the criteria would provide an acceptable probability that the vehicle would remain stable and that a level of absolute lateral acceleration above the criteria would result in a high probability of the vehicle becoming unstable.

#### G. Yaw Stability

NHTSA has decided to defer research on the yaw maneuver suggested by EMA, the single lane change on a wet surface test. EMA did not provide any data showing how its performance criterion (differential brake pressure) measures the capability of the ESC system to prevent yaw instability. Moreover, EMA submitted data showing that at least three of its tested vehicles failed to meet the criteria. NHTSA would need to further research the EMA maneuver and determine adequate performance metrics. More data is needed to create criteria that represent appropriate stability thresholds by showing an acceptable probability that the vehicle would remain stable if the ESC system maintains those criteria.

The SWD maneuver was designed to test the ESC system's ability to prevent yaw instability by measuring how quickly the vehicle stops turning, or rotating about its vertical axis, after the steering wheel is returned to the straight-ahead position. The vehicle that continues to turn or rotate about its vertical axis under these conditions is most likely experiencing oversteer, which is what ESC is designed to prevent. EMA's data does not show how its yaw maneuver will adequately test the ESC system's capabilities to prevent oversteer. Likewise, the Bendix test, a ramp with dwell maneuver, will not be examined by NHTSA at this time for yaw stability testing. In order to create

a performance test, NHTSA would need to do further research on the Bendix maneuver and determine adequate performance metrics.

We are also concerned that the maneuver is conducted on a low-friction wet Jennite surface. EMA stated that it disagrees with the statement in the NPRM that low-friction surfaces such as wet Jennite are too variable to make them unusable for ESC testing. EMA believes that the use of wet Jennite in FMVSS No. 121 for air-brake testing makes wet Jennite suitable for ESC testing. However, we remain concerned about the potential for variability in surface friction on a wet Jennite surface for ESC system testing.

To date, we have found that only the SWD maneuver proposed in the NPRM is suitable for testing yaw stability, and even that test is limited to testing oversteer. As discussed above, we have decided not to conduct compliance tests on vehicles using the SWD because of the substantial time and instrumentation burden associated with the SWD maneuver. We do not believe that this additional time and cost is justified solely to test yaw stability when a majority of the benefits of this final rule are derived from rollover prevention. Moreover, the SWD maneuver would only test oversteer mitigation of yaw instability, whereas understeer is the primary type of yaw instability that we observed in our testing. However, we are continuing to examine possible yaw performance maneuvers, including the SWD maneuver and the lane change maneuver suggested by EMA to test yaw stability control performance in the future.

#### H. Understeer

As we stated in the NPRM, the agency has no performance test to evaluate how the ESC responds when understeer is induced. The technique used by a stability control system for mitigating wheel lift, excessive oversteer or understeer conditions is to apply unbalanced wheel braking so as to generate moments (torques) to reduce lateral acceleration and to correct excessive oversteer or understeer. However, for a vehicle experiencing excessive understeer, if too much oversteering moment is generated, the vehicle may oversteer and spin out with obvious negative safety consequences. In addition, excessive understeer mitigation acts like an anti-roll stability control where it momentarily increases the lateral acceleration the vehicle can attain. Hence, too much understeer mitigation can create safety problems in the form of vehicle spin out or rollover.

During the testing to develop FMVSS No. 126 for light vehicles, the agency concluded that understanding both what understeer mitigation can and cannot do is complicated, and that there are certain situations where understeer mitigation could potentially produce safety disbenefits if not properly tuned. Therefore, the agency decided to enforce the requirements to meet the understeer criterion included in the ESC definition using a two-part process. First, the requirement to meet definitional criteria ensured that all had the hardware needed to limit vehicle understeer. Second, the agency required manufacturers to make available engineering documentation to NHTSA upon request to show that the system is capable of addressing vehicle understeer.

Based on the agency's experience from the light vehicle ESC rulemaking and the lack of a suitable test to evaluate understeer performance, the agency did not propose a test for understeer to evaluate ESC system performance for truck tractors and large buses. The agency sought comment on the lack of an understeer test.

Advocates stated in its comment that there should be a compliance test for understeer performance. It said the ESC equipment requirement for understeer is not enough to ensure sufficient performance to mitigate understeer conditions.

While we agree with the Advocates goal of having an understeer test, we have not been able to develop a test that safely challenges an ESC system's ability to mitigate understeer. Moreover, we believe the definitional criteria are robust enough to ensure that an ESC system will reduce loss-of-control crashes in both understeer and oversteer conditions.

## XI. Test Conditions and Equipment

### A. Outriggers

Throughout the agency's research program, truck tractors and buses were equipped with outrigger devices to prevent vehicle rollover. During the program, the agency encountered many instances of wheel lift and outrigger contact with the ground indicating that it was probable that rollover could occur during testing. Over many years of research of ESC systems, it has been proven that outriggers are essential to ensure driver safety and to prevent vehicle and property damage during NHTSA's compliance testing. Although NHTSA conducted some of its testing with ESC systems disabled, thereby increasing the need for outriggers, outriggers are still necessary as a safety

measure during testing of vehicles equipped with an ESC system in case the system fails to activate.

The agency proposed that outriggers be used on all truck tractors and buses tested. We believe that outrigger influence on heavy vehicles is minimal because of the higher vehicle weight and test load. To reduce test variability and increase the repeatability of the test results, the agency proposed to specify a standard outrigger design for the outriggers that will be used for compliance testing. The agency used this same approach in FMVSS No. 126 for compliance testing of light vehicle ESC systems. The agency also made available the detailed design specifications by reference to a design document located in the agency public docket.

For truck tractors, the document detailing the outrigger design to be used in testing has been placed in a public docket.<sup>59</sup> This document provides detailed construction drawings, specifies materials to be used, and provides installation guidance. For truck tractor combinations, the outriggers are mounted on the trailer. The outriggers are mounted mid-way between the center of the kingpin and the center of the trailer axle (in the fore and aft direction of travel), which is generally near the geometric center of the trailer. They will be centered geometrically from side-to-side and bolted up under the traditional flatbed control trailer. Total weight of the outrigger assembly, excluding the mounting bracket and fasteners required to mount the assembly to the flatbed trailer, is less than 2,500 pounds. The bulk of the mass is for the mounting bracket which is located under the trailer near the vehicle's lateral and longitudinal center of gravity so that its inertial effects are minimized. The width of the outrigger assembly is 269 inches and the contact wheel to ground plane height is adjustable to allow for various degrees of body roll. A typical installation on a flatbed type trailer involves clamping and bolting the outrigger mounting bracket to the main rails of the flatbed.

The NPRM proposed that the outrigger design have a maximum weight of 726 kg (1,600 lb.). However, the agency raised the weight limit of the outriggers used for testing to accommodate the use of older and heavier outrigger designs. This final rule raises the maximum weight of the outriggers to 1,134 kg (2,500 lb.).

For buses, the outrigger installations will not be as straightforward as the

outrigger installations on the control trailers, and the NPRM solicited comments on bus outrigger designs. This is because outriggers cannot be mounted under the flat structure, but instead must extend through the bus. NHTSA used outriggers on the three large buses tested during its research program and will use outriggers for testing buses for compliance with this rule. The agency plans to use the same outrigger arms of the standard outrigger design that it plans to use for truck tractor testing. Therefore, the size, weight, and other design characteristics will be similar.

The location and manner of mounting the outriggers on buses cannot be identical to truck tractors. Nonetheless, there are a limited number of large bus manufacturers, which results in a limited number of unique chassis structural designs. Also, the agency understands that large bus structural designs do not change significantly from year-to-year. We believe that once outrigger mounts have been constructed for several different bus designs, those mountings can be modified and reused during subsequent testing. The agency has, in the document described above, provided additional engineering design drawings and further installation guidelines for installing the standard outrigger assemble to large buses.

#### *B. Automated Steering Machine*

The NPRM proposed using an automated steering machine be used for the test maneuvers on the truck tractors and large buses in an effort to achieve highly repeatable and reproducible compliance test results. In the SWD maneuver, the steering must follow an exact sinusoidal pattern over a three-second time period. For the SWD maneuver, each test vehicle is subjected to as many as 22 individual test runs all requiring activation at a specific vehicle speed, each of which will require a different peak steering wheel angle and corresponding steering wheel turning rate.

However, the agency has chosen the J-turn maneuver for the performance test. Although the SWD test requires a fixed steering wheel angle, the J-turn test is a path-following maneuver. This means a steering controller will not be required for the J-turn test because the driver provides the steering wheel input in order to keep the vehicle within the lane during the test maneuver.

Because the driver must attempt to keep the vehicle within the lane width, he has some discretion on the steering wheel angle and the position of the vehicle within the lane as the vehicle crosses the start gate. Depending on the

experience and technique of the driver, the vehicle may have a steering wheel angle that is varied by the time the vehicle crosses the start gate. This variance is tolerable because we do not expect that it will be difficult for a professional test driver to maintain the vehicle lane. Nevertheless, to ensure that variability in testing does not affect vehicle compliance, the performance requirements need only be satisfied during two out of four runs of a test series (or six out of eight runs of the final series).

#### *C. Anti-Jackknife System*

The agency proposed using an anti-jackknife system when testing truck tractors. An anti-jackknife system prevents the trailer from striking the tractor during testing in the event that a jackknife event occurs during testing. This would prevent damage to the tractor that may occur during testing. We do not believe that the use of an anti-jackknife system will affect test results, nor have we observed any damage to test vehicles, including vehicle finishes, caused by anti-jackknife cables.

The agency proposed using cables to limit the angle of articulation between the truck tractor and trailer, and set a minimum angle of 45 degrees because setting the cables too tight could artificially help the ESC system maintain control during testing. However, if the angle of articulation is set too low the turning radius of the combination vehicle decreases to a point where maneuverability of the vehicle becomes an issue. A vehicle with too low of a turning radius would not be able to drive through the J-turn test course. Therefore, we must set a minimum articulation angle for the jackknife system that ensures safety during testing, but is not too low such that it would affect test results. However, our testing has shown that 45 degrees is too high of an angle for a 4x2 truck tractor, because the trailer could still contact the truck tractor. Therefore agency is specifying 30 degrees as the minimum articulation angle in this final rule, which is sufficient to provide safety during the testing of all truck tractors.

#### *D. Control Trailer*

The agency proposed using a control trailer to evaluate the performance of a truck tractor in the loaded condition. In FMVSS No. 121, the agency specifies the use of an unbraked control trailer for compliance testing purposes. An unbraked control trailer minimizes the effect of the trailer's brakes when testing the braking performance of a tractor in

<sup>59</sup> Docket No. NHTSA-2010-0034-0010.

its loaded condition. Nevertheless, in the NPRM, we identified potential variability in the control trailer that affected the repeatability of SWD testing and asked for comments on how the control trailer may be specified to prevent variability.<sup>60</sup>

Navistar and EMA commented on a specific truck tractor that satisfied the proposed SWD criteria with the ESC system disabled. We believe this is "Vehicle J" that was identified in the NPRM. NHTSA conducted its own testing on "Vehicle J" using a different control trailer. In contrast to EMA's test results, NHTSA's testing showed that Vehicle J became laterally unstable with the ESC system disabled.

Volvo, EMA, Advocates, and Bendix commented on the control trailer specifications. Volvo asserted that further specifications need to be made for the control trailer because trailer configuration greatly affects compliance of the SWD test. EMA stated that the control trailer's track width, deck height, ballast, suspension, tires and torsional stiffness affect the SWD test results, and small variations in the control trailer influence the SWD testing. EMA further indicated that would not be practical to build trailers with stricter design specifications in order to perform SWD tests and obtain consistent results. Conversely, Advocates and Bendix recommended that the agency add new specifications and tighten up existing requirements in order to reduce the variability in testing. Advocates recommended specifying track width, trailer CG height, and load CG height in the standard because it would minimize variation in testing.

Other than soliciting comments in the NPRM, the agency did not investigate whether variations in the control trailer significantly affect the results of the SWD maneuver. However, the agency has not further modified the specifications of the control trailer. Rather, we believe that, by using the J-turn maneuver rather than the SWD maneuver, any potential test variability caused by different control trailers is ameliorated. The agency's research shows that, because the performance metric is vehicle speed rather than lateral acceleration ratio, the effect that the control trailer has on the lateral

acceleration is negligible. The sole consideration in the performance criteria in this final rule is speed reduction, which has not been observed to be affected by variations in the control trailer.

We note that Volvo, EMA, and Bendix recommended the adoption of the J-turn test, which is one of the alternative tests discussed in the NPRM. None of the commenters supporting adoption of the J-turn test raised issues regarding variability in the control trailer with the J-turn maneuver. Rather, their comments regarding control trailer variability were limited to the SWD test maneuver.

Further, the agency conducted J-turn testing using two different control trailers. We did not find any relevant differences in the ESC system performance of the truck tractors when connected to different control trailers. We believe, based on our testing and the lack of comments related to the control trailer in the J-turn maneuver, that the potential for variability identified in the NPRM related to the control trailer was limited to the SWD maneuver. We conclude that the factors identified in the NPRM will have no effect on the performance of vehicles using the J-turn maneuver.

Volvo also commented that the control trailer specified in FMVSS No. 121 will not work with four or more axle tractors such as 8x6 truck tractor's because the trailer's fifth wheel position causes interference between the tractor frame and trailer frame. NHTSA has considered this comment and believes that there is merit in Volvo's assertion. A control trailer at the length specified in the NPRM of  $6550 \pm 150$  mm (258  $\pm$  6 in) may be too short to test vehicles with four or more axles. In this final rule, we are changing the specified length of the control trailer to allow for testing with a longer trailer. We are specifying that truck tractors will be tested with a control trailer that is between 6400 mm and 7010 mm (252 in and 276 in), inclusive. However, for truck tractors with four or more axles, at the manufacturer's option, NHTSA will test with a control trailer with a length up to 13,208 mm (520 in). We do not believe that using a control trailer longer than that specified in the proposal would cause variability in testing.

#### E. Sensors

The vehicle speed is measured with a non-contact GPS-based speed sensor. Accurate speed data is required to ensure that the SWD maneuver is executed at the required  $72.4 \pm 1.6$  km/h (45.0  $\pm$  1.0 mph) test speed. Sensor

outputs are available to allow the driver to monitor vehicle speed.

#### F. Ambient Conditions

The ambient temperature range specified in other FMVSSs for outdoor brake performance testing is 0 °C to 38 °C (32 °F to 100 °F). However, when the agency proposed a range of 0 °C to 40 °C (32 °F to 104 °F) for FMVSS No. 126, the issue of tire performance at near freezing temperatures was raised. The agency understood that near freezing temperatures could impact the variability of compliance test results. As a result, the agency increased the lower bound of the temperature range to 7 °C (45 °F) to minimize test variability at lower ambient temperatures. For the same reasons, the NPRM proposed an ambient temperature range of 7 °C to 40 °C (45 °F to 104 °F) for testing.

In their comments, Meritor WABCO, EMA, and Bendix recommended changes to the minimum ambient temperature allowed for testing. The three commenters requested that the minimum temperature for performance tests to be reduced. Meritor WABCO recommended a minimum temperature of 2 °C (35 °F). Both EMA and Bendix recommended a minimum temperature of 0 °C (32 °F). EMA asserted that the minimum temperature of 7 °C (45 °F) proposed in the NPRM reduces the amount of time available to test vehicles during the year. We agree that a minimum test temperature of 7 °C (45 °F) restricts the agency's ability to test for compliance in certain areas of the United States, including NHTSA's Vehicle Research and Test Center in Ohio. Thus, we are lowering the minimum testing temperature to 2 °C (35 °F). We believe this change will have a negligible effect on the outcome of performance testing.

EMA further recommended that the upper limit be decreased from 40 °C (104 °F) to 38 °C (100 °F) to match the FMVSS No. 121 ambient temperature specifications. We are not adopting this suggestion to match the temperature specifications in FMVSS No. 121. EMA gave no reason other than consistency with FMVSS No. 121 for adopting this change. Allowing for a larger temperature range for testing ESC systems does not have any effect on the agency's ability to conduct consecutive FMVSS No. 121 and FMVSS No. 136 tests because the FMVSS No. 121 testing is conducted at an ambient temperature of not greater than 38 °C (100 °F). Thus, compliance testing will be conducted at any temperature between 2 °C (35 °F) and 40 °C (104 °F). The agency proposed a maximum wind speed for conducting the compliance testing of no greater

<sup>60</sup> There were three specifications, not set forth in control trailer specifications in FMVSS No. 121, that the agency identified that might affect SWD test performance and prevent repeatable, consistent test results using different control trailers. First, the track width of the control trailer is not specified. Second, the center of gravity of the control trailer is not specified. Third, the center of gravity of the load in FMVSS No. 121 testing is only specified to be less than 24 inches above the top of the tractor's fifth wheel.



than 5 m/s (11 mph). This is the same value specified for testing multi-purpose passenger vehicles (MPVs), buses, and trucks under FMVSS No. 126. This is also the same value used for compliance testing for FMVSS No. 135, *Light Vehicle Brake Systems*.

As for other ambient conditions, Bendix recommended that the maximum wind speed be raised from 11 mph (5 m/s) to 22 mph (10 m/s). Bendix did not specify any rationale for wanting the increase in the allowable wind speed. The agency sees no reason to increase the wind speed at this time.

#### G. Road Test Surface

The NPRM proposed that the SWD maneuver be executed on a high friction surface with a peak friction coefficient (PFC) of 0.9, which is typical of a dry asphalt surface or a dry concrete surface. As in other standards where the PFC is specified, we proposed that the PFC be measured using an ASTM E1136 standard reference test tire in accordance with ASTM Method E1337-90, at a speed of 64.4 km/h (40 mph), without water delivery. We proposed incorporating these ASTM provisions into the standard.

Although we have changed the performance test maneuver, we have not changed the specifications for the road test surface. The J-turn maneuver is conducted on a high friction surface with a PFC of 0.9. Thus, we are incorporating the relevant ASTM provisions into this standard.

Bendix recommended adding a restriction that there be no ice or snow buildup on the test track surface. NHTSA has not adopted this suggested change. We believe that the surface PFC specification of 0.9 already ensures that the test track will be free of snow and ice.

#### H. Vehicle Test Weight

The agency proposed that truck tractors be tested with the combined weight of the truck tractor and control trailer be equal to 80 percent of the tractor's GVWR. To achieve this load condition, we proposed that the tractor be loaded with the fuel tanks filled to at least 75 percent capacity, test driver, test instrumentation, and ballasted control trailer with outriggers. The center of gravity of all ballast on the control trailer was proposed to be located directly above the kingpin. When possible, load distribution on non-steer axles will be in proportion to the tractor's respective axle GAWRs. Load distribution will be adjusted by altering fifth wheel position, if adjustable. In the case where the tractor's fifth wheel cannot be adjusted

so as to avoid exceeding a GAWR, ballast will be reduced so that axle load equals specified GAWR, maintaining load proportioning as close as possible to specified proportioning.

In its comments, EMA recommended changing the loading requirements from 80 percent of the truck tractor's GVWR to 100 percent of the truck tractor's GVWR requirements. EMA wanted this loading condition because it is used in FMVSS No. 121 testing, and it would eliminate the burden of changing the vehicle's load when going from FMVSS No. 121 testing to FMVSS No. 136 testing.

In light of the change to the J-turn maneuver, we have determined that the vehicle should be tested at its GVWR rather than 80 percent of the truck tractor's GVWR. The agency proposed SWD testing at 80 percent of GVWR because it was determined that such a weight would enable the agency to evaluate both roll and yaw stability with a single maneuver. The J-turn maneuver is designed to evaluate only roll stability, and testing the vehicle at its GVWR is the most severe configuration for the maneuver. Thus, the agency can use the same loading condition that it uses for FMVSS No. 121 testing.

EMA also suggested removing the proposed test condition that the fuel tank be 75 percent full. EMA reasoned that high fuel volume is dangerous for testing. Also, EMA observed that a 75% fuel filling condition is not included in FMVSS No. 121.

Regarding the fuel tank filling, NHTSA specifies the 75 percent fuel level in FMVSS No. 126 for testing light vehicles. The goal of the fuel level specification in FMVSS No. 126 was to ensure consistent vehicle test weights for the performance tests. With the adoption of the J-turn maneuver, NHTSA did not find any evidence of varying fuel levels affecting the results of the ESC performance tests. Therefore, NHTSA agrees with EMA and will remove the specification of a minimum fuel tank level.

The agency proposed that liftable axles be in the down position for testing. This was because we proposed to conduct our performance test in a loaded condition. Although the NPRM proposed to load the truck tractor to 80 percent of its GVWR, we believed that a truck tractor would operate with liftable axles in the down position. In the final rule, we are testing vehicles at GVWR. Consequently, we will test vehicles equipped with liftable axles in the down position. This is consistent with the test conditions for testing fully loaded air braked vehicles under FMVSS No. 121.

For testing buses, the agency proposed loading the vehicle to a simulated multi-passenger configuration. For this configuration the bus would be loaded with the fuel tanks filled to at least 75 percent capacity, test driver, test instrumentation, outriggers and simulated occupants in each of the vehicle's designated seating positions. The simulated occupant loads would be obtained by securing 68 kilograms (150 pounds) of ballast in each of the test vehicle's designated seating positions without exceeding the vehicle's GVWR and GAWR. The 68 kilogram (150 pound) occupant load was chosen because that is the occupant weight specified for use by the agency for evaluating a vehicle's load carrying capability under FMVSS Nos. 110 and 120. During loading, if any rating is exceeded the ballast load would be reduced until the respective rating or ratings are no longer exceeded.

In the final rule, we have removed the specification that the ballast consists of water dummies. We do not believe that it is necessary to specify the type of ballast in the test procedure. We note that, for truck tractors, the type of ballast that is loaded on the control trailer is not specified. We do not believe, especially in light of the change to the J-turn test, that the type of ballast used (whether it is water, sand, or some other ballast) would have an effect on the ESC system's ability to lower the vehicle's forward speed.

Unlike in the NPRM, this final rule specifies that buses are tested at its GVWR. This is the most severe loading condition for testing buses using the J-turn test maneuver. The NPRM specified that buses would be tested with a simulated full passenger load, without any cargo other than test equipment. We have increased the testing load, which makes the load condition consistent with the loading NHTSA uses to test FMVSS No. 121 compliance. We have added specification to the loading procedure to allow for the vehicle to be loaded to GVWR. First, simulated passengers are loaded. Next, ballast is added to the lowest baggage compartment. If the bus does not have a baggage compartment or additional ballast is needed because the baggage compartment is loaded to capacity, ballast is added to the floor of the passenger compartment to load the bus to its GVWR. During loading, if any axle rating is exceeded, the ballast is reduced in the reverse order it is loaded until the GVWR or GAWR of any axle is no longer exceeded.

### I. Tires

We proposed testing the vehicles with the tires installed on the vehicle at time of initial vehicle sale. The agency's compliance test programs generally evaluate new vehicles with new tires. Therefore, we proposed that a new test vehicle have less than 500 miles on the odometer when received for testing.

For testing, the agency proposed that tires be inflated to the vehicle manufacturer's recommended cold tire inflation pressure(s) specified on the vehicle's certification label or the tire inflation pressure label. We will not change the vehicle's tires during testing unless test vehicle tires are damaged before or during testing. We did not propose using inner tubes for testing because we have not seen any tire debanding in any test.

Before executing any test maneuvers, the agency proposed to condition tires to wear away mold sheen and achieve operating temperatures. To begin the conditioning the test vehicle would be driven around a circle 46 meters (150 feet) in radius at a speed that produces a lateral acceleration of approximately 0.1g for two clockwise laps followed by two counterclockwise laps.

EMA asserted that there should be no requirement for testing using the tires installed on the vehicle at the time of initial sale. According to EMA, sometimes a test vehicle is used for certifying compliance, but sometimes a vehicle that is later sold to a customer is tested. Further, EMA notes that heavy truck manufacturers often offer hundreds of different tire options for their customers. EMA notes that different tires would change the road adhesion and cornering stiffness, potentially affecting test results.

Finally, EMA recommended using language from FMVSS No. 121 for the tire inflation procedure specified by manufacturer for the vehicle's GVWR, instead of the procedure proposed in the NPRM, which is to use the vehicle's certification label or tire inflation pressure label. EMA reasoned that the actual tires installed on the vehicle may differ from the specifications given on the label.

First, inasmuch as EMA is referring to the tires used for certifying compliance, we note that our regulations do not specify how manufacturers certify compliance. We recognize that some manufacturers do wish to base their certification of compliance on a vehicle's performance in NHTSA's test maneuvers. However, there is no obligation for manufacturer's to conduct NHTSA's compliance test for any vehicle, much less for every possible

tire combination. For instance, manufacturers currently certify that their vehicles meet the minimum stopping distance and ABS requirements of FMVSS No. 121. They must satisfy those requirements for any vehicle-tire combination that is sold. That is, manufacturers have an obligation to certify compliance with all applicable standards in whatever configuration that tires are delivered to customers. We expect that manufacturers design their ESC systems to account for any potential differences in tires that might be installed on the vehicle at the time of initial sale.

However, with respect to the tire inflation pressure at which testing will be conducted, we agree with EMA that we should not use the inflation pressure specified on the vehicle's certification or tire information labels. As EMA observes, a heavy truck may be sold with many different tire combinations. However, nothing requires that all of those combinations be listed on the certification or tire information label.<sup>61</sup> However, multiple combinations may be listed on the label. Thus, we are removing from the regulatory text the reference to the vehicle's certification or tire information label and merely specifying that the tires' inflation pressure will be the inflation pressure specified for the GVWR of the vehicle.

Regarding tire conditioning, Bendix requested clarification of whether the presence of a tire conditioning procedure means that the vehicle must be equipped with new tires. Bendix also recommended that the agency remove this section about the removal of mold sheen because by performing the brake conditioning test procedure, the same result is likely to be achieved.

To clarify, the agency is not specifying that new tires must be installed prior to the ESC testing. However, in the event the vehicle has not been driven prior to testing (for example, a FMVSS No. 121 compliance test has not been performed), we do not believe that the brake burnishing procedure is sufficient to wear away any mold sheen on the tire prior to ESC testing. Therefore, the requirement to perform four laps is necessary for the consistency and repeatability of the ESC tests. We do not believe that this procedure is especially burdensome, even if the mold sheen was removed during prior testing.

<sup>61</sup> In fact, S5.1.2 of FMVSS No. 120, the standard that provides for tire information labeling on vehicles over 10,000 pounds GVWR, expressly contemplates that a vehicle may be sold with a tire size designation that is not listed on the tire information label.

### J. Mass Estimation Drive Cycle

Both truck tractors and large buses experience large variations in payload mass, which affects a vehicle's roll and yaw stability thresholds. To adjust the activation thresholds for these variations, stability control systems estimate the mass of the vehicle after ignition cycles, periods of static idling, and other driving scenarios. To estimate the mass, these systems require a period of initial driving.

The agency proposed including a mass estimation drive cycle as a part of pre-test conditioning. To complete this drive cycle the test vehicle is accelerated to a speed of 64 km/h (40 mph), and then, by applying the vehicle brakes, decelerated at 0.3g to 0.4g to a stop.

Meritor WABCO requested that the mass estimation drive cycle procedure be made manufacturer-specific. That is, Meritor WABCO requested that the procedure be changed to specify that NHTSA would contact the ESC system supplier for a mass estimation procedure.

Although we specified a mass estimation procedure in the NPRM, that procedure is based on current ESC system designs. We recognize that system designs could change or new suppliers could enter the market with different designs that estimate vehicle mass differently. Thus, we accept Meritor WABCO's request that NHTSA not specify a mass estimation cycle.

However, we do not agree with Meritor WABCO's suggestion that NHTSA contact the ESC system supplier for the mass estimation cycle. It is the vehicle's manufacturer that is ultimately responsible for certifying compliance with the FMVSSs. Thus, we believe it is the vehicle's manufacturer, not the ESC system supplier, who should be responsible for supplying NHTSA with the mass estimation cycle procedure. Thus, we expect that the vehicle manufacturer will be able to provide the mass estimation cycle procedure to NHTSA upon request in advance of any compliance testing.

### K. Brake Conditioning

Heavy vehicle brake performance is affected by the original conditioning and temperatures of the brakes. We believe that incompletely burnished brakes and excessive brake temperatures can have an effect on ESC system test results, particularly in the rollover performance testing, because a hard brake application may be needed for the foundation brakes to reduce speed to prevent rollover.

The agency proposed that the burnish procedure specified in S6.1.8 of FMVSS

No. 121 be conducted prior to ESC system testing. The burnish procedure is performed by conducting 500 brake snubs<sup>62</sup> between 40 mph and 20 mph at a deceleration of 10 fps<sup>2</sup>. If the vehicle has already completed testing to FMVSS No. 121, the agency did not propose to repeat the full burnishing procedure. Instead, the brakes are conditioned for ESC system testing with 40 snubs. The agency proposed that the brake temperatures be in the range of 65 °C to 204 °C (150 °F to 400 °F) at the beginning of each test maneuver. We also proposed that the brake temperature be measured by plug-type thermocouples installed on all brakes and that the hottest brake be used for determining whether cool-down periods required.

We received no comment on the burnishing procedure and are adopting the proposed procedure in this final rule, with two exceptions. First, in the NPRM, we proposed to repeat the FMVSS No. 121 burnish procedure at the manufacturer's option. However, in this final rule, we have removed the option. Rather, we are merely specifying that a burnish procedure similar to the one in FMVSS No. 121 be completed prior to testing. Furthermore, rather than referencing FMVSS No. 121, we have included the entire burnishing in FMVSS No. 136 to avoid the need to cross-reference between Standards. Second, we have altered the metric conversion of 150 °F from 65 °C to 66 °C to be more accurate.

In the NPRM, the agency suggested, as a general rule, that a new test vehicle have less than 500 miles on the odometer when received for testing. EMA commented on this suggestion, requesting that there be no odometer requirements on a test vehicle. EMA believes that this requirement may require transporting the test vehicle by hauling it on a trailer to the test site if the test site is located far away from the place of manufacture. NHTSA agrees with EMA that it is not feasible to require that a test vehicle have less than 500 miles on its odometer prior to testing. This is particularly true in light of the burnishing procedure, which could itself require 500 miles of driving. Thus, the final rule does not have a mileage requirement for test vehicles.

#### L. Compliance Options

Both Bendix and Volvo requested clarification of the proposed regulatory text specifying compliance options. That provision would require that a manufacturer identify which

compliance option was selected for compliance test purposes and provide that information to the agency upon request. Bendix and Volvo raised this issue because they did not believe that any of the proposed requirements offered manufacturers any compliance options to choose from.

In this final rule, we are giving manufacturers a compliance option with respect to the length of the control trailer used for testing truck tractors. As discussed in section XI.D, manufacturers of truck tractors with four or more axles may, at the manufacturer's option, have testing conducted with a longer control trailer. Thus, we are retaining the language requiring manufacturers to specify compliance options prior to agency testing.

#### M. Data Collection

In the NPRM, we proposed that the collection of data from the vehicle, such as engine torque output and driver-requested torque, come from the SAE J1939 communication data link. Bendix requested that NHTSA change the collection procedure to specify that the data come from the vehicle controller area network (CAN) bus, which is a more generic reference instead of specifically requiring a SAE J1939 data link. The CAN bus is what allows a vehicle's electronic control units and other devices to communicate with each other. SAE J1939 is a recommended practice to standardize vehicle communications. Bendix believes that citing SAE J1939 specifically may have the effect of limiting vehicle design in the future.

We agree with Bendix that the reference to SAE J1939 should be changed to a more generic reference. This will allow future technological advances regarding in-vehicle communications, including the adoption of new industry recommended practices. Accordingly, we are specifying that data be collected from the vehicle's communication network or CAN bus.

Bendix also commented upon the filtering of engine torque data received from an analog signal. Bendix noted that data from an SAE J1939 compliant communication network is digital data. However, because we are removing the references to SAE J1939 in response to Bendix's comment, we are not changing the procedure for filtering analog data signals because recognize that some communication systems could use analog signals.

## XII. ESC Disablement

### A. Summary of Comments

In the NPRM, the agency considered allowing a control for the ESC to be disabled by the driver. Because, heavy vehicles currently equipped with ESC systems do not include on/off controls for ESC that allow a driver to deactivate or adjust the ESC system, the agency did not propose allowing an on/off switch for ESC systems. The agency sought public comment on the need to allow an on/off switch, and asked that commenters specifically address why manufacturers might need such a switch and how manufacturers would implement a switch in light of the ABS requirements.

Temsa and Advocates opposed allowing the disablement of the ESC system. They stated that the ESC system should not be allowed to be deactivated by a switch because the driver may inadvertently forget to reactivate the system.

In contrast, Daimler, Volvo, Meritor WABCO, HDBMC, Associated Logging, EMA, and Bendix recommended that we allow the ESC systems to be disabled. The commenters asserted that the ESC system may need to be disabled in certain conditions such as slippery roads in snow and mud, off-road operation, and when using snow chains on the tires.

Daimler stated in its comment that the current ESC and traction control systems are interlinked, and the disablement of traction control will disable ESC systems. Daimler asserted that disabling traction control may be necessary in conditions such as starting from rest on sloped ground, driving on slippery roads, and using snow chains. HDBMC also asserted that ESC disablement is needed for gaining traction in snow and mud and to provide optimum performance when using snow chains. Meritor WABCO similarly referred to the need for the ability to change the control scheme of the ESC system to allow for deep snow and mud.

In contrast, Bendix stated that its ESC system is tuned for both on-road and mild off-road conditions. However, Bendix suggested that different vehicle tuning may be necessary for severe off-road conditions.

Regarding the absence of ESC disablement on current truck tractors, EMA also suggested that some small volume tractors are more likely to need to have an ESC disablement function for off-road operation and claimed that at least one manufacturer had equipped a vehicle with such a switch to temporarily disable ESC. Further, EMA

<sup>62</sup> A snub is a brake application where the vehicle is not braked to a stop but to a lower speed.

suggested that ESC disablement functions are not prevalent because large fleet customers have been purchasing ESC systems.

HDMBC recommended that vehicles that have a switch to disable ESC systems be equipped with a lamp indicating that the ESC system is off similar to the ESC Off telltale in FMVSS No. 126. In its comment, Meritor WABCO suggested that the ESC malfunction lamp should be constantly illuminated if ESC is deactivated.

Meritor WABCO, HDBMC, Bendix, EMA, and Volvo also suggested that vehicles be allowed to automatically disable their ESC systems under certain conditions. Meritor WABCO claimed that all-wheel drive is an example of when ESC should automatically be disabled. HDBMC, EMA, and Bendix said there should be the ability to automatically disable ESC system for certain applications such as all-wheel drive and truck tractors with multiple steering axles. Volvo asserted that, while it has no plans to offer an ESC on/off switch, it recognizes that some customers may want to convert a truck tractor to a truck. Volvo believes that it may be preferable to allow an ESC off switch rather than having converters disabling the ESC system during a conversion.

In its comment, Bendix also recommended changing the minimum speed at which an ESC system is required to operate from 20 km/h (12.4 mph) to 25 km/h (15.5 mph) to accommodate the wide variation of tires sizes, tone ring tooth counts, and production tolerances. Bendix said the higher speed threshold is necessary based on wheel-speed sensor signal strength and antilock braking system functionality.

#### *B. Response to Comments*

This final rule does not allow a function to disable an ESC system at speeds where ESC systems are required to operate.

First, we address the integration between traction control systems and ESC systems. Both systems use the vehicle's brake control system to accomplish different goals. Traction control reduces engine power and applies braking to a spinning drive wheel in order to transfer torque to the other drive wheel on the axle. This function is used to allow a vehicle to move forward in certain conditions where wheel spin may otherwise prevent forward movement. In contrast, ESC systems are designed to maintain roll and yaw stability rather than facilitate forward movement.

While we agree that traction control may need to be disabled in slippery conditions such as snow or mud or other off-road conditions, the commenters do not explain why ESC functions must be disabled in those circumstances. Although ESC may share components with traction control, the requirements for ESC are independent of those for traction control. As explained above, ESC mitigates roll and yaw instability of the vehicle by reducing lateral acceleration and maintaining directional control, respectively. Although traction control provides mobility in starting on slippery surfaces, it does not improve lateral stability beyond what ESC provides through braking and reduction in engine torque. Likewise, traction control does not improve yaw stability by providing directional control. Traction control provides no further assistance when lateral or yaw instability is detected.

Furthermore, we are not requiring the ESC system to activate at extremely low vehicle speeds, which is when the vehicle would be starting from rest. This concern may be remedied by optimizing traction control, and a manufacturer has the option to activate traction control or allow deactivation of traction control at any vehicle speed. If the disablement of traction control also disables the ESC system, then the disablement function is prohibited from disabling ESC functionality at speeds above the minimum speed ESC systems are required to operate. This means that the ESC system must automatically reactivate once the vehicle reaches the minimum speed at which the ESC system is required to operate.

Some of the commenters asserted the need for ESC disablement on vehicles with all-wheel-drive or multi-steering axles. In FMVSS No. 126, we allow the ESC to be disabled on light vehicles for certain four-wheel drive modes. None of the commenters asserted any similarities that truck tractors and large buses have with light vehicles regarding enhanced traction modes such as four-wheel drive low. Therefore, we do not believe any exceptions should be made for all-wheel drive vehicles because there was insufficient data submitted to justify an exception for heavy vehicles.

With regard to vehicles with multiple steering axles, we received no specific information about the vehicle operation and why vehicle with multiple steer axles should be allowed to have their ESC systems disabled either by switch or automatically. Without any information, the agency cannot justify an exception.

Regarding off-road use, Bendix and Meritor WABCO discussed ESC tuning

differences between on-road and off-road uses in their comments. However, neither supplier provided detailed reasons for why ESC system disablement would be beneficial when used in off-road circumstances. In contrast, Bendix said the off-road situations need ESC disablement at low speeds and different ESC tuning is expected.

Regarding Volvo's assertion that an ESC disablement switch may be preferable to converters disabling ESC during a conversion of a vehicle from a truck tractor to a truck, we do not believe that this limited circumstance justifies an ESC disablement switch. Volvo was not specific on the nature of the conversion it was referring to and why the ESC system would need to be disabled.

Bendix suggested that a switch could be allowed to disable an ESC system below a maximum speed of 25 mph. Bendix believes that this would allow for maneuverability in slippery conditions such as mud or snow. Relatedly, Bendix suggested that the minimum ESC operational speed be raised from the proposed 20 km/h (12.4 mph) to 25 km/h (15.5 mph).

After considering the comments, we are not raising the minimum speed at which an ESC system must operate. We proposed the minimum operating speed of 20 km/h (12.4 mph) based on information we obtained from vehicle manufacturers and ESC system suppliers, including Bendix. As we stated in the NPRM, the low speed thresholds of ESC systems were 10 km/h (6.2 mph) for yaw stability control and 20 km/h (12.4 mph) for roll stability control. We believed that setting a single low speed threshold was preferable because yaw and roll stability functions are intertwined. Bendix's recommendation for increasing the minimum speed criteria presents new information to the agency. We also observe that the proposed minimum speed threshold is the same as UN ECE Regulation 13. Instead of raising the minimum activation speed, at which an ESC system must operate, manufacturers may wish to disable the traction control system, where disabling traction control does not cause the ESC system to be in a malfunction state, without compromising the effectiveness of an ESC system. However, once a vehicle reaches a forward speed of 20 km/h (12.4 mph), the ESC system is required to be functional to prevent roll and yaw instability. We believe that changes to the traction control system operation will mitigate the concerns raised by the commenters regarding

system operability in slippery or off-road conditions.

Finally, we also sought and received comments on how a manufacturer would implement an ESC disablement switch. Because we have decided not to allow ESC disablement above the minimum speed at which ESC is required to operate, we need not address these comments in this final rule.

### XIII. ESC Malfunction Detection, Telltale, and Activation Indicator

#### A. ESC Malfunction Detection

The NPRM proposed that that vehicles would be required to be equipped with an indicator lamp, mounted in front of and in clear view of the driver, which would be activated whenever there is a malfunction that affects the generation or transmission of control or response signals in the vehicle's ESC system. Heavy vehicles presently equipped with ESC generally do not have a dedicated ESC malfunction lamp. Instead, they share that function with the mandatory ABS malfunction indicator lamp or the traction control activation lamp. The agency proposed requiring a separate ESC malfunction lamp because it would alert the driver to the malfunction condition of the ESC and would help to ensure that the malfunction is corrected at the earliest opportunity.

The ESC malfunction telltale would be required to remain illuminated continuously as long as the malfunction exists whenever the ignition locking

system is in the "On" ("Run") position. The proposal required that ESC malfunction telltale extinguish after the malfunction has been corrected.

The NPRM also included a test that would allow the engine to be running and the vehicle to be in motion as part of the diagnostic evaluation. The agency proposed simulating several possible malfunctions to ensure the system and corresponding malfunction telltale provides the required warning to the vehicle operator, such as by disconnecting the power source to an ESC system component or disconnecting an electrical connection to or between ESC system components. After a malfunction has been simulated and identified by the system, the system would be restored to normal operation. The engine is started and the malfunction telltale is checked to ensure it has cleared.

We received no adverse comments on the requirement that an ESC system malfunction be displayed to the driver, nor did we receive comments on the test procedure for ensuring malfunction detection. Therefore, we are adopting these requirements as proposed in the NPRM.

#### B. ESC Malfunction Telltale

The NPRM proposed requiring that an ESC malfunction lamp provide a warning to the driver when one or more malfunctions that affect the generation of control or response signals in the vehicle's electronic stability control

system is detected. Specifically, the ESC malfunction telltale would be required to be mounted in the driver's compartment in front of and in clear view of the driver and be identified by the symbol shown for "ESC Malfunction Telltale" or the specified words or abbreviations listed in Table 1 of FMVSS No. 101, *Controls and displays*. FMVSS No. 101 includes a requirement for the telltale symbol, or abbreviation, and the color required for the indicator lamp to show a malfunction in the ESC system.

The agency proposed that the symbol and color used to identify ESC malfunction should be standardized with the symbol used on light vehicles. The symbol established in FMVSS No. 126 is the International Organization for Standardization (ISO) ESC symbol, designated J.14 in ISO Standard 2575. The symbol shows the rear of a vehicle trailed by a pair of "S" shaped skid marks, shown below in Figure 3. The malfunction telltale is displayed in the color yellow, which communicates the malfunction of a system that does not require immediate correction. The agency found that the ISO J.14 symbol and close variations were the symbols used by the greatest number of light vehicle manufacturers that used an ESC symbol before the requirement was established. Furthermore, FMVSS No. 126 allows, as an option, the use of the text "ESC" in place of the telltale symbol. This same option was proposed in the NPRM for heavy vehicles.



Figure 3: ESC Malfunction Telltale Symbol in FMVSS No. 101

In addition to the ESC malfunction telltale being used to warn the driver of a malfunction in the ESC, the telltale is also used as a check of lamp function during vehicle start-up. We believe that the ESC malfunction telltale should be activated as a check of lamp function either when the ignition locking system is turned to the "On" ("Run") position whether or not the engine is running. This function provides drivers with the information needed to ensure that the ESC system is operational before the vehicle is driven. It also provides Federal and State inspectors with the

means to determine the operational status of the ESC system during a roadside safety inspection.

In the regulatory text of the NPRM, we proposed requiring that the ESC malfunction telltale illuminate only when a malfunction exists. However, we also required that the telltale illuminate as a check of lamp function. These two requirements may be read as inconsistent with each other. We have added language to this final rule to clarify that the check of lamp function is an exception to the requirement that

the telltale only illuminate in the event of a system malfunction.

Meritor WABCO commented on the operation of the light and said that the ESC malfunction lamp should be continuously illuminated if there is a malfunction in the ESC system. We agree with Meritor WABCO. The requirement that the indicator lamp be continuously illuminated if there is a malfunction in the ESC system was included in the proposed standard and is included in this final rule.

Bendix recommended a change that would allow a malfunction lamp to

remain illuminated until either the system self-resets with an ignition cycle or a recommended diagnostic tool can be used to clear faults. Bendix states that in some cases of faults, their systems are not guaranteed to self-reset upon correction.

We are not adopting Bendix's suggested change to allow that the telltale remain illuminated until a diagnostic tool can be used to reset a fault. If a diagnostic tool can be used to remedy a fault without an ignition cycle, there is nothing prohibiting the malfunction telltale from being extinguished. However, we cannot include in the malfunction lamp requirements the ability for the telltale to remain illuminated, even after a malfunction may have been corrected, until a diagnostic tool can be used. The purpose of the requirement that the malfunction lamp extinguish upon an ignition cycle after correction of the problem is that the system should be

able to detect both a malfunction and a correction without the use of external tools. The malfunction lamp should not extinguish until the fault is actually corrected.

We also received comments regarding the ESC system malfunction telltale itself. Temsa commented that there should be the option to use the text of "ESC" on the malfunction indicator. Temsa reasoned that this would be more user-friendly. This option was included in the NPRM and is included in this final rule.

We received several comments on the depiction of the vehicle in the telltale. Daimler referred to ECE Regulation 13, which citing ISO 2575, allows the vehicle shape to be changed to better represent the true exterior shape of a given vehicle. Daimler also stated that it uses a heavy truck or bus symbol on its European systems and it may result in an increased cost if the symbol depicting a passenger car was required in the U.S. Daimler asserted that the

discretion to choose the vehicle outline should be left to the manufacturer. Similarly ATA and Volvo recommended that the telltale should depict the rear of a truck tractor above the "S" shaped skid marks.

In response, we acknowledge desire of the industry to most accurately depict the type of vehicle being displayed on the ESC system malfunction telltale. We believe that requiring a symbol depicting the rear end of a trailer or bus above the "S" skid marks will satisfy the concerns of the manufacturers without causing any confusion regarding the identification of the telltale. We are including in the allowable telltales for this Standard trailer and bus symbols drawn from ISO 2575. We have chosen to depict the rear outline of a trailer rather than a truck because it is a better depiction of the usual rear view of a combination vehicle. The symbols are depicted in Figure 4 below.

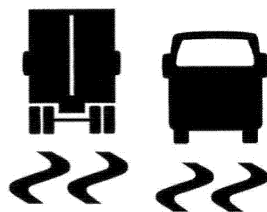


Figure 4: ESC Malfunction Telltale Symbols Depicting a Truck Tractor and a Bus

### C. Combining ESC Malfunction Telltale With Related Systems

In its comment, CVSA supported NHTSA's proposal to require a separate ESC malfunction telltale, without which the end user would not know if the system is operating. Further, CVSA reasoned that an anticipated Federal Motor Carrier Safety Administration (FMCSA) rule would require commercial vehicles with ESC systems be free of any indicated ESC faults.

Volvo supported combining the ESC malfunction indicator with a malfunction indicator for a traction control system. Volvo reasoned that a malfunction in the traction control system would be likely to also constitute a malfunction in the ESC system. In a simplified fault representation system submitted by Volvo, 17 out of 18 faults in a traction control system were also ESC system faults that would presumably trigger the ESC malfunction indicator. Volvo reasoned that having separate lamps for traction control and ESC system faults

could confuse a driver and diminish the importance of addressing the fault.

Likewise, EMA noted that the current industry practice is to combine the malfunction indicator lamp for the ESC and traction control systems. EMA also observed that traction control and ESC systems share similar components and, thus, tend to fail simultaneously. EMA stated that by mandating separate traction control and ESC malfunction lamps, NHTSA would be unnecessarily requiring investment of resources to change the instrument cluster. EMA stated that in FMVSS No. 126, NHTSA permits light vehicles to use the ESC malfunction indicator to signal malfunctions in related systems such as traction control. EMA requested that NHTSA provide similar flexibility.

Bendix similarly observed that the current industry practice is to combine ESC and traction control system malfunction indicators and that having a third lamp for traction control system malfunctions is unnecessary. Bendix also stated that the interconnected nature of traction control and ESC

systems means that a failure in one system is likely to be a failure in the other system.

In response, the agency must first correct what appears to be a common misconception shared by the commenters advocating that a separate traction control malfunction indicator should not be required. Currently, NHTSA has no performance requirements for traction control systems and no requirement that a traction control system malfunction generate a telltale visible to the driver. Thus, to require an ESC-only telltale does not necessarily require separate telltales for ESC system malfunctions and traction control system malfunctions. In fact, as the comments demonstrate, nearly all traction control system malfunctions would also be ESC system malfunctions and will require an ESC system malfunction telltale to illuminate. For those limited circumstances where a traction control system malfunction is not simultaneously an ESC system malfunction, the manufacturer could

display the malfunction to the driver in any manner that is not contrary to FMVSS No. 101 or not display the malfunction at all.

*D. ESC Activation Indicator*

The agency requested comment on whether there is a safety need for an ESC activation indicator. We received four comments on the issue.

Daimler stated that UN ECE Regulation 13 requires an ESC activation indicator and that the U.S. should allow such an indicator. Daimler reasoned that the driver would benefit from indication of the activation of an ESC system because it may allow him to realize that a more cautious driving style may be appropriate. Moreover, Daimler argued that it would not be advantageous to have contrary requirements in the U.S. and Europe.

Volvo and Bendix stated that it currently provides ESC system activation indication by flashing the malfunction lamp during system interventions. Both Volvo and Bendix requested that NHTSA not preclude the use of system activation indicators. EMA similarly requested flexibility for manufacturers to allow system activation indicators.

Based on the comments, NHTSA is allowing, but not requiring, the use of the ESC malfunction telltale in a

flashing mode to indicate ESC operation. Furthermore, we are expressly excluding this function from the requirement that the malfunction telltale only illuminate if there is an ESC system malfunction. We believe that allowing an activation indicator will give manufacturers flexibility to inform drivers when the ESC system is activating. However, we are not requiring such an indicator because we do not believe, nor do we have any data to suggest, that drivers with activation indicators will perform better than drivers who are given no indicator. This is consistent with the agency's decision to allow, but not require, activation indicators on light vehicles.

**XIV. Benefits and Costs**

This section addresses the benefits and costs of the rule, including estimates of ESC system effectiveness and the size of the crash population. We also address public comments related to these issues. Much of the information in this section is derived from the Final Regulatory Impact Analysis (FRIA) associated with this final rule, which has been placed in the docket.

*A. Target Crash Population*

The initial target crash population for estimating benefits includes all crashes resulting in occupant fatalities, MAIS 1

and above nonfatal injuries, and property damage only crashes that were the result of either (a) first-event untripped rollover crashes and (b) loss-of-control crashes (e.g., jackknife, cargo shift, avoiding, swerving) that involved truck tractors or large buses and might be prevented if the subject vehicle were equipped with a stability control system.

We updated the estimates from the NPRM which used the 2006–2008 Fatality Analysis Reporting System (FARS) and General Estimate System (GES) to used 2006–2012 FARS and GES data. The FARS data were used for evaluating fatal crashes and the GES data were used for evaluating nonfatal crashes. The updated crash data showed a lower number of rollover crashes and injuries from rollover crashes compared to the NPRM, but a higher number of fatalities from rollover crashes. Conversely, there are a higher overall number of loss-of-control crashes and injuries resulting from those crashes compared to the NPRM, but a lower number of fatalities from loss-of-control crashes. The estimated number of crashes, fatalities, injuries, and deaths that make up the initial target population are summarized in the following table.

TABLE 4—INITIAL TARGET CRASHES, MAIS INJURIES, AND PROPERTY DAMAGE ONLY VEHICLE CRASHES BY CRASH TYPE

Crash type	Crashes	Fatalities	Injuries	PDO
Rollover .....	4,577	122	1,957	2,510
Loss of control .....	6,266	184	1,510	5,351
Total .....	10,843	306	3,467	7,861

Source: 2006–2012 FARS, 2006–2012 GES.  
 PDO: property damage only.

The 2006–2012 crash data were then adjusted to take account of the estimated ESC and RSC system installation rates in model year 2018. To determine the number of crashes that could be prevented by requiring that ESC systems be installed on new truck tractors, the agency had to consider two subsets of the total crash population—those vehicles that would not be equipped with stability control systems (Base 1 population) and those vehicles that would be equipped with RSC systems (Base 2 population). The Base 1 population will benefit fully from this final rule. However, the Base 2

population will benefit only from the incremental increased effectiveness of ESC systems over RSC systems.

Based upon manufacturer production estimates, about 26.2 percent of truck tractors manufactured in model year 2012 were equipped with ESC systems and 16.0 percent were equipped with RSC systems. We also estimate that 80 percent of large buses subject to this final rule are equipped with ESC systems. Based upon historical rates of increase of installation of ESC and RSC systems, from 2013 to 2018 (which is the base model year for the cost and benefit analysis), we expect the rate of ESC system installation to increase by

approximately 15 percent annually and the rate of RSC system installation to increase by about 5 percent annually. Thus, by 2018, we expect that 33.9 percent of vehicles would be equipped with ESC systems and 21.3 percent of vehicles would be equipped with ESC systems. We would not expect that the installation rate on buses would change substantially before 2018. Adjusting the initial target crash populations using these estimates, the agency was able to estimate the Base 1 and Base 2 populations and the projected target crash population (Base 1 + Base 2) expressed in the following table.



TABLE 5—PROJECTED CRASHES, MAIS INJURIES, AND PROPERTY DAMAGE ONLY VEHICLE CRASHES BY CRASH TYPE, CRASH SEVERITY, INJURY SEVERITY, AND VEHICLE TYPE FOR 2018

Crash type	Crashes	Fatalities	Injuries	PDO
<b>Base 1</b>				
Rollover .....	2,099	56	898	1,151
Loss of Control .....	2,813	83	678	2,403
Total .....	4,912	139	1,576	3,554
<b>Base 2</b>				
Rollover .....	998	27	426	547
Loss of Control .....	1,337	39	322	1,142
Total .....	2,335	66	748	1,689
<b>Base 1 + Base 2 (Projected Target Population)</b>				
Rollover .....	3,097	83	1,324	1,698
Loss of Control .....	4,150	122	1,000	3,545
Total .....	7,247	205	2,324	5,243

Source: 2006–2012 FARS, 2006–2012 GES.  
 PDO: property damage only.

The agency has also examined the same crash data sources for large buses. Based upon this examination, the agency estimates that an average of two target rollover and three loss-of-control crashes that would be affected by ESC systems occur annually. The small number of crashes combined with the high projected voluntary ESC system installation rate causes the benefits resulting from this final rule attributable to buses to be very small. Therefore, the benefits estimates for buses are not further presented and the benefits of this final rule are assumed to be the benefits derived only from truck tractors.

*B. System Effectiveness*

1. Summary of the NPRM

As we stated in the NPRM, direct data that would show the effectiveness of stability control systems is not available because stability control technology on heavy vehicles is relatively new. Accordingly, the effectiveness rates presented in the NPRM were built upon from three earlier studies: (1) A 2008 study on RSC that was conducted by American Transportation Research Institute and sponsored by the Federal Motor Carrier Safety Administration (FMCSA),<sup>63</sup> (2) a 2009 study that was conducted by UMTRI and Meritor WABCO and sponsored by NHTSA,<sup>64</sup>

<sup>63</sup> Murray, D., Shackelford S., House, A., Analysis of Benefits and Costs of Roll Stability Control Systems, FMCSA–PRT–08–007 October 2008.

<sup>64</sup> Woodrooffe, J., Blower, D., and Green, P., Safety Benefits of Stability Control Systems for Tractor-Semitrailers, DOT HS 811 205, October 2009.

and (3) The 2011 NHTSA Research Note.<sup>65</sup> The effectiveness rates from the first two studies were based on computer simulation results, expert panel assessments of available crash data, input from trucking fleets that had adopted the technology, and research experiments. The third study refined the effectiveness that was established in the second study.

None of these studies derived the effectiveness from a statistical analysis of real-world crashes. Such statistical analyses require a comparison of vehicles with and without the technology. This is not feasible because ESC and RSC penetration in the national fleet of truck tractors is still small. ESC and RSC are relatively new technologies that have only been installed on a small percentage of new tractors over the past few years.

2. Summary of Comments and Response

ATA, Schneider, OOIDA, EMA, Bendix, and Martec commented on the agency’s effectiveness estimates. ATA, Schneider, and OOIDA all relied upon a study by the American Transportation Research Institute entitled “Roll Stability Systems: Cost Benefit Analysis of Roll Stability Control Verses Electronic Stability Control Using Empirical Crash Data.” EMA and OOIDA both criticized the use of simulation and expert analysis data as a substitute for real-world data. OOIDA asserted that the ATRI study represented real-world data that did not support requiring vehicles to have ESC

<sup>65</sup> Docket No. NHTSA–2010–0034–0043.

systems. EMA asserted that, with so many trucks on the road currently equipped with stability control systems, real-world data ought to be available. Martec presented a rebuttal to the ATRI study. Bendix conducted its own ESC and RSC system effectiveness study using a method similar to that used by NHTSA.

(a) ATRI Study

ATRI’s study concluded that equipping vehicles with RSC systems would result in fewer rollover, jackknife, and tow/truck crashes compared to ESC systems. The ATRI study used crash data, miles traveled, and financial information that they collected through their survey of 14 large and mid-size motor carriers. Of these carriers, 81.5 percent were in the truckload sector, 10.0 percent were in the less-than-truckload sector, and 8.5 percent were in the specialized sector. The ATRI sample included 135,712 trucks; of these trucks, 68,647 (50.6%) were equipped with RSC systems, 39,529 (29.1%) with ESC systems, and 27,536 (20.3%) with no stability control systems. Using the data received, ATRI calculated the crash rate per 100 million miles traveled, the crash cost per 1,000 miles traveled, and annual benefits and crash costs for three truck groups: Those with ESC systems, those with RSC systems, and those with no stability control systems. The group with no stability control systems served as the baseline to compare the other two groups. ATRI concluded that, if their sample is consistent with the industry as whole, RSC would result in fewer

rollover, jackknife, and tow/struck crashes than ESC. RSC also would provide greater benefits and lower installation costs than ESC.

Martec was asked by Bendix to evaluate the ATRI's study. Martec asserted that the methods employed by ATRI do not meet basic standards found in the global market research industry. Martec stated that, because the methods ATRI employed in its study were inadequate, the results cannot be used to draw any meaningful conclusions about the overall trucking industry's experience with stability control systems or the analysis of the costs and benefits of individual technologies as sold into the marketplace.

Martec reached four conclusions regarding ATRI's study. First, ATRI's study demonstrated confirmation bias by elaborating on its hypotheses and stating that the results of its research will be used to "inform responses" to a proposed NHTSA mandate. Second, ATRI's study lost objectivity by not collecting all evidence in a controlled and systematic way so that the results can be replicated and validated by other researchers and by not making an attempt to assure that its sample of fleets was random. Third, ATRI's study is biased due to disproportionate sampling that is not representative of the industry. Fourth, ATRI's study lacks the necessary statistical tests to address the uncertainty of the statistics.

We largely agree with Martec's conclusions regarding the ATRI study. Based in these concerns, we conclude that it is inappropriate to use ATRI's results to calculate the benefits and the cost-effectiveness of ESC and RSC systems.

ATRI's sample is subjected to self-selection bias. When soliciting data, ATRI revealed the research hypothesis in their data request form, as shown in Appendix A of the ATRI report: "ATRI's Research Advisory Committee hypothesized that, while ESC has more crash mitigation sensors than RSC systems, the higher per-unit cost of ESC may not make it as 'cost-effective' as RSC." Furthermore, in the survey form, ATRI stated that its research is intended to inform responses to NHTSA's NPRM, which proposed to mandate ESC systems on all new equipment two years after the rule goes into effect.

By revealing the hypothesis and the very specific intention of survey, ATRI potentially biased the participants' responses in favor of RSC systems. Carriers who have strong opinions in favor of RSC systems over ESC systems may have been more willing to respond than those who did not respond. We believe that this happened given that trucks with RSC systems (50.6 percent) and ESC systems (29.1 percent) are substantially overrepresented in the ATRI's sample. The self-reporting bias is further evidenced by the lack of accurate representation of trucking industry and counterintuitive crash rate outcome. Based on ATRI's data, the respondents skewed towards the truckload sector (*e.g.*, dry van, refrigerated, flatbed, intermodal container, and end-dump carriers) compared to the overall industry and thus does not represent the truck industry as a whole. Therefore, ATRI's results may not be attributed to the effects of RSC systems and ESC systems, but rather to the sample bias from self-reporting.

The quality of the self-reporting is also questionable, as evidenced by the crash rates per 100 million miles traveled as shown in Table 1 of ATRI's report. The report states that trucks equipped with ESC systems had higher rollover and jackknife crash rates than trucks equipped with RSC systems. Given that ESC systems include all of the functionality of an RSC system, that ESC systems have additional braking capability, and that ESC has substantially more effect on loss-of-control crashes, these rates are illogical. These illogical results most likely can be explained by the impact of self-selection in the sample.<sup>66</sup>

ATRI used control and comparison methodology to examine RSC and ESC. In its approach, ATRI used the trucks without stability control as the control group and compared the crash rates of trucks equipped with ESC and RSC systems to those of the control group. For this approach, controlling confounding factors (*i.e.*, factors other than the technologies of interest that would influence the crash rates) is critical in order to draw valid

<sup>66</sup> The results may also reflect that the RSC systems could be tuned to be more sensitive to allow them to brake more aggressively. We noted this possibility in the NPRM.

conclusions. There is no indication that ATRI investigated whether the three groups have similar characteristics. For example, if the majority of trucks in the control group were specialty trucks and specialty trucks were prone to rollover crashes while the ESC and RSC groups were overrepresented by a different truck sector that would be prone to loss-of-control crashes, then the ATRI results are not valid to address the difference between ESC and RSC.

ATRI acknowledged that there are some confounding factors that were not controlled for. However, ATRI did not try to identify these factors and examine the effects of these factors. Examining the confounding factors is essential to the validity of the analysis. With these concerns, the agency believes that it is inappropriate to use ATRI's results to support this final rule.

There are no other sources of real-world data available to NHTSA that discriminate between crashes involving heavy vehicles equipped with stability control systems and those that do not. The UMTRI study, which includes case reviews and simulation, which has been reviewed and slightly modified by NHTSA, represents the best estimate available to the agency regarding the effectiveness of stability control systems.

#### (b) Bendix Study

Bendix stated that, based on over 30 years of experience on commercial vehicle dynamic, braking, and stability control systems, the agency's assessment of the effectiveness of ESC systems is conservative. Bendix reviewed the 159 cases that were used as the basis for the agency's effectiveness estimates and re-rated ESC and RSC system effectiveness based on its experience. Furthermore, Bendix identified some of these 159 cases that were not stability-control relevant and included additional cases that agency did not identify as relevant. Based upon these changes and Bendix's own estimates of ESC and RSC system effectiveness, Bendix concluded that ESC systems are 31 percent greater than RSC systems. The gap is much wider than the 6 to 7 percent estimated by NHTSA. Table 6 shows the effectiveness from Bendix's analysis and those estimated by NHTSA in the NPRM.

TABLE 6—EFFECTIVENESS COMPARISON BETWEEN BENDIX’S ANALYSIS AND NHTSA’S NPRM

	Bendix			NHTSA’s NPRM		
	Overall	Rollover	LOC	Overall	Rollover	LOC
ESC .....	78	83	69	28–36	40–56	14
RSC .....	47	58	26	21–30	37–53	3
Difference .....	31	25	43	6–7	3	12

The agency believes that Bendix’s method of determining system effectiveness is biased in favor of ESC systems. Prior to issuing the NPRM, the agency had shared its concerns with Bendix’s assignment of effectiveness at two meetings. The agency identified four issues.

First, for many rollover crashes, Bendix assigned a significant higher effectiveness to ESC systems compared to RSC systems. Based on the agency’s understanding of ESC and RSC system functions to prevent rollover crashes, the agency’s engineers did not believe the difference between ESC and RSC would be as pronounced as Bendix had estimated. Second, Bendix assigned a relatively high effectiveness for RSC systems against loss-of-control crashes. However, the agency’s testing suggests

that RSC systems would have a small effect on loss-of-control crashes. Third, although Bendix categorized some of the cases addressed by NHTSA as not relevant, Bendix still assigned effectiveness for those cases. This seems contradictory. Finally, Bendix included additional cases that were not included by NHTSA and UMTRI. However, these cases included truck types that are not covered by the NPRM or this final rule. Thus, while we commend Bendix for undertaking the review that NHTSA and UMTRI undertook to review individual crash cases, we cannot agree with the conclusion that ESC systems are substantially more effective than RSC systems at preventing rollover crashes.

3. Effectiveness Estimate

In this final rule, we are generally using the effectiveness estimate used the

NPRM, which was derived from 2011 research note. However, we have made two modifications. First, we have included an additional loss-of-control crash type (non-collision single-vehicle jackknife crashes) that should have been included in the PRIA. Second, because we added an additional loss-of-control crash type, we have reweighted the ratio of rollover to loss-of-control crashes. However, these modifications have not substantially changed the effectiveness rates for ESC and RSC systems from the rates presented in the NPRM. As shown in Table 7, ESC systems are considered to be 3 percent more effective than RSC systems at reducing rollover crashes and 12 percent more effective at reducing loss-of-control crashes.

TABLE 7—EFFECTIVENESS RATES FOR ESC AND RSC BY TARGET CRASH TYPES

Technology	Overall	Rollover	LOC
ESC .....	25–32	40–56	14
RSC .....	17–24	37–53	2

Although the J-turn performance test does not measure an ESC system’s ability to prevent loss-of-control crashes resulting from yaw instability, the equipment requirement ensures some level of yaw stability performance. Our assessment for yaw stability control performance is based on the ability of current generation ESC systems to prevent yaw instability, just as our assessment for roll stability performance (which does have an associated

performance test) is based on the ability of current generation ESC systems to prevent roll instability.

C. Benefits Estimates

1. Safety Benefits

The crash benefits of this final rule were derived by multiplying the projected target population, including fatalities, injuries, and property damage only crashes by the effectiveness rate for

both rollover and loss-of-control crashes. The benefits estimate for rollover crashes are presented as a range because the ESC effectiveness rate is a range. In contrast, there is only one estimate of benefits for loss-of-control crashes. Table 8 presents the benefits of this final rule. As shown in that table, this final rule will prevent 1,424 to 1,759 crashes, 40 to 49 fatalities, and 505 to 649 injuries.

TABLE 8—BENEFITS OF THE FINAL RULE

Crash type	Crashes	Fatalities	Injuries	PDO
Rollover .....	870–1,205	23–32	372–516	476–661
LOC .....	554	17	133	473
Total .....	1,424–1,759	40–49	505–649	949–1,134

2. Monetized Benefits

ESC systems are crash avoidance systems. Preventing a crash not only saves lives and reduces injuries, but it

also provides tangible benefits associated with the reduction in crashes. These benefits include savings from medical care, emergency services, insurance administration, workplace

costs, legal costs, congestion, property damage, and productivity. We have broken down these benefits into those that are injury related and those that are non-injury related. Of the listed

benefits, congestion and property damage reduction are non-injury-related benefits, and the others are injury-related benefits. These benefits are estimated based upon periodic examinations of the economic impact of vehicle crashes. The most recent analysis was completed in 2014.<sup>67</sup>

We have also monetized benefits in terms of the value of a statistical life (VSL), which represents individuals' willingness to pay to reduce the risk of dying. These benefits include the value

of quality of life, household productivity, and after-tax wages. These benefits are realized through the life of the vehicle and must be discounted to reflect their value at the time of purchase.

June 2014 guidance from the Department's Office of the Secretary sets forth guidance for the treatment of VSL in regulatory analysis.<sup>68</sup> This guidance establishes a VSL of \$9.2 million for analyses based on 2013 economics and a 1.18 percent annual adjustment rate

for the VSL for the next 30 years. The VSL is adjusted to reflect real increases in VSL that are likely to occur in the future as consumers become economically better off in real terms over time.

Using this guidance applied to the prevention of crashes resulting in fatalities, injuries, and property damage only, the following undiscounted monetized benefits of this final rule are estimated.

TABLE 9—UNDISCOUNTED MONETIZED BENEFITS OF THE FINAL RULE  
[2013 Dollars]

	Low	High
Societal Economic Savings for Crashworthiness .....	\$27,013,989	\$34,526,917
Congestion and Property Damage .....	14,234,540	17,566,251
Societal Economic Savings Total .....	41,248,529	52,093,168
VSL .....	484,836,271	603,762,776
<b>Total Monetized Savings .....</b>	<b>526,084,800</b>	<b>655,855,944</b>

D. Cost Estimate

In the NPRM, we relied upon data received from manufacturers to estimate the costs of implementing the proposal to require ESC systems on truck tractors and large buses. Based upon these submissions, NHTSA calculated that the average cost of an ESC system for both truck tractors and buses was \$1,160 and the average cost of an RSC system was \$640. Based on our estimates that 150,000 truck tractors and 2,200 buses would be covered by the proposal, and the estimates of 2012 ESC and RSC system adoption in the fleet, we estimated that the total cost of the proposal would be \$113.6 million in 2010 economics. Furthermore, we

estimated that the proposed SIS and SWD test maneuvers would cost approximately \$15,000 per test to run, assuming availability of test facilities, tracks, and vehicles.

We received specific a comment on the costs of ESC system from Bendix. Bendix stated that they did not see a correlation between the cost differential estimated in the PRIA and those from Bendix to its OEM customers. Bendix did not specify their cost differential. However, Bendix stated that when ESC was mandated, they believed the cost would be in the lower end of estimates. Thus, the net benefits of ESC would be further increased.

After publishing the NPRM, the agency published a cost teardown study

for ESC and RSC systems for heavy trucks to assess the required components and their unit costs. The results were published in a report titled, "Cost and Weight Analysis of Electronic Stability Control and Roll Stability Control for Heavy Trucks," on October 25, 2012.<sup>69</sup> The study looked at the incremental costs of equipping vehicles with ESC and RSC systems over a baseline of ABS by looking at one truck equipped only with ABS, two truck tractors equipped with RSC, one truck tractor equipped with ESC, and one large bus equipped with ESC. The following table shows the components and the cost of each component on the five vehicles that were examined.

TABLE 10—COMPONENT COST ESTIMATES FOR BASELINE ABS AND FOUR STABILITY TECHNOLOGY SYSTEMS IN 2013 DOLLARS <sup>70</sup>

	ABS WABCO tractor baseline		RSC Bendix tractor		RSC WABCO tractor		ESC Bendix large bus		ESC WABCO tractor	
	component	total	component	total	component	total	component	total	component	total
Wheel Speed Sensor ..	\$11.85	\$47.40	X	X	X	X	X	X	X	X
Wheel Speed Cables ..	5.32	21.28	X	X	X	X	X	X	X	X
Dual Modulator Valves	284.82	569.64	X	X	X	X	X	X	X	X
Modulator Valve Cables.	10.50	42.00	X	X	X	X	X	X	X	X
ECU .....	90.05	90.05	X	X	X	X	X	X	X	X
Delta ECU* .....			37.80	37.80	50.36	50.36	37.80	37.80	43.58	43.58
Solenoid Valves .....			29.20	58.40	29.20	58.40	29.20	58.40	29.20	87.60
Solenoid Valve Cables			9.58	19.16	9.58	19.16	9.58	19.16	9.58	28.74
Lateral Accelerometer			49.74	49.74		In ECU ..		In Yaw Sensor.		In ESC Module

<sup>67</sup> Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A., The economic and societal impact of motor vehicle crashes, 2010, (May 2014) (DOT HS 812 013).

<sup>68</sup> 2014 Office of the Secretary memorandum on the "Guidance on Treatment of the Economic Value of a Statistical Life in U.S. Department of Transportation Analyses—2014 Adjustment., June 13, 2014" <http://www.dot.gov/regulations/economic-values-used-in-analysis>

<sup>69</sup> See Docket No. NHTSA–2011–0066–0034.

<sup>70</sup> The cost teardown study is in 2011 economics, and it was revised to 2013 economics using an implicit price deflator (1.033=106.588/103.199).

TABLE 10—COMPONENT COST ESTIMATES FOR BASELINE ABS AND FOUR STABILITY TECHNOLOGY SYSTEMS IN 2013 DOLLARS<sup>70</sup>—Continued

	ABS WABCO tractor baseline		RSC Bendix tractor		RSC WABCO tractor		ESC Bendix large bus		ESC WABCO tractor	
	component	total	component	total	component	total	component	total	component	total
Modulator Valve (for trailer)**			197.82	197.82	197.82	197.82			197.82	197.82
Modulator Valve Cables (for trailer)			10.50	10.50	10.50	10.50			10.50	10.50
Yaw Rate Sensor							51.38	51.38		In ESC Module
Pressure Sensor							2.14	6.42	2.14	6.42
Pressure Sensor Cable							10.12	30.36	10.12	30.36
Steering Angle Sensor							29.50	29.50	29.50	29.50
ESC Module									85.48	85.48
ESC Module Cable									28.86	28.86
Baseline ABS Cost		770.37								
Incremental Costs Above Baseline ABS				373.42		336.24		233.02		548.86

<sup>70</sup> Delta ECU is an incremental cost estimate over the cost of WABCO Tractor Baseline ABS ECU.

\*\* Modulator Valve for trailer is added as a component in Bendix Tractor RSC, Meritor-WABCO Tractor RSC and Meritor-WABCO Tractor ESC since it is required to be installed in trailers in the final rule.

Furthermore, the installation of an ESC system requires a technician to tune a system for each vehicle. We estimate that it will take one hour of labor to perform this task at the cost of \$33.40. Additionally, this final rule requires the installation of a telltale lamp using specific symbols or text. We estimate the cost of this lamp and associated wiring at \$2.96. Thus, we estimate the total cost for installing an ESC system to be \$585.22 on truck tractors and \$269.38 on large buses. We have averaged the two estimates of the cost to install an RSC system, which is \$391.19.<sup>71</sup> We note that this estimate generally corresponds to the lower end of the cost estimate in the FRIA, which is consistent with Bendix’s comment.

TABLE 11—SUMMARY OF ESC AND RSC SYSTEM UNIT COST ESTIMATES IN 2013 DOLLARS

ESC	\$585.22
RSC	391.19
ESC Incremental over RSC	194.03

We have also examined the effect of increased costs on vehicle sales. We expect that the cost of ESC systems is relatively small compared to the estimated average cost of a truck tractor of \$110,000. We expect that this cost will be passed on to purchasers of truck tractors and large buses. Those purchasers have indicated that truck operating costs represent about 21 percent of total operating costs, and that the elasticity of demand for truck freight is approximately -1.174. Thus, we believe that the increased costs of truck

tractors related to this final rule will reduce truck tractor sales by 101 units per year. We expect that this rule will have even less of an impact on the sales of large buses, because the average cost of a bus affected by this rule is approximately \$400,000.

Based on our assumptions regarding costs and the estimates of ESC and RSC system penetration in the market in 2018, we expect that this final rule will result in a total cost of \$45.6 million. The costs are set forth in Tables 12 and 13. This total cost is based upon 21.3 percent of truck tractors sold annually upgrading from RSC systems to ESC systems, 44.8 percent of truck tractors sold annually without stability control systems installing ESC systems, and 20.0 percent of large buses sold annually without stability control systems installing ESC systems.

TABLE 12—TOTAL COST OF THE FINAL RULE [2013 \$]

	Technology Upgrade Needed		
	None	Upgrade RSC to ESC	ESC
<b>Truck Tractors:</b>			
% Needing Improvements	33.9%	21.3%	44.8%
150,000 Sales Estimated	50,850	31,950	67,200
Costs per Affected Vehicle	0	\$194.03	\$585.22
Total Costs	0	\$6.2 M	\$39.3 M
<b>Large Buses:</b>			
% Needing Improvements	80%	0%	20%
2,200 Sales Estimated	1,760	0	440
Costs per Affected Vehicle	0	NA	\$269.38
Total Costs	0	\$0 M	\$0.1 M

M: million.

<sup>71</sup> Unlike in the NPRM, the cost of installing an ESC system on a bus is considered to be

substantially less than on a truck tractor. This is

because an ESC system on a bus is not required to control a trailer’s brakes.

TABLE 13—SUMMARY OF VEHICLE COSTS  
[2013 \$]

	Average vehicle costs	Total costs
Truck Tractors .....	\$303.50	\$45.5 M
Large Buses .....	53.90	0.1 M
Total .....	299.90	45.6 M

The agency estimates that the cost of executing the J-turn test maneuvers will be \$13,400 per truck tractor and \$20,100 per large bus, assuming access is available to test facilities, tracks, and

vehicles. The costs include preparation, brake burnish test, and other miscellaneous preparations and required equipment. Table 14 presents these estimated costs. In addition, for

comparison purpose, the table also includes the costs for SWD maneuver that was proposed in the NPRM.<sup>72</sup>

TABLE 14—ESTIMATED COMPLIANCE TEST COST PER VEHICLE  
[2013 \$]

Cost Items	J-Turn		SWD	
	Tractor	Large Bus	Tractor	Large Bus
(1) Preparing for and executing the test maneuvers, .....	\$8,400.00	\$12,800.00	\$10,800.00	\$14,700.00
(2) Executing brake burnish test, and .....	2,600.00	3,600.00	2,600.00	3,600.00
(3) Other miscellaneous preparations and required equipment such as .....	2,400.00	3,700.00	3,400.00	4,800.00
(a) Brake conditioning between maneuvers,				
(b) Jackknife cable maintenance,				
(c) ballast loading, and				
(d) Post data processing, i.e., LAR and Torque reduction process				
Sum .....	13,400.00	20,100.00	16,800.00	23,100.00

E. Cost Effectiveness

Safety benefits can occur at any time during the vehicle's lifetime. Therefore, the benefits are discounted at both 3 and 7 percent to reflect their values in 2013

dollars, as reflected in Table 15. Table 15 also shows that the net cost per equivalent life saved from this final rule range from \$0.1 to \$0.3 million at a 3 percent discount rate and from \$0.3 to \$0.6 million at a 7 percent discount rate.

The net benefits of this final rule are estimated to range from \$412 to \$525 million at a 3 percent discount rate and from \$312 to \$401 million at a 7 percent discount rate.

TABLE 15—SUMMARY OF COST-EFFECTIVENESS AND NET BENEFITS BY DISCOUNT RATE  
[2013 \$]

	3% Discount		7% Discount	
	Low	High	Low	High
Fatal Equivalents .....	40	50	32	40
Societal Economic Savings for Crashworthiness .....	\$21,816,498	\$27,883,938	\$17,288,953	\$22,097,227
Congestion and Property Damage .....	11,495,815	14,186,504	9,110,106	11,242,401
Total Societal Economic Savings (1) .....	33,312,313	42,070,442	26,399,059	33,339,628
VSL .....	424,352,045	528,442,215	331,681,943	413,040,877
Total Monetized Savings (2) .....	457,664,358	570,512,657	358,081,002	446,380,505
Vehicle Costs* .....	45,644,570	45,644,570	45,644,570	45,644,570
Net Costs (3) .....	12,332,257	3,574,128	19,245,511	12,304,942
Net Cost Per Fatal Equivalent (4) .....	308,306	71,483	601,422	307,624
Net Benefits (5) .....	412,019,788	524,868,087	312,436,432	400,735,935

\* Vehicle costs are not discounted, since they occur when the vehicle is purchased, whereas benefits occur over the vehicle's lifetime and are discounted back to the time of purchase.

- (1) = Societal Economic Savings for Crashworthiness + VSL Savings.
- (2) = Societal Economic Savings + VSL.
- (3) = Vehicle Costs – Total Societal Economic Savings.
- (4) = Net Costs/Fatal Equivalents.
- (5) = VSL – Net Costs.

<sup>72</sup> We have revised the estimated SWD maneuver costs from the PRIA. In the PRIA, the estimated cost for SWD is \$15,000 which included \$10,000 for

preparing for and executing the maneuvers, \$2,000 for executing FMVSS No. 121 brake burnish test,

and \$3,000 for other miscellaneous preparations and required equipment.

F. Comparison of Regulatory Alternatives

The agency considered two alternatives to this final rule. The first alternative was requiring RSC systems be installed on all newly manufactured truck tractors and buses covered by this final rule. The second alternative was requiring RSC systems be installed on all newly manufactured trailers.

Regarding the first alternative, requiring RSC systems be installed on

truck tractors and large buses, our research has concluded that RSC systems are less effective than ESC systems. An RSC system is only slightly less effective at preventing rollover crashes than an ESC system, but it is much less effective at preventing loss-of-control crashes. However, RSC systems are estimated to cost less than ESC systems. Furthermore, only approximately 44.8% of truck tractors will be required to install RSC systems based on data regarding manufacturers'

plans and the agency's estimates of ESC and RSC system adoption rates between 2012 and 2018.

A summary of the cost effectiveness of RSC systems is set forth in Table 16. When comparing this alternative to this final rule, requiring RSC systems rather than ESC systems would be slightly more cost effective. However, this alternative would save fewer lives and have lower net benefits than this final rule. Consequently, the agency has rejected this alternative.

TABLE 16—SUMMARY OF COST-EFFECTIVENESS AND NET BENEFITS BY DISCOUNT RATE  
ALTERNATIVE 1—REQUIRING TRACTOR-BASED RSC SYSTEMS  
[2013 \$]

	3% Discount		7% Discount	
	Low	High	Low	High
Fatal Equivalents .....	25	35	20	28
Societal Economic Savings—Crashworthiness .....	\$14,708,167	\$20,700,276	\$11,655,804	\$16,404,380
Congestion and Property Damage .....	6,694,636	9,378,093	5,305,308	7,431,871
Total Societal Economic Savings (1) .....	21,402,803	30,078,369	16,961,112	23,836,251
VSL .....	260,249,473	363,828,274	203,416,130	284,375,367
Total Monetized Savings (2) .....	281,652,276	393,906,643	220,377,242	308,211,618
Vehicle Costs* .....	26,406,495	26,406,495	26,406,495	26,406,495
Net Costs (3) .....	5,003,692	-3,671,874	9,445,383	2,570,244
Net Cost Per Fatal Equivalent (4) .....	200,148	N/A	472,269	91,794
Net Benefits (5) .....	255,245,781	367,500,148	193,970,747	281,805,123

\* Vehicle costs are not discounted, since they occur when the vehicle is purchased, whereas benefits occur over the vehicle's lifetime and are discounted back to the time of purchase.

(1) = Societal Economic Savings – Crashworthiness + VSL Savings.

(2) = Societal Economic Savings + VSL.

(3) = Vehicle Costs – Total Societal Economic Savings; Cost per equivalent life saved is not presented where the alternative results in negative net cost because there would be no cost per equivalent life saved.

(4) = Net Costs/Fatal Equivalents.

(5) = VSL – Net Costs.

The second alternative considered was requiring trailer-based RSC systems to be installed on all newly manufactured trailers. Trailer-based RSC systems are only expected to prevent rollover crashes. Based on 2006–2012 GES data, 98 percent of the target truck-tractor crashes involve truck tractors with trailers attached. Therefore, the base crash population is 98 percent of Base 1 discussed above.

As discussed in the NPRM, it became apparent during testing that trailer-based stability control systems were less effective than tractor-based systems because trailer-based systems could only control the trailer's brakes. Based upon the agency's testing of trailer-based RSC systems using a 150-foot J-

turn test maneuver, the benefits of trailer-based RSC systems in preventing rollover are about 17.6 percent of tractor-based ESC systems, corresponding to an effectiveness rate of 7 to 10 percent.

The agency estimates that about 217,000 new trailers are manufactured each year. Further, based on information from manufacturers, the agency estimates that a trailer-based RSC system costs \$400 per trailer. Available data indicates that as much as 5 percent of the current annual production of trailers comes with RSC systems installed. Assuming all new trailers would be required to install RSC, the cost of this alternative is estimated to be \$74.7 million.

Table 17 sets forth a summary of the cost effectiveness of trailer-based RSC systems. Because the operational life of a trailer (approximately 45 years) is much longer than that of a truck tractor, it would take longer for trailer-based RSC systems to fully penetrate the fleet than it would for any tractor-based system. Therefore, when the benefits of trailer-based RSC systems are discounted at a 3 and 7 percent rate, there is a much higher discount factor. As can be seen in Table 17, this results in this alternative having negative net benefits and a high cost per life saved. Also, this alternative would have no effect on buses. Accordingly, the agency has rejected this alternative.

TABLE 17—SUMMARY OF COST-EFFECTIVENESS AND NET BENEFITS BY DISCOUNT RATE  
ALTERNATIVE 2—REQUIRING TRAILER-BASED RSC SYSTEMS  
[2013 \$]

	3% Discount		7% Discount	
	Low	High	Low	High
Fatal Equivalents .....	3	3	2	2



TABLE 17—SUMMARY OF COST-EFFECTIVENESS AND NET BENEFITS BY DISCOUNT RATE—Continued  
 ALTERNATIVE 2—REQUIRING TRAILER-BASED RSC SYSTEMS  
 [2013 \$]

	3% Discount		7% Discount	
	Low	High	Low	High
Societal Economic Savings—Crashworthiness .....	\$1,571,042	\$2,036,588	\$1,057,467	\$1,370,825
Congestion and Property Damage .....	684,213	938,236	460,543	631,526
Total Societal Economic Savings (1) .....	2,255,255	2,974,824	1,518,010	2,002,351
VSL .....	30,196,954	39,659,995	19,696,851	25,869,398
Total Monetized Savings (2) .....	32,452,209	42,634,819	21,214,861	27,871,749
Vehicle Costs * .....	74,734,800	74,734,800	74,734,800	74,734,800
Net Costs (3) .....	72,479,545	71,759,976	73,216,790	72,732,449
Net Cost Per Fatal Equivalent (4) .....	24,159,848	23,919,992	36,608,395	36,366,225
Net Benefits (5) .....	-42,282,591	-32,099,981	-53,519,939	-46,863,051

\* Vehicle costs are not discounted, since they occur when the vehicle is purchased, whereas benefits occur over the vehicle's lifetime and are discounted back to the time of purchase.

(1) = Societal Economic Savings - Crashworthiness + VSL Savings.

(2) = Societal Economic Savings + VSL.

(3) = Vehicle Costs - Total Societal Economic Savings; negative means benefits are greater than the cost.

(4) = Net Costs/Fatal Equivalents.

(5) = VSL - Net Costs.

**XV. Regulatory Analyses and Notices**

*A. Executive Order 12866, Executive Order 13563, and DOT Regulatory Policies and Procedures*

NHTSA has considered the impact of this rulemaking action under Executive Order 12866, Executive Order 13563, and the Department of Transportation's regulatory policies and procedures. This rulemaking is considered economically significant and was reviewed by the Office of Management and Budget under E.O. 12866, "Regulatory Planning and Review." The rulemaking action has also been determined to be significant under the Department's regulatory policies and procedures. NHTSA has placed in the docket a Final Regulatory Impact Analysis (FRIA) describing the benefits and costs of this rulemaking action. The benefits and costs are summarized in section XIV of this preamble.

Consistent with Executive Order 13563 and to the extent permitted under the Vehicle Safety Act, we have considered the cumulative effects of the new regulations stemming from NHTSA's 2007 "NHTSA's Approach to Motorcoach Safety" plan, DOT's 2009 Motorcoach Safety Action Plan, and the Motorcoach Enhanced Safety Act, and have taken steps to identify opportunities to harmonize and streamline those regulations. By coordinating the timing and content of the rulemakings, our goal is to expeditiously maximize the net benefits of the regulations (by either increasing benefits or reducing costs or a combination of the two) while simplifying requirements on the public and ensuring that the requirements are

justified. We seek to ensure that this coordination will also simplify the implementation of multiple requirements on a single industry.

NHTSA's Motorcoach Safety Action Plan identified four priority areas—passenger ejection, rollover structural integrity, emergency egress, and fire safety. There have been other initiatives on large bus performance, such as ESC systems—an action included in the DOT plan—and an initiative to update the large bus tire standard.<sup>73</sup> In deciding how best to initiate and coordinate rulemaking in these areas, NHTSA examined various factors including the benefits that would be achieved by the rulemakings, the anticipated vehicle designs and countermeasures needed to comply with the regulations, and the extent to which the timing and content of the rulemakings could be coordinated to lessen the need for multiple redesign and to lower overall costs. After this examination, we decided on a course of action that prioritized the goal of reducing passenger ejection and increasing frontal impact protection because many benefits could be achieved expeditiously with countermeasures that were readily available (using bus seats with integral seat belts, which are already available from seat suppliers) and whose installation would not significantly impact other vehicle designs. Similarly, we have also determined that an ESC rulemaking presents relatively few synchronization issues with other rules, because the vehicles at issue already have the foundation braking systems needed for the stability control

technology and the additional equipment necessary for an ESC system are sensors that are already available and that can be installed without significant effect on other vehicle systems. Further, we estimate that 80 percent of the affected buses already have ESC systems. We realize that a rollover structural integrity rulemaking, or an emergency egress rulemaking, could involve more redesign of vehicle structure than rules involving systems such as seat belts, ESC, or tires.<sup>74</sup> Our decision-making in these and all the rulemakings outlined in the "NHTSA's Approach to Motorcoach Safety" plan, DOT's Motorcoach Safety Action Plan, and the Motorcoach Enhanced Safety Act will be cognizant of the timing and content of the actions so as to simplify requirements applicable to the public and private sectors, ensure that requirements are justified, and increase the net benefits of the resulting safety standards.

*B. Regulatory Flexibility Act*

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The Small Business Administration's

<sup>74</sup> The initiative on fire safety is in a research phase. Rulemaking resulting from the research will not occur in the near term.

<sup>73</sup> 75 FR 60037 (Sept. 29, 2010).

regulations at 13 CFR part 121 define a small business, in part, as a business entity “which operates primarily within the United States.” (13 CFR 121.105(a)). No regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

NHTSA has considered the effects of this final rule under the Regulatory Flexibility Act. I certify that this final rule will not have a significant economic impact on a substantial number of small entities. This final rule will directly impact manufacturers of truck-tractors, large buses, and stability control systems for those vehicles. It will indirectly affect purchasers of new truck-tractors and large buses, which include both fleets and owner-operators. NHTSA believes the entities directly affected by this rule do not qualify as small entities. Inasmuch as some second-stage manufacturers of certain body-on-frame buses that are subject to this final rule are small businesses, this final rule will not substantially affect those small businesses. The small manufacturers that may be affected by this rule are final stage manufacturers that purchase incomplete vehicles from other large manufacturers and complete the manufacturing process. The incomplete vehicle manufacturers, which we do not believe are small businesses, typically certify compliance with all braking-related standards and we believe ESC would be included among those. The sole effect on the final stage manufacturers is a marginal increase in the cost of incomplete vehicles due to the addition of ESC systems. This additional cost is very small relative to the average cost of buses subject to this final rule (\$200,000 to \$500,000), and the costs would likely ultimately be passed on to the final purchaser.

#### *C. Executive Order 13132 (Federalism)*

NHTSA has examined this final rule pursuant to Executive Order 13132 (64 FR 43255, August 10, 1999) and concluded that no additional consultation with States, local governments or their representatives is mandated beyond the rulemaking process. The agency has concluded that the rulemaking will not have sufficient federalism implications to warrant consultation with State and local

officials or the preparation of a federalism summary impact statement. The final rule 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.”

NHTSA rules can preempt in two ways. First, the National Traffic and Motor Vehicle Safety Act contains an express preemption provision: When a motor vehicle safety standard is in effect under this chapter, a State or a political subdivision of a State may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. 49 U.S.C. 30103(b)(1). It is this statutory command by Congress that preempts any non-identical State legislative and administrative law addressing the same aspect of performance.

The express preemption provision described above is subject to a savings clause under which “[c]ompliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.” 49 U.S.C. 30103(e). Pursuant to this provision, State common law tort causes of action against motor vehicle manufacturers that might otherwise be preempted by the express preemption provision are generally preserved. However, the Supreme Court has recognized the possibility, in some instances, of implied preemption of such State common law tort causes of action by virtue of NHTSA’s rules, even if not expressly preempted. This second way that NHTSA rules can preempt is dependent upon there being an actual conflict between an FMVSS and the higher standard that would effectively be imposed on motor vehicle manufacturers if someone obtained a State common law tort judgment against the manufacturer, notwithstanding the manufacturer’s compliance with the NHTSA standard. Because most NHTSA standards established by an FMVSS are minimum standards, a State common law tort cause of action that seeks to impose a higher standard on motor vehicle manufacturers will generally not be preempted. However, if and when such a conflict does exist—for example, when the standard at issue is both a minimum and a maximum standard—the State common law tort cause of action is impliedly preempted. See *Geier v. American Honda Motor Co.*, 529 U.S.C. 861 (2000).

Pursuant to Executive Order 13132 and 12988, NHTSA has considered whether this rule could or should preempt State common law causes of action. The agency’s ability to announce its conclusion regarding the preemptive effect of one of its rules reduces the likelihood that preemption will be an issue in any subsequent tort litigation.

To this end, the agency has examined the nature (*e.g.*, the language and structure of the regulatory text) and objectives of this rule and finds that this rule, like many NHTSA rules, prescribes only a minimum safety standard. As such, NHTSA does not intend that this rule preempt state tort law that would effectively impose a higher standard on motor vehicle manufacturers than that established by this rule. Establishment of a higher standard by means of State tort law would not conflict with the minimum standard announced here. Without any conflict, there could not be any implied preemption of a State common law tort cause of action.

#### *D. Executive Order 12988 (Civil Justice Reform)*

With respect to the review of the promulgation of a new regulation, section 3(b) of Executive Order 12988, “Civil Justice Reform” (61 FR 4729; Feb. 7, 1996), requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect; (2) clearly specifies the effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) clearly specifies the retroactive effect, if any; (5) specifies whether administrative proceedings are to be required before parties file suit in court; (6) adequately defines key terms; and (7) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. This document is consistent with that requirement.

Pursuant to this Order, NHTSA notes as follows. The issue of preemption is discussed above. NHTSA notes further that there is no requirement that individuals submit a petition for reconsideration or pursue other administrative proceedings before they may file suit in court.

#### *E. Protection of Children From Environmental Health and Safety Risks*

Executive Order 13045, “Protection of Children from Environmental Health and Safety Risks” (62 FR 19855, April 23, 1997), applies to any rule that: (1) is determined to be “economically significant” as defined under Executive

Order 12866, and (2) concerns an environmental, health, or safety risk that the agency has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the agency.

This document is part of a rulemaking that is not expected to have a disproportionate health or safety impact on children. Consequently, no further analysis is required under Executive Order 13045.

#### F. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA), a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. There is not any information collection requirement associated with this final rule.

#### G. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) requires NHTSA to evaluate and use existing voluntary consensus standards in its regulatory activities unless doing so would be inconsistent with applicable law (*e.g.*, the statutory provisions regarding NHTSA's vehicle safety authority) or otherwise impractical. Voluntary consensus standards are technical standards developed or adopted by voluntary consensus standards bodies. Technical standards are defined by the NTTAA as "performance-based or design-specific technical specification and related management systems practices." They pertain to "products and processes, such as size, strength, or technical performance of a product, process or material."

Examples of organizations generally regarded as voluntary consensus standards bodies include ASTM International, SAE International (SAE), and the American National Standards Institute (ANSI). If NHTSA does not use available and potentially applicable voluntary consensus standards, we are required by the Act to provide Congress, through OMB, an explanation of the reasons for not using such standards.

This final rule requires truck tractors and large buses to have electronic stability control systems. In the definitional criteria, the agency adapted the criteria based on the light vehicle ESC rulemaking, which was based on

(with minor modifications) SAE Surface Vehicle Information Report on Automotive Stability Enhancement Systems J2564 JUN2004 that provides an industry consensus definition of an ESC system. In addition, SAE International has a Recommended Practice on Brake Systems Definitions—Truck and Bus, J2627 AUG2009 that has been incorporated into the agency's definition.

The agency based the performance requirement (with modifications) on SAE Surface Vehicle Recommended Practice J266 JAN96, Steady-State Directional Control Test Procedures for Passenger Cars and Light Trucks. UN ECE Regulation 13 also allows the J-Turn test maneuver as one option to be used for demonstrating proper function of an ESC system.

The agency has also incorporated by reference two ASTM standards in order to provide specifications for the road test surface. These are: (1) ASTM E1136–93 (Reapproved 2003), "Standard Specification for a Radial Standard Reference Test Tire," and (2) ASTM E1337–90 (Reapproved 2008), "Standard Test Method for Determining Longitudinal Peak Braking Coefficient of Paved Surfaces Using a Standard Reference Test Tire."

#### H. Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) requires federal agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of more than \$100 million annually (adjusted for inflation with base year of 1995). Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires the agency to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the agency to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the agency publishes with the final rule an explanation of why that alternative was not adopted.

This final rule will not result in any expenditure by State, local, or tribal governments or the private sector of more than \$100 million, adjusted for inflation.

#### I. National Environmental Policy Act

NHTSA has analyzed this rulemaking action for the purposes of the National Environmental Policy Act. The agency has determined that implementation of this action will not have any significant impact on the quality of the human environment.

#### J. Incorporation by Reference

As discussed earlier in the relevant portions of this document, we are incorporating by reference various materials into the Code of Federal Regulations in this rulemaking. The standards we are incorporating are:

- ASTM E1136–93 (Reapproved 2003), "Standard Specification for a Radial Standard Reference Test Tire," approved March 15, 1993.
- ASTM E1337–90 (Reapproved 2008), "Standard Test Method for Determining Longitudinal Peak Braking Coefficient of Paved Surfaces Using a Standard Reference Test Tire," approved June 1, 2008.

Under 5 U.S.C. 552(a)(1)(E), Congress allows agencies to incorporate by reference materials that are reasonably available to the class of persons affected if the agency has approval from the Director of the Federal Register. As a part of that approval process, the Director of the Federal Register (in 1 CFR 51.5) directs agencies to discuss (in the preamble) the ways that the materials we are incorporating by reference are reasonably available to interested parties. Further the Director requires agencies to summarize the material that they are incorporating [proposing to incorporate] by reference.

NHTSA has worked to ensure that standards being considered for incorporation by reference are reasonably available to the class of persons affected. In this case, those directly affected by incorporated provisions are NHTSA and parties contracting with NHTSA to conduct testing of new vehicles. New vehicle manufacturers may also be affected to the extent they wish to conduct NHTSA's compliance test procedures on their own vehicles. These entities have access to copies of aforementioned standards through ASTM International for a reasonable fee. These entities have the financial capability to obtain a copy of the material incorporated by reference.

Other interested parties in the rulemaking process beyond the class affected by the regulation include members of the public, safety advocacy groups, etc. Such interested parties can access the standard by obtaining a copy from the aforementioned standards development organizations.

Interested parties may also access the standards through NHTSA or the National Archives and Records Administration (NARA). All approved material is available for inspection at NHTSA, 1200 New Jersey Avenue SE., Washington, DC 20590, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NHTSA, contact NHTSA's Office of Technical Information Services, phone number (202) 366-2588. For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Finally, we have also described and summarized the materials that we are incorporating by reference in this document to give all interested parties an effective opportunity to comment. The materials were previously discussed in section XI.G.

*K. Regulatory Identifier Number (RIN)*

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified

Agenda in April and October of each year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

*L. Privacy Act*

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78).

**List of Subjects in 49 CFR Part 571**

Imports, Incorporation by reference, Motor vehicle safety, Motor vehicles, Rubber and rubber products, Tires.

Regulatory Text

In consideration of the foregoing, we amend 49 CFR part 571 as follows:

**PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS**

■ 1. The authority citation for part 571 continues to read as follows:

**Authority:** 49 U.S.C. 322, 30111, 30115, 30166 and 30177; delegation of authority at 49 CFR 1.95.

■ 2. Revise paragraphs (d)(33) and (34) of § 571.5 to read as follows:

**§ 571.5 Matter incorporated by reference.**

\* \* \* \* \*

(d) \* \* \*

(33) ASTM E1136-93 (Reapproved 2003), "Standard Specification for a Radial Standard Reference Test Tire," approved March 15, 1993, into §§ 571.105; 571.121; 571.122; 571.126; 571.135; 571.136; 571.139; 571.500.










(34) ASTM E1337-90 (Reapproved 2008), "Standard Test Method for Determining Longitudinal Peak Braking Coefficient of Paved Surfaces Using a Standard Reference Test Tire," approved June 1, 2008, into §§ 571.105; 571.121; 571.122; 571.126; 571.135; 571.136; 571.500.




\* \* \* \* \*









■ 3. Revise Table 1 of § 571.101 to read as follows:

**§ 571.101 Standard No. 101; Controls and displays.**

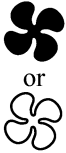

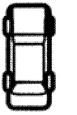
**Table 1**  
**Controls, Telltales, and Indicators**  
**With Illumination or Color Requirements<sup>1</sup>**

Column 1 ITEM	Column 2 SYMBOL	Column 3 WORDS OR ABBRE- VIATIONS	Column 4 FUNCTION	Column 5 ILLUMIN- ATION	Column 6 COLOR
Highbeam <sup>2</sup>	 3, 5	-----	Telltale	-----	Blue or Green <sup>4</sup>
Turn signals <sup>2</sup>	 3, 6	-----	Control	-----	-----
			Telltale	-----	Green <sup>4</sup>
Hazard warning signal	 3	Hazard	Control	Yes	-----
		-----	Telltale <sup>7</sup>	-----	-----
Position, side marker, end- outline marker, identification, or clearance lamps	 3, 8	Marker Lamps or MK Lps <sup>8</sup>	Control	Yes	-----
Windshield wiping system		Wiper or Wipe	Control	Yes	-----
Windshield washing system		Washer or Wash	Control	Yes	-----
Windshield washing and wiping system combined		Washer-Wiper or Wash-Wipe	Control	Yes	-----
Windshield defrosting and defogging system		Defrost, Defog, or Def.	Control	Yes	-----
Rear window defrosting and defogging system		Rear Defrost, Rear Defog, Rear Def., or R-Def.	Control	Yes	-----

Column 1 ITEM	Column 2 SYMBOL	Column 3 WORDS OR ABBRE- VIATIONS	Column 4 FUNCTION	Column 5 ILLUMIN- ATION	Column 6 COLOR
Brake system malfunction	-----	Brake	Telltale	-----	Red <sup>4</sup>
Antilock brake system malfunction for vehicles subject to FMVSS 105 or 135	-----	Antilock, Anti-lock, or ABS <sup>9</sup>	Telltale	-----	Yellow
Malfunction in Variable Brake Proportioning System	-----	Brake Proportioning <sup>9</sup>	Telltale	-----	Yellow
Regenerative brake system malfunction	-----	RBS or ABS/RBS <sup>9</sup>	Telltale	-----	Yellow
Malfunction in antilock system for vehicles other than trailers subject to FMVSS 121	-----	ABS or Antilock <sup>9</sup>	Telltale	-----	Yellow
Antilock brake system trailer fault for vehicles subject to FMVSS 121		Trailer ABS or Trailer Antilock	Telltale	-----	Yellow
Brake pressure (for vehicles subject to FMVSS 105 or 135)	-----	Brake Pressure <sup>9</sup>	Telltale	-----	Red <sup>4</sup>
Low brake fluid condition (for vehicles subject to FMVSS 105 or 135)	-----	Brake Fluid <sup>9</sup>	Telltale	-----	Red <sup>4</sup>
Parking brake applied (for vehicles subject to FMVSS 105 or 135)	-----	Park or Parking Brake <sup>9</sup>	Telltale	-----	Red <sup>4</sup>
Brake lining wear-out condition (for vehicles subject to FMVSS 135)	-----	Brake Wear <sup>9</sup>	Telltale	-----	Red <sup>4</sup>
Electronic Stability Control System Malfunction (for vehicles subject to FMVSS 126) <sup>10, 11</sup>		ESC <sup>12</sup>	Telltale	-----	Yellow
Electronic Stability Control		ESC OFF	Control	Yes	-----

Column 1 ITEM	Column 2 SYMBOL	Column 3 WORDS OR ABBRE- VIATIONS	Column 4 FUNCTION	Column 5 ILLUMIN- ATION	Column 6 COLOR
System "OFF" (for vehicles subject to FMVSS 126) <sup>10</sup>			Telltale	-----	Yellow
Electronic Stability Control System Malfunction (for vehicles subject to FMVSS 136) <sup>11</sup>	 or  or 	ESC	Telltale	-----	Yellow
Fuel Level	 or 	Fuel	Telltale	-----	-----
			Indicator	Yes	-----
Engine oil pressure	 <sup>13</sup>	Oil	Telltale	-----	-----
			Indicator	Yes	-----
Engine coolant temperature	 <sup>13</sup>	Temp	Telltale	-----	-----
			Indicator	Yes	-----
Electrical charge		Volts or Charge or Amp	Telltale	-----	-----
			Indicator	Yes	-----
Engine stop	-----	Engine Stop <sup>14</sup>	Control	Yes	-----
Automatic vehicle speed (cruise control)	-----	-----	Control	Yes	-----



Column 1 ITEM	Column 2 SYMBOL	Column 3 WORDS OR ABBRE- VIATIONS	Column 4 FUNCTION	Column 5 ILLUMIN- ATION	Column 6 COLOR
Speedometer	-----	MPH, or MPH and km/h <sup>15</sup>	Indicator	Yes	-----
Heating and Air conditioning system	-----	-----	Control	Yes	-----
Automatic transmission control position <i>(park)</i> <i>(reverse)</i> <i>(neutral)</i> <i>(drive)</i>	-----	<b>P R N D</b> <sup>16</sup>	Indicator	Yes	-----
Heating and/or air conditioning fan	 or	Fan	Control	Yes	-----
Low Tire Pressure (including malfunction) (See FMVSS 138)	 <sup>17</sup>	Low Tire <sup>17</sup>	Telltale	-----	Yellow
Low Tire Pressure (including malfunction that identifies involved tire) (See FMVSS 138)	 <sup>17</sup>	Low Tire <sup>17</sup>	Telltale	-----	Yellow
Tire Pressure Monitoring System Malfunction <sup>18</sup> (See FMVSS 138)	-----	TPMS <sup>17, 19</sup>	Telltale	-----	Yellow

*Notes:*

<sup>1</sup> An identifier is shown in this table if it is required for a control for which an illumination requirement exists or if it is used for a telltale for which a color requirement exists. If a line appears in column 2 and column 3, the control, telltale, or indicator is required to be identified, however the form of the identification is the manufacturer's option. Telltales are not considered to have an illumination requirement, because by definition the telltale must light when the condition for its activation exists.

<sup>2</sup> Additional requirements in FMVSS 108.

<sup>3</sup> Framed areas of the symbol may be solid; solid areas may be framed.

<sup>4</sup> Blue may be blue-green. Red may be red-orange.

<sup>5</sup> Symbols employing four lines instead of five may also be used.

<sup>6</sup> The pair of arrows is a single symbol. When the controls or telltales for left and right turn operate independently, however, the two arrows may be considered separate symbols and be spaced accordingly.

<sup>7</sup> Not required when arrows of turn signal telltales that otherwise operate independently flash simultaneously as hazard warning telltale.

<sup>8</sup> Separate identification is not required if function is combined with master lighting switch.

<sup>9</sup> Refer to FMVSS 105 or FMVSS 135, as appropriate, for additional specific requirements for brake telltale labeling and color. If a single telltale is used to indicate more than one brake system condition, the brake system malfunction identifier must be used.

<sup>10</sup> Requirement effective September 1, 2011.

<sup>11</sup> A manufacturer may use this telltale in flashing mode to indicate ESC operation.

<sup>12</sup> This symbol may also be used to indicate the malfunction of related systems/functions, including traction control, trailer stability assist, corner brake control, and other similar functions that use throttle and/or individual wheel torque control to operate and share common components with ESC.

<sup>13</sup> Combination of the engine oil pressure symbol and the engine coolant temperature symbol in a single telltale is permitted.

<sup>14</sup> Use when engine control is separate from the key locking system.

<sup>15</sup> If the speedometer is graduated in both miles per hour and in kilometers per hour, the scales must be identified "MPH" and "km/h", respectively, in any combination of upper- and lowercase letters.

<sup>16</sup> The letters 'P', 'R', 'N', and 'D' are considered separate identifiers for the individual gear positions. Their locations within the vehicle, and with respect to each other, are governed by FMVSS 102. The letter 'D' may be replaced by another alphanumeric character or symbol chosen by the manufacturer.

<sup>17</sup> Required only for FMVSS 138 compliant vehicles.

<sup>18</sup> Alternatively, either low tire pressure telltale may be used to indicate a TPMS malfunction. See FMVSS 138.

<sup>19</sup> Required only for vehicles manufactured on or after September 1, 2007.

\* \* \* \* \*

■ 4. Revise the heading of § 571.126 to read as follows:

**§ 571.126 Standard No. 126; Electronic stability control systems for light vehicles.**

\* \* \* \* \*

■ 5. Add § 571.136 to read as follows:

**§ 571.136 Standard No. 136; Electronic stability control systems for heavy vehicles.**

*S1 Scope.* This standard establishes performance and equipment requirements for electronic stability control (ESC) systems on heavy vehicles.

*S2 Purpose.* The purpose of this standard is to reduce crashes caused by rollover or by directional loss-of-control.

*S3 Application.* This standard applies to the following vehicles:

S3.1 Truck tractors with a gross vehicle weight rating of greater than 11,793 kilograms (26,000 pounds). However, it does not apply to:

(a) Any truck tractor equipped with an axle that has a gross axle weight rating of 13,154 kilograms (29,000 pounds) or more;

(b) Any truck tractor that has a speed attainable in 3.2 km (2 miles) of not more than 53 km/h (33 mph); and

(c) Any truck tractor that has a speed attainable in 3.2 km (2 miles) of not more than 72 km/h (45 mph), an unloaded vehicle weight that is not less than 95 percent of its gross vehicle weight rating, and no capacity to carry occupants other than the driver and operating crew.

S3.2 Buses with a gross vehicle weight rating of greater than 11,793 kilograms (26,000 pounds). However, it does not apply to

(a) School buses;

(b) Perimeter-seating buses;

(c) Transit buses;

(d) Any bus equipped with an axle that has a gross axle weight rating of 13,154 kilograms (29,000 pounds) or more; and

(e) Any bus that has a speed attainable in 3.2 km (2 miles) of not more than 53 km/h (33 mph.)

*S4 Definitions.*

*Ackerman Steer Angle* means the angle whose tangent is the wheelbase divided by the radius of the turn at a very low speed.

*Electronic stability control system or ESC system* means a system that has all of the following attributes:

(1) It augments vehicle directional stability by having the means to apply and adjust the vehicle brake torques individually at each wheel position on at least one front and at least one rear axle of the truck tractor or bus to induce correcting yaw moment to limit vehicle oversteer and to limit vehicle understeer;

(2) It enhances rollover stability by having the means to apply and adjust the vehicle brake torques individually at each wheel position on at least one front and at least one rear axle of the truck tractor or bus to reduce lateral acceleration of a vehicle;

(3) It is computer-controlled with the computer using a closed-loop algorithm to induce correcting yaw moment and enhance rollover stability;

(4) It has a means to determine the vehicle's lateral acceleration;

(5) It has a means to determine the vehicle's yaw rate and to estimate its side slip or side slip derivative with respect to time;

(6) It has a means to estimate vehicle mass or, if applicable, combination vehicle mass;

(7) It has a means to monitor driver steering inputs;

(8) It has a means to modify engine torque, as necessary, to assist the driver in maintaining control of the vehicle and/or combination vehicle; and

(9) When installed on a truck tractor, it has the means to provide brake pressure to automatically apply and modulate the brake torques of a towed trailer.

*ESC service brake application* means the time when the ESC system applies a service brake pressure at any wheel for a continuous duration of at least 0.5 second of at least 34 kPa (5 psi) for air-braked systems and at least 172 kPa (25 psi) for hydraulic-braked systems.

*Initial brake temperature* means the average temperature of the service brakes on the hottest axle of the vehicle immediately before any stability control system test maneuver is executed.

*Lateral acceleration* means the component of the vector acceleration of a point in the vehicle perpendicular to the vehicle x-axis (longitudinal) and parallel to the road plane.

*Oversteer* means a condition in which the vehicle's yaw rate is greater than the yaw rate that would occur at the vehicle's speed as result of the Ackerman Steer Angle.

*Over-the-road bus* means a bus characterized by an elevated passenger deck located over a baggage compartment, except a school bus.

*Peak friction coefficient or PFC* means the ratio of the maximum value of braking test wheel longitudinal force to the simultaneous vertical force occurring prior to wheel lockup, as the

braking torque is progressively increased.

*Perimeter-seating bus* means a bus with 7 or fewer designated seating positions rearward of the driver's seating position that are forward-facing or can convert to forward-facing without the use of tools and is not an over-the-road bus.

*Side slip or side slip angle* means the arctangent of the lateral velocity of the center of gravity of the vehicle divided by the longitudinal velocity of the center of gravity.

*Snub* means the braking deceleration of a vehicle from a higher speed to a lower speed that is greater than zero.

*Stop-request system* means a vehicle-integrated system for passenger use to signal to a vehicle operator that they are requesting a stop.

*Transit bus* means a bus that is equipped with a stop-request system sold for public transportation provided by, or on behalf of, a State or local government and that is not an over-the-road bus.

*Understeer* means a condition in which the vehicle's yaw rate is less than the yaw rate that would occur at the vehicle's speed as result of the Ackerman Steer Angle.

*Yaw Rate* means the rate of change of the vehicle's heading angle measure in degrees per second of rotation about a vertical axis through the vehicle's center of gravity.

**S5 Requirements.** Each vehicle must be equipped with an ESC system that meets the requirements specified in S5 under the test conditions specified in S6 and the test procedures specified in S7 of this standard.

**S5.1 Required Equipment.** Each vehicle to which this standard applies must be equipped with an electronic stability control system, as defined in S4.

#### S5.2 System Operational Capabilities.

**S5.2.1** The ESC system must be operational over the full speed range of the vehicle except at vehicle speeds less than 20 km/h (12.4 mph), when being driven in reverse, or during system initialization.

**S5.2.2** The ESC must remain capable of activation even if the antilock brake system or traction control is also activated.

#### S5.3 Performance Requirements.

**S5.3.1 Lane Keeping During Reference Speed Determination.** During each series of four consecutive test runs conducted at the same entrance speed as part of the test procedure to determine the Preliminary Reference Speed and the Reference Speed (see S7.7.1), the wheels of the truck tractor or bus must

remain within the lane between the start gate (0 degrees of radius arc angle) and the end gate (120 degrees of radius arc angle) during at least two of the four test runs.

**S5.3.2 Engine Torque Reduction.** During each series of four consecutive test runs for the determination of engine torque reduction (see S7.7.2), the vehicle must satisfy the criteria of S5.3.2.1 and S5.3.2.2 during at least two of the four test runs.

**S5.3.2.1** The ESC system must reduce the driver-requested engine torque by at least 10 percent for a minimum continuous duration of 0.5 second during the time period from 1.5 seconds after the vehicle crosses the start gate (0 degree of radius arc angle) to when it crosses the end gate (120 degrees of radius arc angle).

**S5.3.2.2** The wheels of the truck tractor or bus must remain within the lane between the start gate (0 degrees of radius arc angle) and the end gate (120 degrees of radius arc angle).

**S5.3.3 Roll Stability Control Test.** During each series of eight consecutive test runs for the determination of roll stability control (see S7.7.3) conducted at the same entrance speed, the vehicle must satisfy the criteria of S5.3.3.1, S5.3.3.2, S5.3.3.3, and S5.3.3.4 during at least six of the eight consecutive test runs.

**S5.3.3.1** The vehicle speed measured at 3.0 seconds after vehicle crosses the start gate (0 degrees of radius arc angle) must not exceed 47 km/h (29 mph).

**S5.3.3.2** The vehicle speed measured at 4.0 seconds after vehicle crosses the start gate (0 degrees of radius arc angle) must not exceed 45 km/h (28 mph).

**S5.3.3.3** The wheels of the truck tractor or bus must remain within the lane between the start gate (0 degrees of radius arc angle) and the end gate (120 degrees of radius arc angle).

**S5.3.3.4** There must be ESC service brake activation.

**S5.4 ESC Malfunction Detection.** Each vehicle must be equipped with an indicator lamp, mounted in front of and in clear view of the driver, which is activated whenever there is a malfunction that affects the generation or transmission of control or response signals in the vehicle's electronic stability control system.

**S5.4.1** Except as provided in S5.4.3 and S5.4.6, the ESC malfunction telltale must illuminate only when a malfunction exists and must remain continuously illuminated for as long as the malfunction exists, whenever the ignition locking system is in the "On" ("Run") position.

**S5.4.2** The ESC malfunction telltale must be identified by the symbol shown for "Electronic Stability Control System Malfunction" or the specified words or abbreviations listed in Table 1 of Standard No. 101 (§ 571.101).

**S5.4.3** The ESC malfunction telltale must be activated as a check-of-lamp function either when the ignition locking system is turned to the "On" ("Run") position when the engine is not running, or when the ignition locking system is in a position between the "On" ("Run") and "Start" that is designated by the manufacturer as a check-light position.

**S5.4.4** The ESC malfunction telltale need not be activated when a starter interlock is in operation.

**S5.4.5** The ESC malfunction telltale lamp must extinguish at the next ignition cycle after the malfunction has been corrected.

**S5.4.6** The manufacturer may use the ESC malfunction telltale in a flashing mode to indicate ESC operation.

**S6 Test Conditions.** The requirements of S5 must be met by a vehicle when it is tested according to the conditions set forth in the S6, without replacing any brake system part or making any adjustments to the ESC system except as specified. On vehicles equipped with automatic brake adjusters, the automatic brake adjusters will remain activated at all times.

#### S6.1 Ambient Conditions.

**S6.1.1** The ambient temperature is any temperature between 2 °C (35 °F) and 40 °C (104 °F).

**S6.1.2** The maximum wind speed is no greater than 5 m/s (11 mph).

#### S6.2 Road Test Surface.

**S6.2.1** The tests are conducted on a dry, uniform, solid-paved surface. Surfaces with irregularities and undulations, such as dips and large cracks, are unsuitable.

**S6.2.2** The road test surface produces a peak friction coefficient (PFC) of 0.9 when measured using an American Society for Testing and Materials (ASTM) E1136-93 (Reapproved 2003) standard reference test tire, in accordance with ASTM Method E 1337-90 (Reapproved 2008), at a speed of 64.4 km/h (40 mph), without water delivery (both documents incorporated by reference, see § 571.5).

**S6.2.3** The test surface has a consistent slope between 0% and 1%.

**S6.2.4 J-Turn Test Maneuver Test Course.** The test course for the J-Turn test maneuver is used for the Reference Speed Test in S7.7.1, the Engine Torque Reduction Test in S7.7.2, and the Roll Stability Control Test in S7.7.3.

S6.2.4.1 The test course consists of a straight entrance lane with a length of 22.9 meters (75 feet) tangentially connected to a curved lane section with a radius of 45.7 meters (150 feet) measured from the center of the lane.

S6.2.4.2 For truck tractors, the lane width of the test course is 3.7 meters (12 feet). For buses, the lane width of the test course is 3.7 meters (12 feet) for the

straight section and is 4.3 meters (14 feet) for the curved section.

S6.2.4.3 The start gate is the tangent point on the radius (the intersection of the straight lane and the curved lane sections) and is designated as zero degrees of radius of arc angle. The end gate is the point on the radius that is 120 degrees of radius arc angle measured from the tangent point.

S6.2.4.4 Figure 1 shows the test course with the curved lane section configured in the counter-clockwise steering direction relative to the entrance lane. The course is also arranged with the curved lane section configured in the clockwise steering direction relative to the entrance lane. The cones depicted in Figure 1 defining the lane width are positioned solely for illustrative purposes.

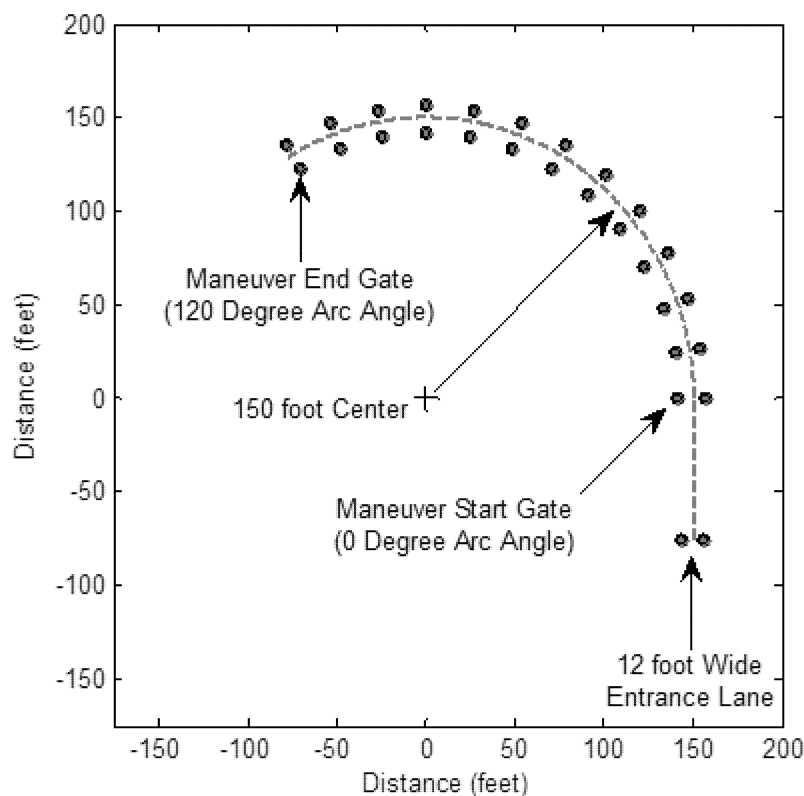


Figure 1. J-Turn Test Maneuver Course (shown with the curved lane section in the counter-clockwise direction)

### S6.3 Vehicle Conditions.

S6.3.1 The ESC system is enabled for all testing, except for the ESC malfunction test (see S7.8).

S6.3.2 All vehicle openings (doors, windows, hood, trunk, cargo doors, etc.) are in a closed position except as required for instrumentation purposes.

### S6.3.3 Test Weight.

S6.3.3.1 *Truck Tractors.* A truck tractor is loaded to its GVWR by coupling it to a control trailer (see S6.3.5). The tractor is loaded with the test driver, test instrumentation, and an anti-jackknife system (see S6.3.8).

S6.3.3.2 *Buses.* A bus is loaded with ballast (weight) to its GVWR to simulate a multi-passenger and baggage configuration. For this configuration the

bus is loaded with test driver, test instrumentation, outriggers (see S6.3.6), ballast, and a simulated occupant in each of the vehicle's designated seating positions. The simulated occupant loads are attained by securing 68 kilograms (150 pounds) of ballast in each of the test vehicle's designated seating positions. If the simulated occupant loads result in the bus being loaded to less than its GVWR, additional ballast is added to the bus in the following manner until the bus is loaded to its GVWR without exceeding any axle's GAWR: First, ballast is added to the lowest baggage compartment; second, ballast is added to the floor of the passenger compartment. If the simulated occupant loads result in the GAWR of

any axle being exceeded or the GVWR of the bus being exceeded, simulated occupant loads are removed until the vehicle's GVWR and all axles' GAWR are no longer exceeded.

S6.3.4 *Transmission and Brake Controls.* The transmission selector control is in a forward gear during all maneuvers. A vehicle equipped with an engine braking system that is engaged and disengaged by the driver is tested with the system disengaged.

### S6.3.5 Control Trailer.

S6.3.5.1 The control trailer is an unbraked, flatbed semi-trailer that has a single axle with a GAWR of 8,165 kg (18,000 lb.). The control trailer has a length of at least 6,400 mm (252 inches), but no more than 7,010 mm (276

inches), when measured from the transverse centerline of the axle to the centerline of the kingpin (the point where the trailer attaches to the truck tractor). At the manufacturer's option, truck tractors with four or more axles may use a control trailer with a length of more than 7,010 mm (276 inches), but no more than 13,208 mm (520 inches) when measured from the transverse centerline of the axle to the centerline of the kingpin.

**S6.3.5.2** The location of the center of gravity of the ballast on the control trailer is directly above the kingpin. The height of the center of gravity of the ballast on the control trailer is less than 610 mm (24 inches) above the top of the tractor's fifth-wheel hitch (the area where the truck tractor attaches to the trailer).

**S6.3.5.3** The control trailer is equipped with outriggers (see S6.3.6).

**S6.3.5.4** A truck tractor is loaded to its GVWR by placing ballast (weight) on the control trailer which loads the tractor's non-steer axles. The control trailer is loaded with ballast without exceeding the GAWR of the trailer axle. If the tractor's fifth-wheel hitch position is adjustable, the fifth-wheel hitch is adjusted to proportionally distribute the load on each of the tractor's axle(s), according to each axle's GAWR, without exceeding the GAWR of any axle(s). If the fifth-wheel hitch position cannot be adjusted to prevent the load from exceeding the GAWR of the tractor's axle(s), the ballast is reduced until the axle load is equal to or less than the GAWR of the tractor's rear axle(s), maintaining load proportioning as close as possible to specified proportioning.

**S6.3.6** *Outriggers.* Outriggers are used for testing each vehicle. The outriggers are designed with a maximum weight of 1,134 kg (2,500 lb.), excluding mounting fixtures.

**S6.3.7** *Tires.* The tires are inflated to the vehicle manufacturer's specified pressure for the GVWR of the vehicle.

**S6.3.8** *Truck Tractor Anti-Jackknife System.* A truck tractor is equipped with an anti-jackknife system that allows a minimum articulation angle of 30 degrees between the tractor and the control trailer.

**S6.3.9** *Special Drive Conditions.* A vehicle equipped with an interlocking axle system or a front wheel drive system that is engaged and disengaged by the driver is tested with the system disengaged.

**S6.3.10** *Liftable Axles.* A vehicle with one or more liftable axles is tested with the liftable axles down.

**S6.3.11** *Initial Brake Temperature.* The initial brake temperature of the hottest brake for any performance test is

between 66 °C (150 °F) and 204 °C (400 °F).

**S6.3.12** *Thermocouples.* The brake temperature is measured by plug-type thermocouples installed in the approximate center of the facing length and width of the most heavily loaded shoe or disc pad, one per brake. A second thermocouple may be installed at the beginning of the test sequence if the lining wear is expected to reach a point causing the first thermocouple to contact the rubbing surface of a drum or rotor. The second thermocouple is installed at a depth of 0.080 inch and located within 1.0 inch circumferentially of the thermocouple installed at 0.040 inch depth. For center-grooved shoes or pads, thermocouples are installed within 0.125 inch to 0.250 inch of the groove and as close to the center as possible.

**S6.4** *Selection of Compliance Options.* Where manufacturer options are specified, the manufacturer must select the option by the time it certifies the vehicle and may not thereafter select a different option for the vehicle. Each manufacturer shall, upon request from the National Highway Traffic Safety Administration, provide information regarding which of the compliance options it has selected for a particular vehicle or make/model.

**S7** *Test Procedure.* **S7.1** *Tire Inflation.* Inflate the vehicle's tires as specified in S6.3.7.

**S7.2** *Telltale Lamp Check.* With the vehicle stationary and the ignition locking system in the "Lock" or "Off" position, activate the ignition locking system to the "On" ("Run") position or, where applicable, the appropriate position for the lamp check. The ESC system must perform a check-of-lamp function for the ESC malfunction telltale, as specified in S5.4.3.

**S7.3** *Tire Conditioning.* Condition the tires to wear away mold sheen and achieve operating temperature immediately before beginning the J-Turn test runs. The test vehicle is driven around a circle 150 feet (46 meters) in radius at a speed that produces a lateral acceleration of approximately 0.1g for two clockwise laps followed by two counterclockwise laps.

**S7.4** *Brake Conditioning and Temperature.* Conditioning and warm-up of the vehicle brakes are completed before and monitored during the execution of the J-Turn test maneuver.

**S7.4.1** *Brake Conditioning.* Condition the brakes in accordance with S7.4.1.1 and S7.4.1.2.

**S7.4.1.1** Prior to executing the J-Turn test maneuver, the vehicle's brakes are burnished as follows: With the transmission in the highest gear

appropriate for a speed of 64 km/h (40 mph), make 500 snubs between 64 km/h (40 mph) and 32 km/h (20 mph) at a deceleration rate of 0.3g, or at the vehicle's maximum deceleration rate if less than 0.3g. After each brake application accelerate to 64 km/h (40 mph) and maintain that speed until making the next brake application at a point 1.6 km (1.0 mile) from the initial point of the previous brake application. If the vehicle cannot attain a speed of 64 km/h (40 mph) in 1.6 km (1.0 mile), continue to accelerate until the vehicle reaches 64 km/h (40 mph) or until the vehicle has traveled 2.4 km (1.5 miles) from the initial point of the previous brake application, whichever occurs first. The brakes may be adjusted up to three times during the burnish procedure, at intervals specified by the vehicle manufacturer, and may be adjusted at the conclusion of the burnishing, in accordance with the vehicle manufacturer's recommendation.

**S7.4.1.2** Prior to executing the performance tests in S7.7, the brakes are conditioned using 40 brake application snubs from a speed of 64 km/h (40 mph) to a speed of 32 km/h (20 mph), with a target deceleration of approximately 0.3g. After each brake application, accelerate to 64 km/h (40 mph) and maintain that speed until making the next brake application at a point 1.6 km (1.0 mile) from the initial point of the previous brake application.

**S7.4.2** *Brake Temperature.* Prior to testing or any time during testing, if the hottest brake temperature is above 204°C (400 °F) a cool down period is performed until the hottest brake temperature is measured within the range of 66°C–204°C (150 °F–400 °F). Prior to testing or any time during testing, if the hottest brake temperature is below 66°C (150 °F) individual brake stops are repeated to increase any one brake temperature to within the target temperature range of 66°C–204°C (150 °F–400 °F) before a test maneuver is performed.

**S7.5** *Mass Estimation Cycle.* Perform the mass estimation procedure for the ESC system according to the manufacturer's instructions. This procedure will be repeated if an ignition cycle occurs or is needed at any time between the initiation and completion of S7.7.

**S7.6** *ESC System Malfunction Check.* Check that the ESC system is enabled by ensuring that the ESC malfunction telltale is not illuminated.

**S7.7** *J-Turn Test Maneuver.* The truck tractor or bus is subjected to multiple series of test runs using the J-Turn test maneuver. The truck tractor or bus

travels through the course by driving down the entrance lane, crossing the start gate at the designated entrance speed, turning through the curved lane section, and crossing the end gate, while the driver attempts to keep all of the wheels of the truck tractor or bus within the lane.

**S7.7.1 Reference Speed Test.** The vehicle is subjected to J-Turn test maneuvers to determine the Reference Speed for each steering direction. The Reference Speeds are used in S7.7.2 and S7.7.3.

**S7.7.1.1 Preliminary Reference Speed Determination.** The vehicle is subjected to two series of test runs using the J-Turn test maneuver at increasing entrance speeds. One series uses clockwise steering, and the other series uses counterclockwise steering. The entrance speed of a test run is the 0.5 second average of the raw speed data prior to any ESC system activation of the service brakes and rounded to the nearest 1.0 mph. During each test run, the driver attempts to maintain the selected entrance speed throughout the J-Turn test maneuver. For the first test run of each series, the entrance speed is  $32 \text{ km/h} \pm 1.6 \text{ km/h}$  ( $20 \text{ mph} \pm 1.0 \text{ mph}$ ) and is incremented 1.6 km/h (1.0 mph) for each subsequent test run until ESC service brake application occurs or any of the truck tractor's or bus's wheels departs the lane. The vehicle entrance speed at which ESC service brake application occurs is the Preliminary Reference Speed. The Preliminary Reference Speed is determined for each direction: Clockwise steering and counter-clockwise steering. During any test run, if any of the wheels of the truck tractor or bus depart the lane at any point within the first 120 degrees of radius arc angle, the test run is repeated at the same entrance speed. If any of the wheels of the truck tractor or bus depart the lane again, then four consecutive test runs are repeated at the same entrance speed ( $\pm 1.6 \text{ km/h}$  ( $\pm 1.0 \text{ mph}$ )).

**S7.7.1.2 Reference Speed Determination.** Using the Preliminary Reference Speed determined in S7.7.1.1, perform two series of test runs using the J-Turn test maneuver to determine the Reference Speed. The first series consists of four consecutive test runs performed using counter-clockwise steering. The second series consists of four consecutive test runs performed using clockwise steering. During each test run, the driver attempts to maintain a speed equal to the Preliminary Reference Speed throughout the J-Turn test maneuver. The Reference Speed is the minimum entrance speed at which ESC service brake application occurs for at least two of four consecutive test runs

of each series conducted at the same entrance speed (within  $\pm 1.6 \text{ km/h}$  ( $\pm 1.0 \text{ mph}$ )). The Reference Speed is determined for each direction: clockwise steering and counter-clockwise steering. If ESC service brake application does not occur during at least two test runs of either series, the Preliminary Reference Speed is increased by 1.6 km/h (1.0 mph), and the procedure in this section is repeated.

**S7.7.2 Engine Torque Reduction Test.** The vehicle is subjected to two series of test runs using the J-Turn test maneuver at an entrance speed equal to the Reference Speed determined in S7.7.1.2. One series uses clockwise steering, and the other series uses counter-clockwise steering. Each series consists of four test runs with the vehicle at an entrance speed equal to the Reference Speed and the driver fully depressing the accelerator pedal from the time when the vehicle crosses the start gate until the vehicle reaches the end gate. ESC engine torque reduction is confirmed by comparing the engine torque output and driver requested torque data collected from the vehicle communication network or CAN bus. During the initial stages of each maneuver the two torque signals with respect to time will parallel each other. Upon ESC engine torque reduction, the two signals will diverge when the ESC system causes a commanded engine torque reduction and the driver depresses the accelerator pedal attempting to accelerate the vehicle.

**S7.7.2.1** Perform two series of test runs using the J-Turn test maneuver at the Reference Speed determined in S7.7.1.2 ( $\pm 1.6 \text{ km/h}$  ( $\pm 1.0 \text{ mph}$ )). The first series consists of four consecutive test runs performed using counter-clockwise steering. The second series consists of four consecutive test runs performed using clockwise steering. During each test run, the driver fully depresses the accelerator pedal from the time when the vehicle crosses the start gate until the vehicle reaches the end gate.

**S7.7.2.2** During each of the engine torque reduction test runs, verify the commanded engine torque and the driver requested torque signals diverge according to the criteria specified in S5.3.2.1.

**S7.7.3 Roll Stability Control Test.** The vehicle is subjected to multiple series of test runs using the J-Turn test maneuver in both the clockwise and the counter-clockwise direction.

**S7.7.3.1** Before each test run, the brake temperatures are monitored and the hottest brake is confirmed to be between  $66 \text{ }^\circ\text{C}$  ( $150 \text{ }^\circ\text{F}$ ) and  $204 \text{ }^\circ\text{C}$

( $400 \text{ }^\circ\text{F}$ ). If the hottest brake temperature is not between  $66 \text{ }^\circ\text{C}$  ( $150 \text{ }^\circ\text{F}$ ) and  $204 \text{ }^\circ\text{C}$  ( $400 \text{ }^\circ\text{F}$ ), the brake temperature is adjusted in accordance with S7.4.2.

**S7.7.3.2** During each test run, the driver will release the accelerator pedal after the ESC system has slowed vehicle by more than  $4.8 \text{ km/h}$  ( $3.0 \text{ mph}$ ) below the entrance speed.

**S7.7.3.3** The maximum test speed is the greater of 130 percent of the Reference Speed (see S7.7.1.2) or  $48 \text{ km/h}$  ( $30 \text{ mph}$ ). The maximum test speed is determined for each direction: clockwise steering and counter-clockwise steering.

**S7.7.3.4** For each series of Roll Stability Control test runs, the vehicle will perform eight consecutive test runs at the same entrance speed, which is any speed between  $48 \text{ km/h}$  ( $30 \text{ mph}$ ) and the maximum test speed determined according to S7.7.3.3.

**S7.7.3.5** Upon completion of testing, post processing is done as specified in S7.9.

**S7.8 ESC Malfunction Detection.**

**S7.8.1** Simulate one or more ESC malfunction(s) by disconnecting the power source to any ESC component, or disconnecting any electrical connection between ESC components (with the vehicle power off). When simulating an ESC malfunction, the electrical connections for the telltale lamp(s) are not disconnected.

**S7.8.2** With the vehicle initially stationary and the ignition locking system in the "Lock" or "Off" position, activate the ignition locking system to the "Start" position and start the engine. Place the vehicle in a forward gear and accelerate to  $48 \pm 8 \text{ km/h}$  ( $30 \pm 5 \text{ mph}$ ). Drive the vehicle for at least two minutes including at least one left and one right turning maneuver and at least one service brake application. Verify that, within two minutes of attaining this speed, the ESC malfunction indicator illuminates in accordance with S5.4.

**S7.8.3** Stop the vehicle, deactivate the ignition locking system to the "Off" or "Lock" position. After a five-minute period, activate the vehicle's ignition locking system to the "Start" position and start the engine. Verify that the ESC malfunction indicator again illuminates to signal a malfunction and remains illuminated as long as the engine is running until the fault is corrected.

**S7.8.4** Deactivate the ignition locking system to the "Off" or "Lock" position. Restore the ESC system to normal operation, activate the ignition system to the "Start" position and start the engine. Verify that the telltale has extinguished.

**S7.9 Post Data Processing.**

S7.9.1 Raw vehicle speed data is filtered with a 0.1 second running average filter.

S7.9.2 The torque data collected from the vehicle communication network or CAN bus as a digital signal does not get filtered. The torque data collected from the vehicle communication network or CAN bus as an analog signal is filtered with a 0.1-second running average.

S7.9.3 The activation point of the ESC engine torque reduction is the point where the measured driver demanded torque and the engine torque first begin to deviate from one another (engine torque decreases while the driver requested torque increases) during the Engine Torque Reduction Test. The torque values are obtained directly from the vehicle communication network or CAN bus. Torque values used to determine the activation point of the ESC engine torque reduction are interpolated.

S7.9.4 The time measurement for the J-Turn test maneuver is referenced to "time zero", which is defined as the

instant the center of the front tires of the vehicle reach the start gate, the line within the lane at zero degrees of radius arc angle. The completion of the maneuver occurs at the instant the center of the front tires of the vehicle reach the end gate, which is the line within the lane at 120 degrees of radius arc angle.

S7.9.5 Raw service brake pressure measurements are zeroed (calibrated). Zeroed brake pressure data are filtered with 0.1 second running average filters. Zeroed and filtered brake pressure data are dynamically offset corrected using a defined "zeroed range". The "zeroing range" is defined as the 0.5 second time period prior to "time zero" defined in S7.9.4.

*S8 Compliance Dates.* Vehicles that are subject to this standard must meet the requirements of this standard according to the implementation schedule set forth in S8.

*S8.1 Buses.*

S8.1.1 All buses with a gross vehicle weight rating of greater than 14,969

kilograms (33,000 pounds) manufactured on or after June 24, 2018 must comply with this standard.

S8.1.2 All buses manufactured on or after August 1, 2019 must comply with this standard.

*S8.2 Trucks.*

S8.2.1 All three-axle truck tractors with a front axle that has a GAWR of 6,622 kilograms (14,600 pounds) or less and with two rear drive axles that have a combined GAWR of 20,412 kilograms (45,000 pounds) or less manufactured on or after August 1, 2017 must comply with this standard.

S8.2.2 All truck tractors manufactured on or after August 1, 2019 must comply with this standard.

Issued on June 3, 2015, in Washington, DC, under authority delegated in 49 CFR 1.95 and 501.5.

**Mark R. Rosekind,**  
*Administrator.*

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Part III

## Department of Transportation

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Federal Transit Administration

49 CFR Part 665

Bus Testing: Establishment of Performance Standards, a Bus Model Scoring System, a Pass/Fail Standard and Other Program Updates; Proposed Rule



**DEPARTMENT OF TRANSPORTATION****Federal Transit Administration****49 CFR Part 665**

[Docket No. FTA-2015-0019]

RIN 2132-AB11

**Bus Testing: Establishment of Performance Standards, a Bus Model Scoring System, a Pass/Fail Standard and other Program Updates****AGENCY:** Federal Transit Administration (FTA), DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The Federal Transit Administration (FTA) proposes to establish a new pass/fail standard and new aggregated scoring system for buses and modified vans (hereafter referred to as “bus” or “buses”) that are subject to FTA’s bus testing program, as mandated by Section 20014 of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The proposed pass/fail standard and scoring system address the following categories as required by MAP-21: structural integrity, safety, maintainability, reliability, fuel economy, emissions, noise, and performance. Once FTA issues a rule in final form, recipients will be prohibited from using FTA financial assistance to procure new buses that have not passed the test. FTA is also seeking comment on establishing testing requirements and a scoring system for remanufactured vehicles sold by third-party vendors and procured using FTA funding, which FTA plans to address in a subsequent rulemaking action. Finally, FTA is proposing to apply Buy America U.S. content requirements to buses submitted for testing.

**DATES:** Comments on this proposed rule must be received on or before August 24, 2015.

**ADDRESSES:** Please submit your comments (identified by the agency name and DOT Docket ID Number FTA-2015-0019 or RIN 2132-AB11) by only one of the following methods:

*Electronic:* Go to the Federal eRulemaking Portal at [www.regulations.gov](http://www.regulations.gov) and follow the online instructions for submitting comments.

*Mail:* Docket Management Facility: U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

*Hand Delivery or Courier:* West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., between

9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

*Fax:* 202-493-2251.

*Additional instructions:* You must include the agency name (Federal Transit Administration) and Docket number (FTA-2015-0019) for this notice at the beginning of your comments. If you wish to receive confirmation that FTA received your submission, please include a self-addressed stamped postcard. Note that all comments received will be posted without change to <http://www.regulations.gov>. Note that any personal information provided will be available to internet users.

*Privacy Act:* You may review DOT’s complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477) or you may visit <http://docketsinfo.dot.gov>.

*Docket Access:* For internet access to the docket to read background documents and comments received, go to <http://www.regulations.gov>. Background documents and comments received may also be viewed at the U.S. Department of Transportation Docket Operations, 1200 New Jersey Ave. SE., West Building Ground Floor, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** For technical information, Gregory Rymarz, Bus Testing Program Manager, Office of Research, Demonstration and Innovation (TRI), (202) 366-6410, [gregory.rymarz@dot.gov](mailto:gregory.rymarz@dot.gov). For legal information, Richard Wong, Office of the Chief Counsel (TCC), (202) 366-0675, [richard.wong@dot.gov](mailto:richard.wong@dot.gov).

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**A. Executive Summary***Purpose*

The purpose of this NPRM is to propose minimum performance standards, a scoring system, and a pass/fail threshold for new model transit buses procured with Federal Transit Administration (FTA) financial assistance authorized under 49 U.S.C. Chapter 53. Once FTA issues a rule in final form, FTA recipients will be prohibited from using FTA financial assistance to procure new buses that have not passed the test standard. The proposed standards and scoring system address the following categories: structural integrity, safety, maintainability, reliability, fuel economy, emissions, noise, and performance. The NPRM proposes that buses will need to pass a minimum performance standard in each of these categories in order to receive an overall passing score and be eligible for purchase using FTA financial assistance. The NPRM proposes that buses can achieve higher scores with higher performance in each category. The NPRM proposes a numerical scoring system based on a 100-point scale so that buyers can more effectively compare vehicles.

The NPRM proposes to adopt many of the existing testing procedures and standards used under the current bus testing program. However, the NPRM proposes some changes including: (1) new inspections at bus check-in to verify the bus configuration is within its weight capacity rating at its rated passenger load and an inspection to determine if the major components of the test bus match those identified in the Buy America pre-audit report; (2) elimination of the on-road fuel economy testing and substitute the fuel economy results obtained during the emissions test; and (3) revision to the payloading procedure to recognize the manufacturer’s “standee” passenger rating. The proposed rule does not add any new tests to the existing bus testing program—in fact, the NPRM proposes to eliminate one test, the on-road fuel economy test, as equivalent data could

be derived from the more accurate dynamometer testing.

Because FTA provides financial assistance to State and local agencies operating public transportation systems, covering eighty percent (80%) of a vehicle's capital cost, while the State or local government provides a twenty percent (20%) matching share, there is a strong incentive by FTA and local agencies to ensure that those funds are used effectively and efficiently. As part of its stewardship of those funds, Congress directed FTA in 1987 to establish a bus testing program whereby new model buses would first be tested to ensure their ability to withstand the rigors of regular transit service before FTA funds would be spent on those vehicles. In the following years, FTA accumulated comprehensive test data on the scores of buses that had undergone testing, but the program did not assign a comparative ranking to the vehicles. Further, because the program was intended to provide information on a vehicle's performance and Congress did not authorize FTA to use the test data to disqualify a vehicle from participating in FTA-assisted procurements, FTA did not establish a pass/fail performance baseline. Since that time, several tested buses did not meet their expected service lives at the cost of millions of dollars to transit agencies and significant inconvenience to transit riders. In MAP-21, Congress directed FTA to establish a new pass/fail standard for tested buses, including a weighted scoring system that would assist transit bus buyers in selecting an appropriate vehicle. The proposed rule would establish a new scoring system and a pass/fail standard for buses tested under FTA's existing bus testing program, as well as make other administrative changes.

**Legal Authority**

Section 20014 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) (Pub. L. 121-141), maintained the existing test categories of maintainability, reliability, safety, performance, structural integrity, fuel economy, emissions, and noise in 49 U.S.C. 5318(a). Section 20014 also expanded 49 U.S.C. 5318(e) by adding

three new requirements on the use of Chapter 53 funding to acquire new bus models. The first is that new bus models meet performance standards for maintainability, reliability, performance (including braking performance), structural integrity, fuel economy, emissions, and noise. The second is that new bus models acquired with Chapter 53 funds meet the minimum safety performance standards established pursuant to paragraph 5329(b) Public Transportation Safety Program. The third is that the new bus model satisfies an overall pass/fail standard based on the weighted aggregate score derived from each of the existing test categories (maintainability, reliability, safety, performance (including braking performance), structural integrity, fuel economy, emissions, and noise.).

This notice does not address the establishment of the minimum safety performance standards for public transportation vehicles required under 49 U.S.C. 5329(b)(2)(C), which will be addressed in a subsequent rulemaking.

**Summary of Key Provisions**

The NPRM proposes to take the following actions, the first of which is required by MAP-21 as part of the new "pass/fail" requirement and the remainder of which are discretionary actions proposed by FTA to strengthen the program:

- Codify existing testing procedures and establish a minimum performance standards and a pass/fail scoring system for new bus models, with a minimum passing score of 60 points. A bus model could receive up to an additional 40 points based on its performance above the proposed minimum performance standard in particular test categories. Buses would need to achieve at least a minimum score in each category in order to pass the overall test and be eligible for procurement using FTA financial assistances.
- Establish check-in procedures, including FTA approval, for new bus models proposed for testing.
- Require transit vehicle manufacturers to submit Disadvantaged Business Enterprise (DBE) goals to FTA.
- Determine a new bus model's total passenger load based on the

manufacturer's maximum passenger rating, including accommodations for standees.

- Establish a simulated passenger weight of 150 lbs. for seated and standing (standee) passengers, and a weight of 600 lbs. for passengers who use wheelchairs.
- Require test model buses to contain at least 60% domestic components, by cost, consistent with FTA Buy America domestic content requirements.
- The replacement of the on-road fuel economy test with the fuel economy testing already conducted during the emissions test on the chassis dynamometer.

The NPRM also seeks comments on establishing testing procedures, performance standards, and a scoring system for remanufactured vehicles sold by third-party vendors and procured using FTA assistance, which FTA plans to address in a subsequent rulemaking action.

**Summary of Benefits and Costs**

Table 1 below summarizes the potential benefits and costs of this proposed rule over 10 years and using a 3 and 7 percent discount rate that we were able to quantify. Quantified costs stem from shipping buses to the testing facility, manufacturer testing fees, having repair personnel for bus manufacturers available at the testing site, new paperwork requirements, and increases to the resources needed to operate the Bus Testing Program (which represents most of the quantified costs). Unquantified costs include remedial actions to buses that do not pass the proposed test (which may extend to all the buses in a model represented by the tested bus) and potential improvements to buses to obtain a higher testing score. However, given that 41 of 49 buses tested between January 2010 and February 2013 would have satisfied the proposed performance standards without any design changes, FTA believes that the proposed requirements would not drive systemic changes to all transit bus models. Quantified benefits are from a reduction in unscheduled maintenance costs.

**TABLE 1—DISCOUNTED CASH FLOW ANALYSIS AND NET PRESENT VALUES**

Year	Costs	Benefits	Net Cash Flow	Discount Rate	DCF @ 3%	Discount Rate	DCF @ 7%
1	109,171	531,990	422,819	0.03	410,504	0.07	395,158
2	109,171	531,990	422,819	0.03	398,547	0.07	369,306
3	109,171	531,990	422,819	0.03	386,939	0.07	345,146
4	109,171	531,990	422,819	0.03	375,669	0.07	322,567
5	109,171	531,990	422,819	0.03	364,727	0.07	301,464
6	109,171	531,990	422,819	0.03	354,104	0.07	281,742

TABLE 1—DISCOUNTED CASH FLOW ANALYSIS AND NET PRESENT VALUES—Continued

Year	Costs	Benefits	Net Cash Flow	Discount Rate	DCF @ 3%	Discount Rate	DCF @ 7%
7	109,171	531,990	422,819	0.03	343,791	0.07	263,310
8	109,171	531,990	422,819	0.03	333,777	0.07	246,085
9	109,171	531,990	422,819	0.03	324,056	0.07	229,986
10	109,171	531,990	422,819	0.03	314,617	0.07	214,940
				NPV	3,606,732	NPV	2,969,704

**B. Background**

FTA’s grant programs, including those at 49 U.S.C. 5307, 5310, 5311 and 5339, assist transit agencies with procuring buses. The Federal transit program allows FTA to provide 80% funding for each bus. In 2013, for example FTA funds assisted in the procurement of 8934 new vehicles, of which approximately 5600 buses and modified vans were covered under the existing testing program. Historically, Section 317 of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA, Pub. Law 100–17) provided that no funds appropriated or made available under the Urban Mass Transportation Act of 1964, as amended, were to be obligated or expended for the acquisition of a new model bus after September 30, 1989, unless a bus of such model had been tested to ensure that the vehicle “will be able to withstand the rigors of transit service” (H. Rept. 100–27, p. 230). In subsection 317(b), Congress mandated seven specific test categories—maintainability, reliability, safety, performance, structural integrity, fuel economy, and noise—augmenting those tests with the addition of braking performance and emissions testing through section 6021 of the Intermodal Surface Transportation Efficiency Act of 1991 (Pub. L. 102–240). These requirements were subsequently codified at 49 U.S.C. 5318.

FTA issued its initial NPRM in May 1989 (54 FR 22716, May 25, 1989) and an interim Final Rule three months later (54 FR 35158, August 23, 1989), establishing a bus testing program that submitted vehicles to seven statutorily-mandated tests resulting in a test report and requiring transit bus manufacturers to submit that completed test report to transit agencies before FTA funds could be expended to purchase those vehicles. Although Congress did not authorize FTA to withhold financial assistance for a vehicle based on the data contained in a test report, FTA expected that the test report would provide accurate and reliable bus performance information to transit authorities that could be used in their purchasing and operational decisions.

Buses procured with FTA assistance are assigned a service life requirement that the recipient must keep the bus in active service for the specified period of time or mileage, whichever occurs first. FTA has five service life categories defined in the current Bus Testing Rule and in our capital program guidance publications:

- (1) Large-size, heavy-duty transit buses (approximately 35’-40’ in length, as well as articulated buses) with a minimum service life of 12 years or 500,000 miles;
- (2) Medium-size, heavy-duty transit buses (approximately 30’ in length) with a minimum service life of ten years or 350,000 miles;
- (3) Medium-size, medium duty transit buses (approximately 30’ in length) with a minimum service life of seven years or 200,000 miles;
- (4) Medium-size, light duty transit buses (approximately 25’-35’ in length) with a minimum service life of five years or 150,000 miles; and
- (5) Other light duty vehicles such as small buses and regular and specialized vans with a minimum service life of four years or 100,000 miles.

This system successfully remained in place for over twenty years. During the intervening period, however, a handful of bus models that had documented problems in their test reports were able to enter transit service, most notably, a fleet of 226 articulated buses that one of the Nation’s largest transit agencies ordered in 2001. After paying \$87.7M of the \$102.1M contract, the transit agency stopped payments in 2005 due to unresolved problems concerning the suspension systems and structural cracks around the articulation joint, near the axles, and in the rear door header, triggering years of litigation. In addition, in 2009, the transit agency abruptly pulled all of these models from service for safety concerns following a structural failure related to the articulation joint, resulting in lengthier and more crowded commutes for thousands of transit riders. In May 2012, a local court ruled that the transit agency could sell the buses for scrap metal, a move that generated only \$1.2M

for vehicles that had served barely half of their FTA-funded service lives.

The 2012 Moving Ahead for Progress in the 21st Century Act (MAP–21) amended section 5318 by adding new requirements to subsection 5318(e), *Acquiring New Bus Models*, including a bus model scoring system and a pass/fail standard based on the weighted aggregate score for each of the existing performance standards (maintainability, reliability, performance (including braking performance), structural integrity, fuel economy, emissions, and noise).

MAP–21 also amended 5318(e) to require that new bus models meet the minimum safety performance standards to be established by the Secretary of Transportation pursuant to 49 U.S.C. 5329(b). FTA began the process to establish these performance standards with the issuance of its Advance Notice of Proposed Rulemaking on Safety and Transit Asset Management,<sup>1</sup> but FTA has not completed this rulemaking. FTA will amend part 665 to establish those standards in a subsequent rulemaking. It is premature at this time for FTA to determine whether the existing safety tests will be incorporated into the new safety performance standards.

The primary purpose of this NPRM is to seek comment on FTA’s proposed bus minimum performance standards, bus model scoring system and pass/fail standard. In developing the proposals contained in this NPRM, FTA engaged in extensive discussions with transit industry stakeholders through the use of public webinars, teleconferences, and presentations at industry conferences. On March 28, 2013, FTA outlined the new statutory mandate in a public webinar held in conjunction with the Bus Testing Program Steering Committee meeting organized by the Larson Transportation Institute (LTI) of the Penn State University, the operator of the Bus Testing facility. On May 7, 2013, FTA presented its proposals at the Bus and Paratransit Conference organized by the American Public Transportation Association (APTA), and again in a public webinar on May 28,

<sup>1</sup> 78 FR 61251 (Oct. 3, 2013).

2013, seeking comments on the proposed performance criteria, Bus Test Scoring System, and pass/fail Standard. In addition, LTI held a series of teleconferences in June 2013 with bus manufacturers to further address and refine the proposed performance standards, results scoring system and the pass/fail threshold. On September 26 and 27, 2013, FTA held two final public webinars to update stakeholders on the proposed performance standards, results scoring system and the pass/fail threshold and to solicit additional comments. Stakeholder contributions are reflected in the aggregate scoring system and pass/fail criteria contained in this NPRM. Participants in these public outreach efforts included transit vehicle manufacturers, component suppliers, public transit agencies, State departments of transportation, and FTA and Bus Testing Facility personnel.

In addition to implementing statutory mandates, FTA is proposing other administrative changes that would adjust the passenger payloading process to better reflect industry practice and ensure that buses tested at the facility comply with FTA Civil Rights and Buy America requirements regarding disadvantaged business enterprises and domestic content, respectively. FTA seeks comments on all of the proposals in this NPRM. In addition, FTA is seeking comment on establishing a bus testing requirement and scoring system for remanufactured buses sold by third parties and procured using FTA funds, which will be addressed in a subsequent rulemaking action.

### C. Performance Standards by Test Category

In the current program, a standardized series of tests are conducted on new bus models and the results are published in a report for recipients to use for informing their procurement decisions.<sup>2</sup> There are no performance requirements that must be satisfied. The only “requirement” is that a new bus model have completed all of the tests required and that the test report has been published and received by the recipient prior to the disbursement of the FTA assistance for the bus procurement.

In formulating the proposed performance standards for the testing categories, FTA examined the test outcomes the testing center, located at the Larson Transportation Institute at Pennsylvania State University, currently reports for each test category to determine which of those were of such significance as to be considered “standards”. A “performance standard”

is defined as a transit bus characteristic that, if not met at the minimum level, would singularly indicate a bus model was at a high risk of not being able to provide adequate transit service throughout its required service life. Due to national variations in the types of bus transit service, climate, bus route characteristics, and ridership preferences driving the recipient’s need for continued bus specification flexibility, FTA’s goal for the proposed performance standards was to identify a minimum set of requirements currently measured and reported by the Bus Testing Program that, once satisfied, enabled all FTA recipients to obtain transit buses that operate safely on bus routes with adequate automotive performance, with the ability to reliably withstand the rigors of transit service over its required service life and to do so without excessive operating costs and excessive negative impact to the environment. To achieve this goal, FTA reviewed existing documented bus performance standards, such as the APTA Standard Bus Procurement Guidelines and current Federal regulations with applicability to the current test categories. For test categories where no external performance standards already exist, FTA formulated proposed standards based on the demonstrated test performance of bus models that proved to be unsuitable in actual service. FTA incorporated external performance standards and formulated new performance standards that applied equally to all bus models. FTA requests comments on the appropriateness of applying all the proposed standards equally to all bus models, and any alternatives that may produce more useful testing outcomes.

To guide the development of the criteria for the proposed standards, FTA analyzed the results from 49 bus testing reports published from January 2010 through February 2013 in addition to the results from specific bus models tested prior to that three-year window that did not meet their expected service life once placed into actual service. The compiled data set from past tests was used as the primary source for setting the proposed performance criterion values.<sup>3</sup> The proposed criteria in each of the five industry sourced performance standards (*i.e.*, interior noise, exterior noise, acceleration, gradeability on a 2.5% grade and on a 10% grade) were also compared to the demonstrated test results to verify the validity of each industry standard. In one case, in the

Performance test category, the industry standard for the sustained speed on a 10% grade has never been met by any 60-foot bus model. As a result, FTA is proposing a lower performance level as the standard based on the fact that a higher performance level, while technically feasible, was not historically required by the procuring agencies when procuring non-standard vehicles such as a 60-foot articulated bus.

#### C.1. Structural Integrity

The useful life of a transit bus is ultimately determined by the life of the vehicle structure. The reason being that the structure is the backbone to which all other vehicle subsystems and components are attached.<sup>4</sup> The structural integrity test category examines a bus model’s response to a range of structural stressors. Under the existing bus testing program, the structural integrity test category is comprised of seven sub-test categories: Shakedown, Distortion, Static Towing, Dynamic Towing, Jacking, Hoisting, and Structural Durability. Each sub-test category has one or more proposed performance standards. In total, these tests simulate how a bus responds to a variety of events that are expected to occur during the service life of a typical transit bus. No changes to the current structural integrity test procedures are being proposed. The results from the existing test procedures will be used to assess compliance with the proposed structural integrity performance standards. The agency requests comments on these specific tests, as well as whether there are any other tests the agency should include as part of the structural integrity performance standard. To the extent possible, please provide data, studies, or other similar information to support your comments.

##### C.1.1. Shakedown Test

The Shakedown Test currently requires loading and unloading a bus up to three times with 2.5 times its gross passenger load and measuring the amount of resulting permanent bus frame/body deflection (*i.e.*, flexing under load and not returning to its original shape) that occurs after each load cycle.<sup>5</sup> The purpose of the test is to verify an adequate factor of safety for structural strength. The first load cycle is intended to settle out the structure. After the second loading, the resulting bending of the structure is measured,

<sup>4</sup> U.S. Department of Transportation, Federal Transit Administration, *Useful Life of Transit Buses and Vans*, Booz Allen Hamilton, Inc. Report Number FTA VA-26-7229-07.1, April 2007.

<sup>5</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-1.shakedown.pdf](http://146.186.225.57/bus_tests_pdfs/5-1.shakedown.pdf)

<sup>3</sup> The test results plots used for the setting of performance criteria and standards are available in the docket for this rulemaking.

<sup>2</sup> <http://www.altoonabustest.com/bus-tests.htm>

and if none of the measurements exceed 0.005 inch, the test is finished. If any of the measured bending exceeds 0.005 inch after the second load cycle, a third load cycle is conducted and the deflections are measured again. The resulting permanent bending is measured, and if none exceed an additional 0.006 inch, the test is complete.

FTA proposes that a tested bus model would meet the Shakedown Test performance standard if the resulting permanent deflection is 0.006 inch (0.005 inch plus 0.001 inch for measurement uncertainty) or less after a third loading cycle as measured according to the current test procedure. Vehicles with deflections in excess of 0.006 would receive a failing score in this category, resulting in an overall failing score. The compiled results for the Shakedown Test revealed that most buses were within this limit after the second load cycle, and all buses were within 0.005 inch or less after the third loading cycle.

Overall, there was a minimal amount of comments received during the outreach sessions regarding the proposed Shakedown performance standard. FTA received a written comment from one bus manufacturer indicating that there is no specific reason for the standard being set at  $\pm 0.005$  inch when  $\pm 0.100$  inch should provide a sufficient limit. FTA chose not to adopt this suggestion as the proposed standard because 0.005 inch, which was taken from the First Article Inspection Test of the American Public Transportation Association's Bus Procurement Guidelines, has been used as the threshold for many years and all previously test buses were capable of meeting this requirement. FTA lacks information regarding the benefits and costs of its proposed standard and the benefits and costs of the suggested  $\pm 0.100$  inch Shakedown test standard. FTA requests comment on the benefits and costs of its proposed shakedown testing procedure and standard, the commenter's suggestion to use  $\pm 0.100$  as the performance standard or other alternatives.

#### C.1.2. Distortion Test

The objective of the existing Distortion Test is to observe the operation of various subsystems when the bus is placed in a longitudinal twist (simulating operation over a 6-inch tall curb or through a 6-inch deep pothole) and subjected to a water spray mechanism simulating rain and traffic

spray.<sup>6</sup> FTA proposes that a tested bus model would meet the Distortion Test performance standard if all of the passenger doors and emergency exits, while under every longitudinal twist test condition, operate and fully open in the same manner as they do with the bus on a level surface. FTA is not aware of problems in its recipient bus fleets related to bus body distortion performance and concludes that bus models that are capable of maintaining normal operation of the doors and windows while under the distortion loadings under this test are capable of providing adequate distortion performance when in service. Bus testing results for distortion shows no issues with test vehicles meeting this proposed standard. During the outreach efforts, bus manufacturers, transit agencies and others involved in the transit industry concurred with this performance standard as sufficient to demonstrate that the bus structure would not deform to the point of preventing the safe egress of the vehicle under this level of static loading. FTA requests comments on the benefits and costs of its proposed distortion testing procedure and standard, as well as on alternatives.

#### C.1.3. Static Towing Test

The objective of the Static Towing Test is to determine the strength characteristics of the bus towing fixtures.<sup>7</sup> Having towing fixtures on the bus is essential for recovering buses that have gone off of the roadway and are immobilized. Without towing fixtures on the bus, vehicle recovery personnel would need to improvise a means of adequate mechanical connection to lift or pull the bus onto the road surface. This improvising can be dangerous to the recovery personnel and also can result in physical damage to the bus when a winch cable contacts the exterior bus in areas incapable of supporting those loads. Having towing provisions of adequate strength is also essential for the safe and effective recovery of immobilized buses.

FTA proposes that a tested bus model would meet the Static Towing Test performance standard if no failure of the towing fixtures and connecting structure occurs at pulling loads up to 120 percent of the bus curb weight. Failure is defined as any visible permanent deformation, yielding, or bending of the provision or other structural component. Cracks in welds will

<sup>6</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-2.distortion.pdf](http://146.186.225.57/bus_tests_pdfs/5-2.distortion.pdf)

<sup>7</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-3.statictow.pdf](http://146.186.225.57/bus_tests_pdfs/5-3.statictow.pdf)

constitute test failure. This proposed requirement is consistent with section TS 25 of the APTA Standard Bus Procurement Guidelines and is consistent with how the test has been conducted since the inception of the Bus Testing Program.<sup>8</sup> Under the current test procedure, a load equal to 120 percent of the bus curb weight is applied to the towing provisions using a hydraulic cylinder and a load distribution yoke. The load is applied to both the front and rear, if applicable, towing fixtures at an angle of 20 degrees with the longitudinal axis of the bus, first to one side then the other in the horizontal plane, and then upward and downward in the vertical plane. Any permanent deformation or damage to the tow eyes or adjoining structure is recorded.

FTA believes that the current static towing test has served the industry adequately as we are aware of no in-service problems with the towing fixtures of buses that meet the requirement. FTA also believes that the current test is not burdensome as it is scaled according to the curb weight of the bus and the vast majority of buses have historically satisfied this requirement. All the buses in the data analysis used for this rulemaking satisfied the current test. During the outreach sessions, FTA received no specific comments regarding the proposed static towing performance standard. FTA seeks comment on the benefits and costs of its proposed static towing testing procedure and standard, and alternatives.

#### C.1.4. Dynamic Towing Test

The objective of this test is to functionally verify that the bus is towable with a heavy-duty commercial vehicle wrecker when following the manufacturer's instructions and using the manufacturer supplied towing interfaces (if any).<sup>9</sup> The test represents the situation where a bus is positioned on a roadway or similar surface but is not operational and must be towed to the maintenance facility. The recovery vehicle (wrecker) is maneuvered into place so the lifting apparatus ("stinger") goes under the front of the bus and interfaces with front and rear treads of the front tires allowing the front of the bus to be lifted from the road surface. The bus is towed for 5 miles, decoupled from the tow vehicle and inspected for

<sup>8</sup> "Standard Bus Procurement Guidelines RFP", American Public Transportation Association, <http://www.apta.com/resources/standards/Documents/APTA%20Bus%20Procurement%20Guidelines.docx>.

<sup>9</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-4.dynamictow.pdf](http://146.186.225.57/bus_tests_pdfs/5-4.dynamictow.pdf)

any damage or loss of normal bus functions. FTA proposes that a tested bus model would meet the Dynamic Towing Test performance standard if a proper connection was made between the heavy-duty wrecker and the test bus and no damage occurred to the bus while being towed.

While the proposed standard is not necessarily rigorous, as all buses in the data analysis were dynamically towable, it is very important that the bus is towable according to the manufacturer's instructions, that it is interoperable with common commercial vehicle recovery vehicles, and that no damage to the bus is incurred during the dynamic towing exercise. During the outreach sessions, FTA received no comments regarding this proposed performance standard. However, FTA seeks comment on the benefits and costs of the proposed dynamic towing testing procedure and standard, and alternatives.

C.1.5. Hydraulic Jacking Test

The objective of this test is to assess the feasibility of hydraulically hoisting the bus with a portable hydraulic jack to a height sufficient to replace a deflated tire.<sup>10</sup> FTA proposes that the bus model would meet the Hydraulic Jacking Test performance standard if the bus can be safely raised and lowered using a portable jack, at each wheel position, to successfully replace a deflated tire without any permanent

frame or body damage to the bus. This proposed standard is based on historic bus testing procedure and results for the jacking substest. The proposed standard is also consistent with section TS 26 in the APTA Standard Bus Procurement Guidelines. During the outreach sessions, FTA received no comments regarding this proposed performance standard. However, FTA seeks comment on its proposed standard in this NPRM.

C.1.6. Hoisting Test

The objective of this test is to assess for possible damage or deformation caused by the jack stands on the jacking pads.<sup>11</sup> FTA proposes that a tested bus model would meet the Hoisting Test performance standard if the bus can be hoisted and placed on jack stands without significant resulting permanent frame or body damage to the bus frame or bus body and that it is stable while on the jack stands. Up to 0.25 inch of plastic deformation of the frame structure directly at the point of jack contact will be allowed. Bulging or cracking anywhere on the frame or body structure while supported by the jack will constitute a failure. This proposed standard is based on the elemental need to be able to safely hoist a bus to enable the effective maintenance of the bus. The proposed standard is consistent with historic bus testing procedure and results for the hoisting substest and is consistent with section TS 27 in the APTA Standard Bus Procurement

Guidelines. FTA is not aware of any in-service hoisting issues with buses that have been tested and have met the proposed standard. There were no comments regarding this proposed standard during the industry outreach sessions. However, FTA seeks comments on the benefits and costs of its proposal, and alternatives.

C.1.7. Structural Durability Test

The objective of this test is to perform an accelerated durability test that simulates the cumulative road shock and vibration a transit bus experiences over 25 percent of its rated service life distance in miles.<sup>12</sup> The current Bus Testing Rule outlines five bus service life categories: four years or 100,000 miles; five years or 150,000 miles; seven years or 200,000 miles; ten years or 350,000 miles; and twelve years or 500,000 miles. The bus manufacturer specifies the service life category for the bus model submitted for testing. Once successfully tested, that bus model is eligible for bus procurements of the same service life length or less. FTA is not proposing any changes to these service life categories. The *Useful Life of Transit Buses and Vans* report from 2007 compared the actual bus retirement ages of buses in the various service life categories and found that the buses were being kept in service beyond their minimum service requirements. The results are shown in Table 3.

TABLE 3—AVERAGE BUS RETIREMENT AGES<sup>13</sup>

Vehicle category/minimum retirement age	Average retirement age (Years)	Share of active vehicles that are:	
		One or more years past the retirement minimum	Three or more years past the retirement minimum
12-Year Bus .....	15.1	19%	9%
10-Year Bus .....	*	7%	4%
7-Year Bus .....	8.2	12%	3%
5-Year Bus/Van* .....	5.9	23%	5%
4-Year Van .....	5.6	29%	10%

\* Average retirement age estimates for this vehicle category is not available.

FTA proposes a Structural Durability Test performance standard requiring that, at the completion of the Structural Durability Test, there are no "uncorrected" failures in the bus frame, body structure, and the propulsion system. An uncorrected failure is a failure that was detected during the test that has not been successfully

eliminated through a design, manufacturing process, or quality control improvement and has been successfully validated with sufficient durability testing. Structural durability validation of powertrain failures is defined as 1.5 times the durability test distance from the accumulated test distance at the first occurrence of the

failure, but no greater than an additional 100 percent of the original durability test length. FTA will bear 80 percent of the cost associated with one additional durability validation test if FTA believes that the proposed modification has merit and will pass the test on a subsequent attempt. Durability validation of frame and body structure

<sup>10</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-5.jacking.pdf](http://146.186.225.57/bus_tests_pdfs/5-5.jacking.pdf).

<sup>11</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-6.hoisting.pdf](http://146.186.225.57/bus_tests_pdfs/5-6.hoisting.pdf).

<sup>12</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/5-7.durability.pdf](http://146.186.225.57/bus_tests_pdfs/5-7.durability.pdf)

<sup>13</sup> U.S. Department of Transportation, Federal Transit Administration, *Useful Life of Transit Buses*

and Vans, Booz Allen Hamilton, Inc. Report Number FTA VA–26–7229–07.1, April 2007.

failures will require that the durability test is started over from the beginning after the application of the design or production process modification.

FTA strongly believes that a bus should not develop any significant failures or defects in the frame or body structure over the course of structural durability testing (the first 25 percent of its rated service life). There are several reasons for this belief:

(1) Structural cracks, structural bending, and structural failures that impede safe operation of the vehicle, delamination, and other material deteriorations could continue to propagate with continued shock and vibration input and other environmental exposure throughout the bus life.

(2) Cracks in structural elements may indicate that the bus design, materials, and/or manufacturing techniques are inadequate for transit service. With the proposed change in the bus payloading procedures contained in this notice, buses would no longer be tested in an "overloaded" condition beyond their Gross Vehicle Weight Rating (GVWR) or Gross Axle Weight Rating (GAWR) and, as a result, cracks in the frame or body would not be attributed to overloading.

(3) Repairs of structural and body cracks, deformation, or delamination may require specialized skills and tools that are beyond the capability of a common transit bus maintenance facility. Repairs of this nature can be expensive and outside the scope of the typical maintenance budget and can remove a bus from service for extended periods.

The proposed structural durability performance standard includes the chassis frame, the bus body structure, and all external and internal load-bearing elements that are either welded or adhesively attached to the frame and/or body structure. Major chassis or body structures that are primarily assembled using fasteners such as screws, bolts or rivets are also included in this performance standard.

FTA also strongly believes that a bus should not exhibit any propulsion system failures during the first 25 percent of its rated service life. Durability failures of the propulsion system are expensive to repair and cause disruptions in service. Failures of the bus powertrain revealed during the durability test will likely occur in actual transit service and may lead to more serious recurring problems later in its service life. Buses with systemic powertrain problems are often retired early due to their financial and operational liability to the operating transit agency. The proposed propulsion system durability performance standard

includes but is not necessarily limited to all components of the energy/fuel storage, delivery, and management systems; engine or drive motor and related controller and management systems; power transmission systems (transmission, driveshaft(s), and drive axle(s)); and cooling systems. Certain essential proprietary off-board equipment required to operate advanced-technology buses may also be considered to be part of the propulsion system.

In setting the proposed durability performance standard, FTA desires to limit costs and risks. If FTA were to propose a more stringent standard, the length of the durability test would increase, which means that the costs of the testing program would also increase, and the cost of buses may increase as well and for no certain benefit. On the other hand, a less stringent testing standard that allows one or more uncorrected failures, or a less stringent testing procedure, would expose FTA and its recipients to greater risk. The existence of even one major uncorrected failure mode in the bus frame, body structure, or powertrain is enough to cause a bus to fail to meet its service life requirements. We note that some vehicles that would not have passed the proposed durability standard during testing have experienced problems once placed into transit service and have had difficulty meeting their specified service life, requiring more maintenance than is typical.

FTA believes that the proposed performance standards for durability are necessary and achievable. Overall, our analyses of the 49 recent tests indicate that there are examples of bus types and sizes of each group that have proven capable of satisfying the proposed performance standards. The analysis further indicated that six bus models experienced either structural failures or powertrain failures. Of those six, FTA believes that three would have needed additional durability testing after the design changes were applied. FTA, though, does not have information concerning whether subsequent production buses were changed as a result of the testing and requests comment on whether any of the 6 models that failed were modified prior to delivery to transit agencies.

FTA received comments regarding durability testing and the associated performance standards that are assessed from these test results (Durability, Reliability, and Maintainability). One commenter recommended that FTA provide the same 80 percent cost match for the test fees associated with additional durability testing. FTA is

willing to provide the 80 percent cost match for any necessary additional durability testing. The commenter also requested that FTA commit to discussing the path forward for resolving a durability failure with the bus manufacturer within three business days. Another commenter highlighted the increased level of risk to a bus manufacturer of introducing new components and subsystems and new technology in general that the proposed standards for Durability, Reliability, and Maintainability create. FTA agrees that once a set of standards become effective, the risk to bus manufacturers, component suppliers, and technology developers may increase and that this is appropriate. The Bus Testing Program is the point-of-entry to the FTA bus capital program where bus models can be procured with FTA funding once testing is completed. Entities may use non-FTA funds to procure buses that have not completed and passed the testing program, but they do so at their own risk.

To encourage innovation, FTA has a prototype waiver policy available for the introduction of new bus technologies.<sup>14</sup> This waiver, if awarded, allows for up to five buses to be procured without the requirement for testing. FTA seeks comments regarding whether a new policy for the management of the risk associated with introducing new bus components and technologies to the new production models is needed once the final durability performance standards become effective. FTA is interested in suggestions regarding a graduated service life requirement and other strategies for sharing technological risk within the bus capital program.

FTA seeks additional comments regarding the proposed Durability performance standards. FTA seeks comments on the benefits and costs of its proposed durability testing procedure and standard, and alternatives. Do commenters have information to determine the extent to which the proposed testing process reasonably simulates real-life use of buses? Does the current and proposed testing process result in manufactures using parts that are more or less durable than needed?

### C.2. Safety

Currently, only a lane change stability test is performed in the Safety test category. However, since the objective of this test category is to document the safety performance of the test bus, FTA proposes to move the braking performance tests into the Safety test

<sup>14</sup> [http://www.fta.dot.gov/12351\\_8875.html](http://www.fta.dot.gov/12351_8875.html)



category. Additionally, FTA proposes to address safety related bus failures identified during any of the tests in the Safety test category. Currently, the significant safety hazards are addressed in the Reliability test category. FTA believes that these tests should be included in the Safety test category because that while braking performance can be considered a bus performance issue and the existence of safety hazards can be considered for their Reliability impact, they are first and foremost related to safety. Table 4 outlines the current and proposed test categories for these tests.

**TABLE 4—CURRENT AND PROPOSED SAFETY SUB-TEST CATEGORIES**

Subtest	Current test category	Proposed test category
Class 1 (safety hazards) Reliability Failures.	Reliability	Safety
Stability .....	Safety .....	Safety
Braking:	Performance.	Safety
Stopping Distance.		
Split Coefficient Surface.		
Parking Brake.		

Inserting them in the Safety test category will provide our recipients a greater holistic view of the safety of the bus. FTA seeks comments about moving the braking test result from the Performance test category and the Class 1 test results from the Reliability test category into the Safety test category. The proposed performance standards for the Safety test category are based on tests currently conducted and reported under the Performance and the Reliability test categories. No new tests are being proposed for the Safety test category in this notice. FTA notes that these tests are not intended to fulfill the mandate found in 49 U.S.C. 5329(b)(2)(C) that the agency promulgate minimum safety performance standards for transit vehicles. Once those standards are finalized via a separate rulemaking action, per section 5318(e)(1)(B)(ii), transit agencies will only be able to purchase vehicles using FTA funds that meet those standards. However, meeting those standards will not be included in the “pass/fail” score discussed in this rulemaking. Bus Testing Rule will be revised accordingly in order to accommodate the standards promulgated under 49 U.S.C. 5329(b)(2)(C). FTA proposes a total of

five performance standards for the Safety test category.

**C.2.1. Hazards**

The first Safety performance standard titled “Hazards” addresses hazardous bus performance failures to include those failures that, when they occur, could result in a loss of vehicle control; serious injury to the driver, passengers, pedestrians, and/or other motorists; and/or property damage or loss due to collision or fire. The performance standard establishes that at the completion of testing there are no uncorrected Class 1 reliability failure modes remaining. Examples of Class 1 reliability failures include a loss of braking capability, a loss of power steering assist or all steering control, an unsecure windshield or side window failure, the failure of a passenger seat or seat mount, a fuel or other flammable fluid or gaseous substance leak, exposed or frayed electrical conductors, electrical short circuits, mechanical failures of energy storage system components and their mounting structures, and any instance of fire. Similar to the Durability test and Reliability test performance standards, an uncorrected failure mode is a failure that occurred during the test that has not been successfully eliminated through a design, manufacturing process, or quality control improvement that has been successfully validated through further testing. Validation of the corrected failure mode requires repeating all tests where the failure mode occurred. For Class 1 failure modes that occur during durability testing and were not classified as durability failures, sufficient validation is defined as 1.5 times the durability test length from the accumulated test length at the first occurrence of the failure mode, but no greater than an additional 100 percent of the original durability test length. This proposed standard is based on historic bus testing results for durability and reliability that have shown that most test vehicles have no issues meeting this proposed standard. FTA seeks comments on the benefits and costs of the proposed hazards testing procedure and standard, and alternatives.

**C.2.2. Stability**

The second proposed safety performance standard addresses the dynamic stability of the bus. The Bus Testing Program has used a double-lane change test procedure to assess the stability of buses. This obstacle avoidance maneuver procedure simultaneously challenges the roll stability, yaw stability, steering rate, the

operator’s workstation design, and the outward visibility of the bus.<sup>15</sup> The lane change maneuvers start at a speed of 20 miles per hour (mph) and continue up to a potential maximum of 45 mph. For each test speed, a bus must remain within the designated lane change test course and not experience any wheel liftoff from the road surface for the test run to be considered successful. For the Stability performance standard, FTA proposes that all buses must successfully negotiate the current lane change test course at a speed of at least 45 mph without lifting a wheel off the ground, striking any of the cones, or exceeding the boundaries of the test lane. This proposed standard reflects the current definition of success for the stability test and no current bus models have failed this requirement. FTA believes the proposed standard is appropriate as it tests the buses within the upper end of their operating speed spectrum. FTA is not aware of in service instability issues with buses that have satisfied this standard thereby providing an impetus for proposing a more stringent standard. FTA is not aware of reasons to propose a lower standard either.

FTA is aware of other test methodologies that examine the dynamic stability characteristics of medium and heavy vehicles. The single-lane change and the slalom course are operational-style tests that use the speed through the test course as the primary performance metric like the current double-lane change test. FTA feels that the double-lane change test is more appropriate as buses most often need to return to lane of travel they were operating within just before the obstacle avoidance maneuver and is therefore more operationally relevant. Similar to the double-lane change, the slalom maneuver alternates the dynamic lateral loading of the bus during the maneuver but the lack of a one lane width of lateral offset during the maneuver makes the test less representative of real-world conditions. FTA is aware of engineering tests that can be used to characterize specific bus stability parameters. The constant radius turn test is used to determine a vehicle’s maximum lateral acceleration potential and its inherent propensity for understeering or oversteering behavior throughout its range of lateral acceleration. The “fishhook” and “sine-with-dwell” maneuvers can be used to induce vehicle instability in a vehicle and then assess the ability of the stability control system to manage the

<sup>15</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/3.safety.pdf](http://146.186.225.57/bus_tests_pdfs/3.safety.pdf)



response of the test vehicle. While these types of tests can provide significant insight into vehicle behavior they are not necessarily operationally relevant to transit bus consumers. Additionally, in order to execute these maneuvers, the use of vehicle safety outriggers, additional instrumentation, and potentially greater expanses of pavement surface are required which increases the cost and time required to conduct the tests. FTA has not analyzed the benefits and costs of these alternative testing procedures due to insufficient data, but FTA believes that the double-lane change test remains the best option for the needs of the Bus Testing Program. FTA received no specific comments regarding the proposed Stability performance standard during the industry outreach events.

FTA also acknowledges the National Highway Traffic Safety Administration's (NHTSA's) proposed rule to require electronic stability control on large buses under the proposed Federal Motor Vehicle Safety Standard (FMVSS) 136.<sup>16</sup> Under this proposed rule, all buses over 26,000 lbs gross vehicle weight rating (GVWR) would be required to have an electronic stability control system (ESC) with specific capabilities and a demonstrated ability to control the bus's stability within specified limits during a defined test maneuver that challenges the stability of the bus, forcing the ESC system to respond. The proposed requirements of FMVSS 136 do not apply to "urban" transit buses. Overall, if the requirements included in the proposal are finalized it is expected that some of the buses tested in this program will have an ESC system and some will not. FTA considered two different options for harmonizing the Bus Testing Stability performance standard with that of FMVSS 136.

The first option considered was replacing the current Stability test with the proposed FMVSS 136 tests and performance requirements for all buses. This option was rejected for several reasons.

1. For buses so equipped, ESC will ensure that they are stable. Our current stability test demonstrates whether a bus can safely execute a double lane change without reducing velocity. Without a minimum speed requirement that ensures a minimum level of agility,

like that proposed for the double-lane change test, it would be possible for ill-handling buses to pass through the Bus Testing Program and enter transit service.

2. The estimated cost of executing the proposed 136 test is 5 times greater (\$15,000 vs. \$3,000) than the cost of the current Bus Testing program stability test. This new test would impact the program budget forcing FTA to reduce testing in other areas.

3. For buses without ESC, the test results would not be operationally meaningful. This reduces the value of the information to the transit industry.

Another option is test and apply the proposed Stability performance standard only to those bus models that do not fall under the scope of the proposed FMVSS 136 (urban transit buses and buses less than 26,000 lbs). Buses that are subject to FMVSS 136 and are certified as compliant by their manufacturer would be given an automatic pass for "Stability". While this option is more practical for the test program, as it eliminates the need to conduct the FMVSS 136 tests, it still could allow a poor handling bus through the testing program. The proposed FMVSS 136 standard affects two types of buses that are used by transit; the over-the-road motorcoach, and the large Class 7 cutaway chassis buses. While it is unlikely that a motorcoach will be placed into regular fixed route transit service where a bus's agility is more important, some Class 7 cutaway buses are used for fixed route service.

Past Stability test results indicate that all bus models are capable of safely executing the double-lane-change test at 45 mph. As a result, FTA believes that probability of an ESC system intervening during this test is low for current production bus models. Therefore, FTA believes that applying the proposed Stability performance standard of 45 mph through the double lane-change test course to all buses, regardless of whether or not they are equipped with ESC, is the best option. However, since the inherent stability performance characteristics of future bus models are unknown, FTA seeks comments regarding the different options for integrating the proposed FMVSS 136 into the Bus Testing Program, including the benefits and costs and those of alternatives. FTA also seeks comments in general on the benefits and costs of its proposed Stability procedure and test, and alternatives.

### C.2.3 Braking Performance

FTA proposes three performance standards for the braking performance of new bus models based on the test results obtained from the current brake performance tests.<sup>17</sup> The first is for the stopping distance on a dry level surface. The second is for the directional stability of the bus while stopping on a level split coefficient friction surface. The last one addresses the performance of the parking brake with the bus on a grade.

#### C.2.3.1 Stopping Distance

The purpose of this test is to assess the straight line stopping capability of a bus model on a level high friction surface at initial speeds of 20, 30, 40, and 45 mph and on a level low friction surface at 20 mph. FTA proposes a stopping distance performance standard that every new bus model satisfies the stopping distance requirement of Federal Motor Vehicle Safety Standard (FMVSS) 105 Hydraulic and electric brake systems (49 CFR 571.105) and FMVSS 121 Air Brake Systems (49 CFR 571.121) of stopping within 158 feet from a speed of 45 mph on dry level road surface.

FTA proposes that although a bus model may fail to stop within 158 feet from a speed of 45 mph, a passing result from an applicable documented FMVSS 105 or 121 certification test conducted by an independent test organization can be used instead. FTA offers this alternative compliance option due to the fact that the Bus Testing Program does not conduct the brake burnish procedure specified in the FMVSS for the considerations of cost and time. The data analysis revealed that three of 49 buses recently tested would have failed this standard based on the Bus Testing results alone. Their average stopping distances from 45 mph were 160, 171, and 189 feet. FTA believes that these three failures could have been resolved through leveraging a FMVSS compliance test report or by repeating the brake testing, and that no mechanical changes would have been necessary in order to pass the proposed test.

After one of the outreach sessions, FTA received written comments from one source regarding the proposed stopping distance performance standard. The commenter recommended a braking distance performance standard of 200 feet from a speed of 45 mph for heavy-duty transit buses due to the fact that the FMVSS burnishing procedure is not conducted prior to conducting the

<sup>16</sup> "Federal Motor Vehicle Safety Standards; Electronic Stability Control Systems for Heavy Vehicles", Notice of Proposed Rulemaking, National Highway Traffic Safety Administration, May 23, 2012. <https://www.federalregister.gov/articles/2012/05/23/2012-12212/federal-motor-vehicle-safety-standards-electronic-stability-control-systems-for-heavy-vehicles>

<sup>17</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/4.2Performance-BrakeTest.pdf](http://146.186.225.57/bus_tests_pdfs/4.2Performance-BrakeTest.pdf)

stopping distance tests. FTA believes that by allowing the use of an FMVSS certification test result as an alternate data source we have addressed the commenter's issue and at the same time not lowered the bar for braking performance below the FMVSS threshold. FTA seeks comments on the benefits and costs of proposed stopping distance performance standard, and alternatives.

#### C.2.3.2 Braking Stability

The purpose of the braking stability test is to determine the ability of a bus model to stay within a standard lane width during a maximum effort panic stop from 30 mph with one side of the bus on a high friction surface the other on a low friction surface. The proposed performance standard for braking stability is that the bus remains within a 12-foot lane width during the split coefficient friction brake stops as conducted under the current Bus Testing Program procedure. The data analysis revealed that all buses satisfied this proposed performance standard. FTA received no comments regarding braking stability. FTA requests comments on the benefits and costs of its proposed braking stability test procedure and standard, and alternatives.

#### C.2.3.3 Parking Brake

The third proposed performance standard is that the parking brake holds the bus stationary on a 20-percent grade while facing uphill and downhill for 5 minutes each in accordance with FMVSS 105 and 121.

The data analysis revealed that all buses satisfied this proposed performance standard. FTA received no comments regarding the parking brake performance standard.

### C.3. Maintainability

The objective of this test is to examine the amount and types of maintenance required to keep the test bus in a fault-free operating state. Selected components (*e.g.*, transmission, alternator, windshield wiper motor, and other comparable components that serve the same functions replaced over a vehicle's lifespan on the bus) are removed and replaced, and the total time required to complete this task is recorded.<sup>18</sup> The amount of time necessary to conduct the scheduled servicing, as defined by the bus manufacturer, is recorded throughout the duration of the test. All unscheduled maintenance activities (*i.e.*, failures the

occur during the testing) are documented as well, including the length of time for each maintenance action, as transit vehicle agencies noted unscheduled maintenance needs was a significant operating constraint.<sup>19</sup>

FTA proposes a maintainability performance standard for the total unscheduled maintenance time of no greater than 125 hours over the full course of all of the tests. Unscheduled maintenance time is a function of the reliability of the bus and the amount of labor required to resolve its malfunctions and is a significant indicator for the operating cost of the bus. FTA selected a standard of 125 hours after reviewing the bus testing results for all bus models that meet the proposed reliability performance standard (no more than two Class 2 reliability failures (a failure resulting in a maintenance road call to repair or tow the bus) and meet the proposed durability standards (no uncorrected frame and body structure failures or powertrain failures remaining at the completion of testing, during the test. Buses that required more than 125 hours of unscheduled hours during the test have been problematic in transit service and have usually not provided the full specified useful service life. Three buses from the study group of 49 would not meet this proposed performance standard. However, these same three bus models also fail the proposed durability requirements. Assuming the durability failures would be verified as "corrected" during the subsequent retesting, this proposed standard would likely be met.

FTA considered proposing a graduated performance standard based on the expectation that the amount of unscheduled maintenance is directly proportional to the amount of bus operation and hence its service life category. However, a plot of the total unscheduled maintenance results for buses with no greater than two Class 2 failures tested in 2010 revealed a uniform distribution of test results that was not directly proportional to the length of the service life. The proposed 125-hour standard would apply to all service life categories as all durability tests represent 25 percent of the vehicle's designated service life.

FTA received written comments from two sources on this subject during our outreach activities. One commenter recommended that specific limits need to be established for "consumable" parts so that shocks or bump stops are not replaced every 1000 miles to hide a

deficiency in reliability during the test that could later impact the total unscheduled maintenance hours significantly. The commenter concurred with using a maximum of 125 hours for the unscheduled maintenance scale. The commenter also recommended having the component removal and replace times account for 20 percent of the points for this test category and the remaining points from the total unscheduled maintenance hours. FTA considered proposing limits on the replacement rates of certain "consumable" components but thought that limiting the total amount of unscheduled maintenance accumulated during the test was an adequate disincentive to "over-maintain" the bus. At the time of the comments regarding the component removal and replace times were submitted, FTA was considering a potential performance standard for this test or including it in the discretionary scoring for Maintainability. FTA chose not to propose including the component removal and replace (R&R) times in the pass/fail scoring system at all. FTA felt that the past test results that this metric did not show significant difference between bus models. Additionally, R&R times are only relevant if that component needs to be replaced multiple times throughout the bus's life. The R&R time for components that fail during the test are already captured in the unscheduled maintenance times.

Another commenter highlighted the concern that new bus models that introduce a new technology or even just a new component could significantly raise the risk of failing the test in the durability, reliability, or maintainability test categories. Overall, FTA agrees with this observation. The Bus Testing Program serves as the point of entry to unlimited bus production volumes for FTA recipients. These issues are already addressed in existing bus testing policies. The program's partial testing policies delineate between component changes that are "major" and need to be tested and those component changes that do not trigger additional testing.<sup>20</sup> Bus models employing new bus technologies may be eligible for a prototype waiver that allows a small quantity of buses to be procured without the need for testing.<sup>21</sup>

FTA seeks additional comments concerning the benefits and costs of its proposed performance standard for Maintainability, as well as on alternatives. In addition, FTA seeks comment on whether the proposed 125-

<sup>18</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/1-3.replacementandrepairsystems.pdf](http://146.186.225.57/bus_tests_pdfs/1-3.replacementandrepairsystems.pdf)

<sup>19</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/1-2.servicing\\_pm\\_and\\_repair.pdf](http://146.186.225.57/bus_tests_pdfs/1-2.servicing_pm_and_repair.pdf)

<sup>20</sup> [http://www.fta.dot.gov/12351\\_8867.html](http://www.fta.dot.gov/12351_8867.html)

<sup>21</sup> [http://www.fta.dot.gov/12351\\_8875.html](http://www.fta.dot.gov/12351_8875.html)

hour standard may have adverse unintended consequences.

C.4. Reliability

The objective of this test category is to document and classify each of the operational reliability failures of a bus

model while it undergoes the tests in the other test categories. As expected, most of the reliability failure incidents occur during the durability test portion of the structural integrity test category. However, all of failures throughout the test are documented. Specifically, the

reliability failures are identified by subsystem and cumulative test distance at the time of failure, and the associated repair and down time for each failure is documented.<sup>22</sup> Table 5 is an example of the product of this analysis.

TABLE 5—RELIABILITY ANALYSIS EXAMPLE

Subsystem	Failure type				Maintenance labor-hours	Downtime
	Class 4	Class 3	Class 2	Class 1		
	Distance (mi)	Distance (mi)	Distance (mi)	Distance (mi)		
Drive System .....		821 1,857 1,860 1,860 6,542	9,725 14,252		2.0 2.0 4.0 6.0 8.0 25.0 20.0	1.0 6.0 24.0 12.0 24.0 144.0 2,712.0

The current bus testing program categorizes a failure during the test into one of the following four classes:

1. Class 1: A malfunction that could lead to a loss of bus control; in serious injury to the driver, passengers, pedestrians, or other motorists; and in property damage or loss due to collision or fire.

2. Class 2: A malfunction that results in test interruption because the bus cannot be operated. Service is discontinued until the bus is repaired at the site of the malfunction or it is towed to a service workshop. An in-service bus that experiences a Class 2 failure would require a road call (*i.e.*, a mechanical failure on the road that requires towing or repairs, but there is no immediate safety risk to the driver and/or passengers).

3. Class 3: A malfunction that results in temporary interruption of testing, and the bus must be returned to a service workshop for repair. An in-service bus that experienced a Class 3 failure could be driven safely to a rendezvous site for a bus swap.

4. Class 4: A malfunction that degrades bus operations but does not require immediate removal of the bus from testing. An in-service bus that experienced a Class 4 failure could complete its shift.

FTA proposes a reliability performance standard for the accumulation of no uncorrected Class 1 and not more than two uncorrected Class 2 reliability failure modes at the completion of the test. This proposed standard allows up to two Class 2 failures resulting from flat tires, failed

coolant and hydraulic hoses, broken accessory drive belts, failed Starting, Lighting, and Ignition (SLI) batteries (common 12-volt batteries used for engine starting and general electrical system use, not traction batteries used for electric bus propulsion) or other externally sourced, high-volume components whose designs and quality control may be beyond the direct control of the bus manufacturers. This proposed standard is based on the past reliability test results for buses that did not have systemic problems with completing their service life requirements in service. The analysis of bus testing results indicates that one bus out of the 49 studied would fail the Class 2 requirement. However, FTA believes that had this requirement existed at the time of that test the manufacturer would have sought to remedy and validate at least one of Class 2 failure modes prior to the end of the test.

FTA chose to propose placing a performance standard for Class 1 reliability failures in the Safety test category and not in the Reliability test category so that these results would not be double-counted in the proposed Bus Model Scoring System. For completeness, the Reliability section of the test report will continue to report the details of all Class 1 failures. FTA also chose not to propose any performance standards for Class 3 and 4 reliability failures. The primary impact of these failure modes is increased unscheduled maintenance which is addressed with the proposed Maintainability performance standard.

FTA seeks comments regarding the adequacy and reasonableness of the treatment of the Class 3 and Class 4 reliability test results.

FTA received written comments regarding the proposed Reliability performance standards. The commenter concurred with the proposed requirements of no uncorrected Class 1 and no more than two uncorrected Class 2 failures existing at the completion of the test. The commenter asked that FTA commit to a review of these failures, the proposed remedies, and the amount of validation test distance required within three business days to minimize the impact to the testing schedule. They also recommended that any additional testing required to validate design changes necessary to meet the Reliability performance standards be shared between FTA and the manufacturer at the same 80/20 percent split as the rest of the test. FTA seeks comments regarding the benefits and costs of the proposed Reliability performance standards, as well as on alternatives.

C.5. Fuel Economy

FTA proposes that the performance standard for the Fuel Economy test category is that every new bus model would satisfy the requirements of NHTSA’s Medium and Heavy-Duty Vehicle Fuel Efficiency Program (49 CFR part 535) for the model year in which it is produced. In this program, transit buses are classified as “heavy-duty vocational vehicles” with voluntary standards starting with the 2013 model year and mandatory

<sup>22</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/2.reliability.pdf](http://146.186.225.57/bus_tests_pdfs/2.reliability.pdf)

standards starting in model year 2016. Correspondingly, this proposed performance standard becomes effective for the Bus Testing Program in 2016. Because buses will be required to comply with these regulations for model year 2016, this proposal would only have costs or benefits if recipients decide to purchase buses that perform better than the minimum standard based on the testing results. The current fuel economy testing conducted in the Bus Testing Program does not address this standard and would not be used for determining compliance. The manufacturer documentation used to demonstrate compliance with the NHTSA program would be the same basis for the Bus Testing Program determining compliance with its fuel economy standard. The Bus Testing Program fuel economy test results would be used to award additional points above the base score as is discussed in paragraph D.1.5 of this notice. No comments were received from stakeholders as this proposal was developed after the outreach sessions. Initially, FTA had proposed a set of minimum performance standards for fuel economy based on the test results produced by the program. FTA seeks public comment on the benefits and costs of its proposed fuel economy standard, as well as on alternatives.

#### C.6. Emissions

To protect public health and welfare, Congress enacted the Clean Air Act (CAA) and its subsequent amendments. The CAA Amendments of 1970 directed the Environmental Protection Agency (EPA) to use scientific data to set and revise national ambient air quality standards (NAAQS) for specific widespread and common pollutants, making major revisions in 1977 and 1990. Currently, the EPA has air quality standards in place for six common "criteria pollutants:" particulate matter, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. Implementation of the standards is a joint responsibility of the States and EPA, with States responsible for developing enforceable State implementation plans that meet national standards. If a State fails to adopt and implement an adequate plan, EPA is required to issue a Federal implementation plan.

FTA proposes that the performance standard for the Emissions test category be that every new bus model would satisfy all of the applicable EPA exhaust emissions requirements for heavy-duty vehicles for the model year in which it is produced. Because buses are currently required to comply with these

requirements, this proposal would only have costs or benefits if recipients decide to purchase buses that perform better than the minimum standard based on the testing results. The EPA divides heavy-duty vehicle exhaust emissions into two groups, criteria pollutants, and green-house gas pollutants. Exhaust emissions of nitrogen oxides (NO<sub>x</sub>), non-methane hydrocarbons (HC), particulate matter (PM), and carbon monoxide (CO) are considered "criteria pollutants" and the standards for governing these pollutants are provided in 40 CFR part 86. Exhaust emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrogen dioxide (N<sub>2</sub>O) are considered "greenhouse gas pollutants," the standards for which are outlined in 40 CFR part 1037. Bus manufacturers currently leverage a "pass-through" compliance from the engine manufacturer, chassis manufacturer, or alternative fuel conversion supplier to demonstrate compliance with 40 CFR part 86. For the greenhouse gas emissions standard, 40 CFR part 1037, bus manufacturers must provide the bus models specific results generated by the Greenhouse Gas Emissions Model (GEM) to the EPA or leverage the chassis original equipment manufacturer (OEM) certification for those bus models built upon an incomplete OEM chassis.

While the Bus Testing Program currently measures all of these exhaust emissions except for N<sub>2</sub>O, the testing is conducted at the vehicle level using transit specific driving cycles and is not suitable for determining compliance with the EPA exhaust emissions requirements. The Bus Testing Program emissions test was designed to provide accurate data measured over transit specific duty-cycles to facilitate direct comparisons between bus models. Instead of using the Bus Testing Program emissions test results to address the EPA requirements, FTA proposes that the bus manufacturer documentation already being used to demonstrate compliance with the EPA requirements also be the basis for the Bus Testing Program to determine compliance with its Emissions performance standard. The Bus Testing Program emissions test results would be used to award additional points above the base score as is discussed in paragraph D.1.6 of this notice. FTA did not receive comments for this proposal as it was not discussed during the outreach sessions. FTA had initially proposed a performance standard for each category of exhaust emissions currently measured by the test program. FTA seeks public comment on the benefits and costs of its proposed

emissions standard, as well as on alternatives.

#### C.7. Noise

The objective of this test category is to measure the noise levels inside and outside of the bus in various operating modes. There are a total of six different noise test procedures currently conducted. The interior noise testing includes measuring the ambient noise level inside the bus as it is being subjected to 80 dB of white noise from outside the bus, measuring the noise levels inside the bus as it accelerates from a standstill to 35 mph, and qualitatively identifies any specific types of noise such as rattles, wind noise, or resonant vibrations that occur at specific speeds, throttle positions, gear ranges, etc. The exterior noise testing measures the noise levels projected into the outside environment from the bus as it accelerates from a steady speed at full throttle, as it accelerates from a standstill to 35 mph under full throttle, and when stationary with the engine at three different throttle settings. FTA plans to continue testing and reporting on the six different noise test procedures as is current practice. However, performance standards are not proposed for all six tests.

To formulate Noise performance standards, FTA reviewed the test results for buses tested in 2010 and later. FTA also reviewed the APTA Standard Bus Procurement Guidelines and its recommended specifications for bus noise performance, as well as from other Federal agencies such as the National Institute for Occupational Safety and Health (NIOSH), the Federal agency responsible for workplace safety research, and the EPA, the Federal agency responsible for environmental health standards.

FTA found that while the APTA guidelines set an interior noise threshold of 80 dB(A) (decibels, A-weighted—a relative measure of the loudness of sounds as perceived by the human ear) for passenger seating locations and 75 dB(A) for the driver area, they were designed to address procurements of urban transit buses between 30 and 60 feet in length and do not address buses of shorter length, such as cutaway buses, which are of a different body design and whose engines are typically located forward in the cab of the vehicle, rather than in the rear of the bus.

FTA examined other noise performance standards to determine whether elevating the driver area noise level above 75 dB(A) posed an unacceptable hazard for the driver. The

NIOSH recommended exposure limit (REL) for occupational noise exposure is 85 dB(A), over an 8-hour time-weighted average. Exposures at and above this level are considered hazardous by NIOSH. Although bus drivers can be exposed to interior bus noise for 8 hours a day, the bus noise level is transient, peaking only during acceleration. Thus, setting the performance standard at 80 dB(A) would ensure that the NIOSH recommended exposure limit is not exceeded.

The APTA exterior noise threshold of 83 dB(A) while accelerating from a full stop is consistent with EPA regulation, which addresses transient external noise levels by commercial vehicles found in section 202.20(b) of 40 CFR part 202. This section provides: "No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 83 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 mph or less; or 87 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 mph." The current Bus Testing program conducts this test in the same manner at a speed up to 35 mph.

Therefore, FTA proposes that the interior and exterior noise measured during the maximum acceleration of the test bus from 0 to 35 mph would be basis for the noise performance test.<sup>23 24</sup> The proposed performance standard would be 80 dB(A) for interior noise throughout the interior of the vehicle and 83 dB(A) for exterior noise as measured by the current test procedures. The noise test data analysis of 49 recent bus models indicates that two cutaway chassis buses exceed the proposed interior noise performance at the driver's position by 4 dB (measured 84 dB versus the 80 dB limit). FTA believes that this level could be reduced to 80 dB or lower by the application of sound absorption materials between the engine compartment and floor areas and the driver's workstation. FTA requests comments on the cost of adding this sound absorption material to a bus. None of the 49 buses would fail the proposed exterior noise performance standard.

<sup>23</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/7-1.interiornoise.pdf](http://146.186.225.57/bus_tests_pdfs/7-1.interiornoise.pdf)

<sup>24</sup> [http://146.186.225.57/bus\\_tests\\_pdfs/7-2.exteriornoise.pdf](http://146.186.225.57/bus_tests_pdfs/7-2.exteriornoise.pdf)

FTA received some verbal and written comments regarding the noise testing and the proposed performance standards. During the earlier outreach sessions, FTA had discussed the proposed performance standards that it was considering for each of the six noise tests that are currently performed. Comments from transit agencies indicated that they focused on the noise test results for the noise produced when a bus is accelerating from a stop. One bus manufacturer concurred with the proposed noise test performance standards. FTA seeks comments concerning the benefits and costs of its proposed Noise performance standards and testing procedures, and alternatives.

#### *C.8. Performance*

The objective of this test is to investigate and document the automotive performance of the bus including its maximum speed, acceleration, and gradeability (grade climbing ability). These three factors are critical for buses to perform as needed for transient recipients: speed is important if the bus will be used in commuter service on highways, acceleration is important after being stopped or when entering traffic, and gradeability is important for those cities not located on flat terrain.

FTA is proposing three performance standards for the Performance test category: one for acceleration, and two for gradeability. A performance standard for the maximum speed on a level road surface is not proposed. The stability performance standard in the Safety test category already requires all buses to be able to maintain 45 mph throughout the lane change test. FTA believes that 45 mph is an adequate maximum speed that all transit buses need to satisfy. FTA understands that there are bus routes that require a speed greater than 45 mph. The Bus Testing Program requirements do not preclude transit agencies from procuring buses with a speed capability greater than 45 mph.

The proposed Acceleration performance standard would establish that every bus be capable of achieving a speed of 30 mph from rest in no greater than 18 seconds, which is consistent with Standard 7.3.1, Table 3, of the APTA Guidelines. FTA does not know the original basis for the acceleration requirement. Our speculation is that, when it was formulated, it was based on the capability of a popular bus model that transit agencies felt provided adequate performance.

The proposed Gradeability performance standards would establish that every bus shall be capable of

sustaining at least 40 mph on a 2.5 percent grade, and at least 10 mph on a 10 percent grade. The proposed gradeability on a 2.5 percent grade performance standards is sourced from the APTA Standard Bus Procurement Guidelines. While this same source recommends a minimum speed of 15 mph on a 10 percent grade, FTA proposes a performance standard of 10 mph on a 10 percent grade to account for the typical measured test performance of the 60-foot articulated buses and to allow manufacturers to optimize the powertrain fuel economy of 40-foot buses for transit applications that do not require significant gradeability performance.

These proposed performance requirements are not particularly rigorous as they were set to allow for the optimization for fuel economy, given transit agency requirements. Additionally, as with any of the tests proposed today, these performance standards do not preclude transit agencies from procuring bus models that have greater performance capability. These proposed standards are consistent with bus testing results that have shown that most test vehicles would likely not have significant difficulty meeting these proposed standards.

The data analysis of the acceleration results for 49 recent bus tests showed that two buses failed to meet the proposed acceleration standard. One, a full electric bus, recorded a time of 18.6 seconds. FTA believes that with a software adjustment to the powertrain control system this particular bus could have reduced its acceleration time to 18 seconds or less. This adjustment would not have a significant cost. The other bus, a 60-foot articulated bus, achieved 30 mph in 19.6 seconds. This diesel-powered bus was equipped with a relatively small displacement engine for the 60-foot bus class. A numerically higher final drive ratio could have been fitted to the bus to reduce its acceleration time, as well as improve its gradeability, at the expense of maximum speed and fuel economy, but no additional equipment cost.

The data analysis for maximum speed on a 2.5 percent grade indicates that all 49 buses would satisfy the proposed requirement of 45 mph. A few buses were just at the threshold of this requirement. The data analysis for the maximum speed on a 10 percent grade reveals that three buses, one 40-foot diesel, one 40-foot electric, and the same 60-foot bus that failed the acceleration requirement failed to achieve 10 mph on a 10 percent grade. Of these three, the 40-foot diesel was the closest, at 7.5 mph, to achieving the

proposed standard. Other 40-foot buses with similar powertrains were capable of meeting this requirement, perhaps indicating that the engine in this particular bus was not operating at full capability. The next slowest bus was an electric bus performing at 5 mph. This particular bus has been confirmed by one operating agency as having poor hill climbing ability, making it unsuitable for several routes in their area.

FTA received several comments and recommendations regarding the proposed acceleration and gradeability performance testing and standards. During the outreach sessions, bus manufacturers endorsed the proposed acceleration requirement as it competes directly with fuel economy performance, citing that they have never had a customer ask for more acceleration than the APTA standard but always have customers asking for more fuel economy. Several bus manufacturers disagreed with the proposed gradeability requirement of 15 mph on a 10 percent grade for heavy-duty buses as most U.S. roadways are limited to a 6 percent grade. One manufacturer provided a summary of the buses tested that could not achieve 15 mph on a 10 percent grade. Two bus manufacturers recommended that FTA and LTI find a new method of determining gradeability performance as the current analytical method that uses the acceleration cannot account for how the new adaptive transmissions perform

when the bus is on an actual grade leading to potentially erroneous test results. Based on these comments and its own data analysis, FTA adjusted the performance requirement for speed on a 10 percent grade down to 10 mph. Additionally, FTA and LTI have been working towards a new gradeability testing methodology using the chassis dynamometer to replicate the grade specific gravitational forces. However, we are not yet ready to propose this methodology. FTA seeks comments regarding the benefits and costs of its proposed acceleration and gradeability performance standards, as well as on alternatives.

**D. Bus Model Scoring System**

MAP-21 requires that FTA include a Bus Model Scoring System that produces an aggregate score that uses test categories and considers the relative importance of each such testing category. FTA proposes a scoring system where the maximum aggregate score is 100 points. The scoring system and maximum points available in each test category are shown in Table D.1. The points available in each test category reflect FTA's concerns as the primary provider of Federal assistance for the procurement of new bus models—namely, that they can operate safely on bus routes with adequate automotive performance, reliably withstand the rigors of transit service over their required service lives and to do so

without excessive operating costs and excessive negative impact to the environment. The other test categories required in MAP-21 and proposed today, including noise, emissions, and fuel economy, are also of great importance for the agency, transit agencies and the public, but, as noted, are within the primary regulatory responsibilities of other Federal agencies.

A total of 54 points has been proposed across test categories that assess the capability of a bus model to reliably withstand continuous transit service for the duration of its service life, with only a reasonable level of maintenance required to sustain a state of good repair (structural integrity—30 points, maintainability—16 points, and reliability—8 points). A total of 20 points is assigned to safety, another FTA priority. The environmental sustainability characteristics of fuel economy and emissions are assigned 7 points each. Bus noise characteristics are assigned a total of 7 points. Lastly, the automotive performance characteristics of bus models are assigned a total of 5 points. FTA requests comments on its proposed scoring system. In particular, FTA seeks information on whether there are alternative scoring systems that would better enable recipients to compare buses, and whether categories should be weighted differently.

TABLE D-1—WEIGHTED TEST RESULTS SCORING SYSTEM

Test category	Potential awarded for meeting each performance standard	Potential points for performance above the standard	Total point weighting by category	
Structural Integrity	Shakedown	1.0	1.0	30
	Distortion	1.0		
	Static Towing	1.0		
	Dynamic Towing	0		
	Jacking	1.0		
	Hoisting	1.0		
	Durability-Structural	12.0		
Safety	Durability—Powertrain	12.0	0	20
	Hazards	10.0		
	Stability	2.5		
Maintainability	Braking	5.5	2.0	16
	Total unscheduled maintenance hours	2.0		
Reliability	Number of Class 2 reliability failures	2.0	6.0	8
Fuel Economy	Liquid fuels.		6.0	7
	CNG.			
	Hydrogen	1.0		
	Electric.			
Emissions	CO <sub>2</sub>		4.0	7
	CO			
	Total hydrocarbon			
	Non-methane hydrocarbon	1.0		
	Nitrogen oxides			
Noise	Particulates		0.4	7
	Interior Noise (0–35 mph)	0.5		
	Exterior Noise (0–35 mph)	0.5		
Performance	Acceleration 0–30 mph	1.5	3.0	5
	Gradeability 2.5%	1.5		
	Gradeability 10%	2.0		
Total		60	40	100

*Determination Of Scores By Test Category*

FTA proposes that the test results for each proposed performance standard be used to generate the score for each test category. To receive a numerical score, a bus model must satisfy each proposed performance standard at least at the minimum level. FTA proposes scoring of the results in two steps: First a base score is awarded for the satisfaction of each performance standard; second,

additional prorated points would be awarded when the performance of the bus model exceeds specific performance standards in the Safety, Maintainability, Reliability, Fuel Economy, Emissions, and Noise test categories as identified in Table D-2. FTA believes that while bus models that only just satisfy the performance standards at the minimum level should be capable of providing adequate transit service, performance above the performance standard in

fifteen specific areas provides additional benefit to transit through increased safety and reliability, reduced operating costs and reduced negative impact on the environment. In these fifteen prorated performance categories, FTA believes that the maximum identified performance levels would not be exceeded by any current bus model. Additional details on the scoring of test results by test category are provided in the following sections.

**TABLE D-2: Performance Standards, Scoring System, and Pass/Fail**

Test Category		Performance Standard	All Performance Standards Met?			
			No	Yes → Assess Score		
				Base Score	+ Prorated Points for Measured Test Performance	
<b>Structural Integrity</b> (30 pts.)	Shakedown	Maximum permanent chassis deflection ≤ 0.006 inch after 3 load cycles		1.0		
	Distortion	All exits remain operational under each distortion loading condition		1.0		
	Static Towing	No significant deformation under 120% curb weight load		1.0		
	Dynamic Towing	Bus is towable with standard wrecker		1.0		
	Jacking	Bus is liftable with a standard jack		1.0		
	Hoisting	Bus stable on jacks		1.0		
	Durability	No uncorrected frame & body structure failures remaining at completion of test				12.0
No uncorrected powertrain failures remaining at completion of test			12.0			
<b>Safety</b> (20 pts.)	Hazards	No uncorrected Class 1 reliability failures remaining at test completion		10.0		
	Stability	Lane change speed no less than 45 mph		2.5		
	Braking	Stopping distance from 45 mph within 158 feet as per FMVSS 105 & FMVSS 121				0.5
		Bus remains within lane during split coefficient brake stops				2.5
		Parking brake holds on 20% grade				2.5
<b>Maintainability</b> (16 pts.)		Accumulation of no more than 125 hours of unscheduled maintenance		2.0	Hours: 125 — 0 Points: 0.0 — 14.0	
<b>Reliability</b> (8 pts.)		No more than 2 uncorrected Class 2 failures remaining at completion of test		2.0	Failures: 2 — 0 Points: 0.0 — 6.0	

<b>Fuel Economy</b> (7 pts.)  (Only 1 fuel type scored)	Liquid Fuels (Diesel, Gasoline, LPG, LNG)	<b>Compliant with 49 CFR Part 535 MEDIUM- AND HEAVY-DUTY VEHICLE FUEL EFFICIENCY PROGRAM- Heavy-Duty Vocational Vehicle Fuel Consumption Standards</b>	<b>1.0</b>	MPG: 1 — 13
	CNG			Points: 0.0 — 6.0
	Hydrogen			SCF/mi: 50 — 10
	Electric			Points: 0.0 — 6.0
<b>Emissions</b> (7 pts.)  (All emissions categories scored)	Carbon Dioxide (CO <sub>2</sub> )	<b>Compliant with all applicable EPA exhaust emissions regulations at date of manufacture including:</b>  <b>40 CFR Part 86 CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES</b>  <b>40 CFR Part 1037 CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES</b>	<b>1.0</b>	Points: 0.0 — 6.0
	Carbon Monoxide (CO)			SCF/mi: 98 — 15
	Total Hydrocarbon (THC)			Points: 0.0 — 6.0
	Non-Methane Hydrocarbon (NMHC)			kW-hr/mi: 3 — 1
	Nitrogen Oxides (NO <sub>x</sub> )			Points: 0.0 — 6.0
	Particulate Matter (PM)			Points: 0.0 — 6.0
<b>Noise</b> (7 pts.)	Interior - acceleration 0-35 mph	No greater than 80 decibels (dB(A))	<b>0.5</b>	Grams/mi: 4000 — 0
	Exterior - acceleration 0-35 mph	No greater than 83 decibels (dB(A))		Points: 0.0 — 4.0
<b>Performance</b> (5 pts.)	Acceleration	Time from 0-30 mph no greater than 18 sec	<b>1.5</b>  <b>1.5</b>  <b>2.0</b>	Grams/mi: 20 — 0
	Gradeability	Sustained speed on 2.5% grade no less than 40 mph		Points: 0.0 — 0.4
		Sustained speed on 10% grade no less than 10 mph		Points: 0.0 — 0.4
<b>Overall Result</b>	<b>FAIL</b>		<b>60</b>	Grams/mi: 3 — 0
	<b>PASS</b>			Points: 0.0 — 0.4
<b>Maximum Aggregate Score</b>			<b>+</b>	<b>0 — 40</b>
<b>Maximum Aggregate Score</b>			<b>100</b>	

D.1.1. Structural Integrity Tests

FTA believes that no discretionary points are available for performance above the standard because of a transit vehicle must meet these baseline

requirements in order to meet its expected service life.

D.1.2 Safety Tests

The proposed scoring of the Safety Test is as shown in Table D-2. A total

of 2.0 discretionary points are available. The Safety Test sub-categories are a collection of safety related bus characteristics that are currently examined in other test categories. Under the current rule, only the Lane Change



Stability Test is included in the Safety test category. The first proposed Safety test sub-category is Hazards. The performance standard for Hazards would require that all bus models have no Class 1 failures at the completion of the test that remained uncorrected. Bus models that satisfy this requirement would receive 10 points. The Stability performance standard would require that a bus model achieve a lane change speed of no less than 45 mph with the bus under control and all wheels on the ground throughout the maneuver. A bus that satisfies the stability standard would receive 2.5 points. There are three safety test sub-categories addressing the braking performance of a bus model. The first Braking performance standard would require the bus to stop from 45 mph in no greater than 158 feet. Bus models that require less than 158 feet to stop would receive 0.5 base points and up to an additional 2.0 prorated points if the bus stops in 80 feet or less. The average test result from this report would be used to award the score. The second Braking performance standard addresses the ability of a bus model to remain within a 12 foot road lane width during a split coefficient brake stop. A bus model that stays within the lane of travel during the stop would receive 2.5 points. The third Braking performance standard addresses the ability of the parking brake to hold the bus stationary on a 20-percent grade while facing uphill and downhill for 5 minutes each. Bus models that satisfy this requirement would be awarded 2.5 points.

#### D.1.3. Maintainability Test

The proposed scoring of the Maintainability Test is shown in Table D-2. A total of 16 points is available in this category. The maintainability performance standard would be set at no greater than 125 hours of unscheduled maintenance activity over the course of the test. All bus models that accumulate no more than 125 hours of unscheduled maintenance would receive 2.0 base points.

FTA believes that maintainability performance above the level set by the performance standard provides additional benefit to the transit industry. FTA is proposing that bus models that accumulate no unscheduled maintenance hours during the test would receive an additional 14 points. Test results between 125 and zero hours would receive an additional prorated amount of points between 0.0 and 14.0. For example, a bus that accumulated 25 hours would receive 13.2 points ( $2.0 + (125-25)/125 * 14 = 13.2$ ) and a bus that accumulated 100 hours would receive

4.8 points ( $2.0 + (125-100)/125 * 14 = 4.8$ ).

#### D.1.4. Reliability Test

The proposed scoring of the Reliability Test is shown in Table D-2. A total of eight points are available in this category. The proposed performance standard allows for accumulation of up to two uncorrected Class 2 failures at the completion of the test. All bus models that have two uncorrected Class 2 failures or fewer would receive 2.0 base points.

FTA believes that reliability performance above the level set by the performance standard provides additional benefit to the transit industry such as fewer road calls and service disruptions. As a result, FTA is proposing that if a bus model accumulated no Class 2 failures throughout the test it would receive an additional 6.0 points. A bus model that accumulates one uncorrected Class 2 failure would receive a total of 5.0 points (2.0 base points + 3.0 prorated points) by linearly prorating the points between two and zero failures.

#### D.1.5. Fuel Economy Test

The proposed scoring of the Fuel Economy Test is as shown in Table D-2. A total of 7.0 points is available in this category. The proposed scoring is a summation of the base score awarded for satisfying the applicable vocational vehicle fuel efficiency requirements from 49 CFR part 535 and the additional points awarded based on the results of the Bus Testing Program fuel economy test.

The fuel economy testing would consist of operating the new bus models on a chassis dynamometer over three different driving cycles (Manhattan, Orange County Bus Cycle, and the Heavy-Duty Urban Dynamometer Driving Schedule (HD-UDDS)). The driving cycles were selected during the emissions test development process to simulate a range of transit bus operating routes.<sup>25</sup> All new bus models would be tested over these cycles regardless of their weight or passenger capacity. During the test, only the energy consumed to provide bus propulsion would be measured. The fuel efficiency impact of heating or cooling the bus interior, while potentially significant, would not be evaluated during the test as the test facility does not provide a controlled ambient environment in the dynamometer facility.

<sup>25</sup> West Virginia University, Center for Alternative Fuels, Engines & Emissions, *Transit Vehicle Emissions Program*, Dr. Scott Wayne, FTA Project No. WV-26-7008, May 2013.

The fuel economy testing accommodates a wide range of fuel sources and propulsion technologies. Transit buses historically have been produced in relatively low volumes totaling about 5,000 units of all types annually. Due to these low volumes, the majority of buses rely on the medium and heavy-duty truck powertrain and incomplete chassis vehicle supplier marketplace from which to source their bus propulsion systems. The current OEM powertrain market supplies complete gasoline and diesel powered cutaway chassis for body-on-frame buses. The OEMs also supply diesel and natural gas engines combined with traditional mechanical (automatic) and hybrid-electric transmissions with energy storage systems for the heavy-duty urban transit bus manufacturers. Additionally, there are third-party alternative fuel conversion suppliers that provide compressed natural gas (CNG) and liquefied petroleum gas (LPG (propane)) conversions of OEM gasoline cutaway chassis used by the bus manufacturers. Hybrid-electric and full electric conversions of OEM cutaway chassis are also available in the market. Heavy-duty bus OEMs are now developing and producing their own full electric and hydrogen fuel-cell electric powertrains in low volumes.

FTA used the Bus Testing Program fuel economy results from 2010 and newer bus models to establish the proposed fuel economy and fuel consumption scoring scales. The test results for the 2010 and newer bus models reflect the current state of bus propulsion technologies that are compliant with current EPA emissions laws and their impact on transit bus fuel economy. FTA is proposing four different scales to score the fuel economy results based on the bus model fuel type: liquid fuel (gasoline, diesel, propane and liquefied natural gas); CNG; hydrogen; and electric. For each proposed scale, the minimum was based on the measured or estimated fuel economy/fuel consumption of the largest transit buses—that is, a 60-foot long articulated bus, for each fuel type category. The scale maximum of each fuel scoring category was based on actual or estimated maximum results for each fuel type category with an additional margin to allow for future improvements in fuel efficiency. In formulating the proposed fuel economy scoring system, FTA focused on the intended purpose of providing information for bus model procurement decisions and fleet-level decisions about fueling infrastructure investments and bus operations.

Commonly, bus procurement solicitations already specify the length, the passenger capacity, and the fuel type. It is unlikely that transit agencies would be comparing bus testing fuel economy results for buses of different fuel types and significantly different passenger capacities when reviewing bids. Bus fleet strategy parameters such as bus design type (heavy-duty urban, cutaway, or paratransit), passenger capacity, and bus fuel type are usually decided prior to issuing a bus procurement request for proposal (RFP). Once the desired fuel has been decided, minimization of the overall fuel cost is the objective. However, this cost includes several variables including the unit price of the fuel, the amortized cost of any fuel specific fueling infrastructure, and the fuel efficiency of the bus models over its intended transit routes. Of these considerations, only the fuel efficiency of the bus is addressed by the Bus Testing Program, as fuel prices—including alternative fuels and electricity—are subject to market forces. Fueling infrastructure requirements vary by the type of fuel used, the size of the bus fleet, and the characteristics of the bus routes. Due to the existence of these and many other variables that affect fuel operating costs FTA believes it is not critical to use an identical measure to score the fuel economy of the four fuel types.

FTA considered other fuel economy scoring systems recommended by the bus manufacturers and their powertrain suppliers. FTA considered a universal energy efficiency scoring scale like British Thermal Units (BTUs) per mile or diesel miles per gallon equivalent, etc. This type of scale was rejected as it does not take into account the other variables related to fuel cost (e.g., regional pricing differences, availability of fueling infrastructure, etc.), the change in relative efficiency between fuel types when operating in extreme climates, particularly in cold climates, and due to the significantly greater efficiency of electric buses, the resulting loss in granularity of the scale would greatly minimize the difference in score between bus models of similar size and fuel type, which defeats the objective of the program. We also considered a passenger miles per gallon or equivalent fuel consumption version of this metric. This type of metric was rejected as it assumes that buses are always operating with a full passenger load, that it would show that larger buses are more efficient even though they consume more fuel, which is counter-intuitive to consumers. FTA believes this metric could motivate bus manufacturers to over-maximize the

passenger capacity of their bus model submitted for testing. This metric would also penalize bus models submitted for testing that employed a seating layout that was optimized for passengers who use wheelchairs, as the resulting total passenger capacity would be lower than that of the same bus model optimized for seated or standing passengers. FTA considered a ton-miles per gallon metric but this was rejected as it again would indicate that heavier buses are more efficient even though they consume more fuel. Lastly, FTA considered the merits of establishing multiple scoring scales based on bus size or bus passenger capacity. This approach could further increase the granularity of the scoring, highlighting differences between similar bus models. However, this type of scoring system was rejected due to concerns about manufacturers artificially manipulating the characteristics of the test bus to gain entry into the category that had most advantageous scoring system.

The proposed base score for satisfying the performance standard is 1.0 point. The remaining 6.0 points would be determined based on one of the applicable scales for the dominant fuel type of the bus model. For liquid-fueled buses, the average miles per gallon measured would be scored from the range of 1 mile per gallon (MPG) to a maximum of 13 MPG. All bus models that average 1 MPG or less would be awarded the base points. Bus models that average 13 MPG or more would be awarded an additional 6.0 points. Test results between 1 and 13 MPG would be awarded a prorated score between 0.0 and 6.0.

All CNG-fueled bus models that consume an average of 50 standard cubic feet per mile (SCF/mile) or more would receive the base score. An additional 6.0 points would be awarded for a test result of 10 SCF/mile or less. (Note: since the SCF/mile metric is a consumption metric, numerically lower values of SCF/mile would indicate greater efficiency). Test results between 50 and 10 SCF/mile would receive an additional amount of points prorated between 0.0 and 6.0.

All hydrogen-fueled bus models that consume an average of 98 standard cubic feet per mile (SCF/mile) or more during the test would receive the base score. An additional 6.0 points would be awarded for a test result of 15 SCF/mile or less. Test results between 98 and 15 SCF/mile would receive an additional amount of points prorated between 0.0 and 6.0. The hydrogen scoring scale was developed by a relative comparison of the measured performance of hydrogen fuel-cell

powered 40-foot buses during National Fuel Cell Bus Program demonstrations and scaling the results for a 60-foot bus model.

Bus models whose primary source of power is electricity would be scored based on the consumption metric of kiloWatt-hours per mile (kW-hr/mile). Test results of 3 kW-hr/mile or greater would receive the base score. Averaged test results of 1 kW-hr/mile or less would be awarded an additional 6.0. (Note: Since the kW-hr/mile metric is a energy consumption metric, not a fuel economy metric, numerically lower values of kW-hr/mile indicate greater efficiency). Test results between 3 and 1 kW-hr/mile would receive an additional score prorated from 0.0 to 6.0.

#### D.1.6. Emissions Tests

The proposed scoring of the Emissions test results is shown in Table D.-2. A total of seven points would be available in this category. The proposed scoring is based on a combination of satisfying the emissions performance standard and the test results for six measured emission products averaged over the Manhattan, Orange County, and HD-UDDS transit bus driving test cycles. A base score of 1.0 point would be awarded to each new bus model that meets all applicable EPA exhaust emissions standards. The remaining six points available are distributed among the six exhaust emission categories measured during the transit specific Bus Testing Program emissions test with 4.0 points available in the carbon dioxide (CO<sub>2</sub>) category and 0.4 points available in each of the five other categories of carbon monoxide (CO), total hydrocarbon (THC), non-methane hydrocarbon (NMHC), nitrogen oxides (NO<sub>x</sub>), and particulate matter (PM). The CO<sub>2</sub> category was assigned 10 times the available points of the other categories due to the fact that, while it is now regulated by the EPA, the gross amount of these emissions is significantly greater than the others and CO<sub>2</sub> emissions vary among similar size bus models based on their fuel type and propulsion technology. FTA would like to highlight the difference in CO<sub>2</sub> emissions between bus models.

The scoring scale for each category of exhaust emissions was developed from the test results of the 49 bus models tested since 2010. These bus models represent the current state of production bus emissions performance. The results for all current bus models would fall within the range of the performance bounds proposed. Bus Models with overall test results for CO<sub>2</sub> emissions of 4,000 grams per mile or greater would

receive the base score and an averaged test result of zero grams per mile will be awarded an additional 4.0 points.

Averaged test results between 4,000 and 0 grams per mile would receive an additional amount of points prorated between 0.0 and 4.0. Test results for carbon monoxide emissions of 20 grams per mile or greater would receive the base score and an averaged test result of zero grams per mile would be awarded an additional 0.4 points. Averaged test results between 20 and 0 grams per mile would receive an additional amount of points prorated between 0.0 and 0.4.

Test results for total hydrocarbon emissions of 3 grams per mile or greater would receive the base score and an averaged test result of zero grams per mile would be awarded an additional 0.4 points. Averaged test results between 3 and 0 grams per mile would receive an additional amount of points prorated between 0.0 and 0.4.

Test results for non-methane hydrocarbon emissions of 3 grams per mile would receive the base score and an averaged test result of zero grams per mile would be awarded an additional 0.4 points. Averaged test results between 3 and 0 grams per mile would receive an additional amount of points prorated between 0.0 and 0.4.

Test results for oxides of nitrogen emissions of 2 grams per mile or greater would receive the base score and an averaged test result of zero grams per mile would be awarded an additional 0.4 points. Averaged test results between 2 and 0 grams per mile would receive an additional amount of points prorated between 0.0 and 0.4.

Test results for particulate emissions of 0.1 grams per mile or greater would receive the base score and an averaged test result of zero grams per mile would be awarded an additional 0.4 points. Averaged test results between 0.1 and 0 grams per mile would receive an additional amount of points prorated between 0.0 and 0.4.

#### D.1.7. Noise Tests

The proposed scoring of the Noise Test results is as shown in Table D-2. The Noise Test category would be worth a total of 7 points with 3.5 points assigned to interior noise level and 3.5 points to the exterior noise level. Both noise performance standards address the noise levels produced by the bus while accelerating from 0 to 35 mph at its maximum rate. Test results for interior noise at or below the performance standard threshold of 80 decibels would receive 0.5 base points and test result of 30 decibels would be awarded an additional 3.0 points. Test results between 80 and 30 decibels would receive an additional amount of points prorated between 0.0 and 3.0. Test results for exterior noise at the performance standard threshold of 83 decibels would receive 0.5 base points and test result of 50 decibels would be awarded an additional 3.0 points. Test results between 83 and 50 decibels would receive an additional amount of points prorated between 0.0 and 3.0.

#### D.1.8. Performance Tests

The proposed scoring of the three Performance Tests is as shown in Table D.2. A total of five points would be

available in this test category. The first sub-category tests the acceleration from 0–30 mph. A bus that accelerates to 30 mph in no greater than 18 seconds would satisfy the performance standard and receive 1.5 points. The maximum sustained speed on a 2.5 percent grade is the next sub-category. A bus model that is determined to be capable of sustaining no less than 40 mph on a 2.5 percent grade would satisfy the standard and receive 1.5 points. The maximum sustained speed on a 10 percent grade is the next sub-category. A bus model that is determined to be capable of sustaining no less than 10 mph on a 10 percent grade would satisfy the standard and receive 2.0 points. No discretionary points were assigned to this test category. FTA believes that performance in this category above the proposed performance standards is not necessarily beneficial to all transit agencies.

#### D.2. Calculation of the Aggregate Score

The aggregate score would be the summation of all of the individual test sub-category scores. The raw aggregate score would be rounded to the nearest whole number by rounding down when the first digit to the right of the decimal point is below 5 and rounding up when the first digit to the right of the decimal point is 5 or greater. Table D-3 presents the scoring for two bus models within the study group, report numbers PTI-BT-1007 and PTI-BT-1108. Both buses are 40-foot heavy-duty diesel-hybrid electric bus models with a 12-year service life.

TABLE D-3: Test Results Scoring of Two Bus Models

Test Category		Performance Standard	Report No. PTI-BT-1007		Report No. PTI-BT-1108	
			Performance Standard Met	Result	Performance Standard Met	Result
				Points Awarded		Points Awarded
Structural Integrity	Shakedown	Maximum permanent chassis deflection $\leq$ 0.006 inch after 3 load cycles	Met		Met	
	Distortion	All exits remain operational under each distortion loading condition	Met		Met	
	Static Towing	No significant deformation under 120% curb weight load	Met		Met	
	Dynamic Towing	Bus is towable with standard wrecker	Met		Met	
	Jacking	Bus is liftable with a standard jack	Met		Met	
	Hoisting	Bus stable on jacks	Met		Met	
	Durability	No uncorrected frame & body structure failures remaining at completion of test	Met		Met	
No uncorrected powertrain failures remaining at completion of test		Met		Not Met		
Safety	Hazards	No uncorrected Class 1 reliability failures remaining at test completion	Met		Met	
	Stability	Lane change speed no less than 45 mph	Met		Met	
	Braking	Stopping distance from 45 mph within 158 feet as per FMVSS 105 & FMVSS 121	Met	143.19 ft	NA-Bus Could not achieve 45 mph	NA
				0.38		0.00
		Bus remains within lane during split coefficient brake stops	Met		Met	
Parking brake holds on 20% grade	Met		Met			
Maintainability	Accumulation of no more than 125 hours of unscheduled maintenance	Met	25	Not Met	180	
			11.20		0.00	
Reliability	No more than 2 uncorrected Class 2 failures remaining at completion of test	Met	0	Met	2	
			6.00		0.00	

TABLE D-3: Test Results Scoring of Two Bus Models (Cont'd) Test Category	Performance Standard	Test Results Scoring Scale	Report No. PTI-BT-1007		Report No. PTI-BT-1108	
			Performance Standard Met	Result	Performance Standard Met	Result
				Points Awarded		Points Awarded
<b>Fuel Economy</b>	Compliant with 49 CFR Part 535 MEDIUM- AND HEAVY-DUTY VEHICLE FUEL EFFICIENCY PROGRAM-Heavy-Duty Vocational Vehicle Fuel Consumption Standards	Liquid Fuels: 1-13 mpg/ 0.0-6.0 points	NA- Met	4.71 avg	NA-Met	3.15 avg
				1.86		1.08
		Compressed Natural Gas 50-10 SCF/mi/ 0.0-6.0 points				
		Hydrogen 98-15 SCF/mi/ 0.0-6.0 points				
	Electric 3-1 kW-hr/mi/0.0-6.0 points					
<b>Emissions</b>	40 CFR Part 86 CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES Or 40 CFR Part 1037 CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES	Carbon Dioxide (CO <sub>2</sub> ) Grams/mi: 4000-0/ 0.0-4.0 points	Met	2063 avg	Met	3251 avg
				1.94		0.75
		Carbon Monoxide (CO) Grams/mi: 20- 0/ 0.0-0.4 points		0.15 avg		1.97 avg
				0.40		0.36
		Total Hydrocarbon (THC) Grams/mi: 3- 0/ 0.0-0.4 points		0.01 avg		0.10 avg
				0.40		0.39
		Non-Methane Hydrocarbon (NMHC) Grams/mi: 3- 0/ 0.0-0.4 points		0.01 avg		0.10 avg
				0.40		0.39
		Nitrogen Oxides (NO <sub>x</sub> ) Grams/mi: 2-0/ 0.0-0.4 points		0.74 avg		14.25 avg
				0.25		0.00
	Particulate Matter (PM)	0.006 avg	0.02 avg			

Test Category	Performance Standard	Test Results Scoring Scale	Report No. PTI-BT-1007		Report No. PTI-BT-1108	
			Performance Standard Met	Result	Performance Standard Met	Result
				Points Awarded		Points Awarded
Interior Noise	No greater than 80 decibels (dB)	80-30 dB/0.0-3.0 points	Met	77.2 dB	Met	71.2 dB
				0.17		0.53
Exterior Noise	No greater than 83 decibels (dB)	83-50 dB/0.0-3.0 points	Met	65.8 dB	Met	62.9 dB
				1.56		1.83
Acceleration	0-30 mph $\leq$ 18 seconds		Met		Met	
Gradeability	Speed on 2.5% $\geq$ 40mph		Met		Met	
	Speed on 10% $\geq$ 10mph		Met		Not met	
Are all performance standards met?			Yes		No	
Overall Result			Pass		Fail	
Scoring Subtotals			60	24.9		
Aggregate Score			85		Fail	

#### E. Pass/Fail Standard

In order to allow an amount of discretionary points available that provides meaningful dispersion of test scores and to maintain the test category scoring weights consistent with the relative importance between test categories, FTA proposes a pass/fail standard of 60 points. Under the proposed Bus Model Scoring System, a total of 60 points is achieved when a bus model meets, but does not anywhere exceed, the minimum requirements of each of the performance standards.

With regard to the testing at issue in this rulemaking, in order for a bus to be eligible for FTA funding, MAP-21 now requires that it meet two criteria. First,

under paragraph 5318(e)(1), FTA funding is allowed only if the “bus . . . met . . . performance standards for maintainability, reliability, performance (including braking performance), structural integrity, fuel economy, emissions, and noise, as established by the Secretary by rule.” That is, a bus would be required to at least meet the minimum standards proposed in today’s NPRM. Second, under paragraph 5318(e)(2), the bus also would need to pass the proposed “Bus Model Scoring System” based on the bus’ aggregate score. With the proposed pass/fail standard, FTA is choosing to link those two requirements. Without the two requirements being linked, FTA believes it would not be possible to establish a

pass/fail standard that requires some level of performance above the minimum levels established by the performance standards. However, FTA seeks comment on whether or not there are alternatives to this approach. Additionally, FTA proposes that, to eliminate confusion for recipients, a bus model that fails to satisfy one or more performance standards would not be issued an overall score until the failures are resolved. This is necessary to prevent the situation where a bus model fails an essential performance standard but scored very high in one or more other categories, potentially elevating the aggregate score above 60.

*E.1. Effective Date of Pass/Fail Requirements*

The performance standards, Bus Model Scoring System, and pass/fail standard would become effective ninety days after the final rule is published and would apply to both new bus models and previously tested bus models subsequently produced with major changes that require partial testing. The date of the signed contract for testing would determine the applicability of the new rule to a bus model.

*E.2. Resolving the Failure To Meet a Performance Standard*

When a new bus model undergoing testing fails to meet any one of the minimum performance standards, testing would be halted, pending a review of the test result by the Bus Testing Facility operator, the FTA Bus

Testing Program Manager, and the bus manufacturer. Except for the test categories of Structural Integrity Test, Maintainability Test, and Reliability Test, FTA proposes that for test results that achieve 95 percent or greater of the value set for the performance standard but fail to meet the standard, that the test would be conducted one additional time at no additional cost to the manufacturer. For failures to meet the performance standards in the Structural Integrity Test, Maintainability Test, and Reliability Test, FTA proposes that a manufacturer propose and implement a design remedy to directly address the failure and then repeat the test(s) necessary to validate the design remedy. The FTA Bus Testing Program would bear 80 percent of the costs associated with one re-test in these test categories. If the proposed bus modifications necessary to remedy a performance

standard failure are considered a “major” change in configuration or component, additional testing may be required.

*E.3. Scoring of New Partial Tests*

Existing bus models that undergo major changes in configuration or component (as defined in 665.5) that would require partial testing after the effective date of this rule would be scored based on the results for the new tests conducted and on the older test results that did not need to be repeated. During the partial test determination process, FTA would review the existing test data for that bus model and may require the retesting in categories where the existing report indicates a failure to meet a performance standard, in addition to the test categories affected by the major change in configuration.

TABLE E-1—PARTIAL RETEST REQUIREMENTS EXAMPLE

Test category	Original Bus Report No. PTI-BT-1007	Partial Bus Report No. PTI-BT-1007-P
Structural Integrity		
Shakedown .....	Met .....	No Retest Required.
Distortion .....	Met .....	No Retest Required.
Static Towing .....	Met .....	No Retest Required.
Dynamic Towing .....	Met .....	No Retest Required.
Jacking .....	Met .....	No Retest Required.
Hoisting .....	Met .....	No Retest Required.
Durability .....	Met .....	No Retest Required.
Safety		
Hazards .....	Met .....	No Retest Required.
Stability .....	Met .....	No Retest Required.
Braking .....	Met .....	Retest.
Maintainability .....	Met .....	No Retest Required.
Reliability .....	Met .....	No Retest Required.
Fuel Economy .....	Met .....	Retest.
Emissions .....	Met .....	Retest.
Interior Noise .....	Met .....	Retest.
Exterior Noise .....	Met .....	Retest.
Acceleration .....	Met .....	No Retest Required.
Gradeability .....	Met .....	No Retest Required.
Are All Performance Standards Met? .....	Yes .....	Yes.
Overall Results .....	Pass .....	Pass.
Scoring Subtotals .....	24.9 .....	25.4.
Aggregate Score .....	85 .....	85.

*E.4. Scoring of Existing Bus Models*

Due to the administrative and financial burden of retesting all existing transit buses under the testing program proposed in today’s NPRM, FTA proposes that buses with a valid test report conducted under the current testing program would remain eligible for FTA financial assistance until the bus undergoes a major change in component or configuration, because a major change in the configuration or a component might invalidate the data contained in its test report that was based upon a particular component (e.g. engine) or configuration (e.g., front- vs.

rear-mounted engine). A major change is currently defined by the Bus Testing Program rule (49 CFR 665) as:

(1) *Major change in chassis design* means, for vehicles manufactured on a third-party chassis, a change in frame structure, material or configuration, or a change in chassis suspension type;

(2) *Major change in components* means:

(a) For those vehicles that are not manufactured on a third-party chassis, a change in a vehicle’s engine, axle, transmission, suspension, or steering components;

(b) For those that are manufactured on a third-party chassis, a change in the

vehicle’s chassis from one major design to another;

(3) *Major change in configuration* means a change that is expected to have a significant impact on vehicle handling and stability or structural integrity.

For the benefit of purchasers, FTA proposes that the data from existing test reports would be evaluated using the new criteria to calculate an aggregate score, with the resulting amended test report reflecting the vehicle’s performance using the new criteria, along with new scores for any additional partial tests that conform with the new criteria. The amended report would apply the scoring system

adopted in the final rule and generate an aggregate score for the applicable performance standards.

#### *E.5. Re-Testing of Existing Bus Models To Raise the Overall Score*

FTA would approve the execution of one partial test of an existing bus model that has undergone non-major changes (e.g., adjusting engine or transmission control software in order to improve mileage, replacing wall insulation in order to further reduce interior noise) in anticipation of achieving a higher aggregate score. Existing bus models that undergo major configuration changes would continue to be eligible for partial testing. If a bus fails to obtain a passing score, the vehicle is ineligible to participate in FTA-assisted procurements.

### **F. Other Proposed Program Changes**

#### *F.1. Bus Payloading Procedures*

There are three bus loading conditions currently employed during the testing process. Portions of the Durability Test are performed at curb weight (CW = bus weight including maximum fuel, oil, and coolant; but without passengers or driver), seated load weight (SLW = 150 pounds load in each passenger seat and 600 pounds per wheelchair position), and at gross vehicle weight (GVW = seated load weight plus 150 pounds for every 1.5 square feet of free floor space). Under the current Bus Testing Rule, loading to GVW is performed even if the gross vehicle weight rating (GVWR) or the axle weight ratings (AWR) have been exceeded. While this loading procedure is a good approximation of the potential peak passenger loads in actual transit service, it creates some negative impacts that are difficult to resolve. For instance, not all buses are designed for transporting standing passengers and those that are not designed for standees could be loaded beyond the ratings of the chassis components. Thus, analysis of durability and reliability failures during the test will be confounded by the overloading, and the bus model's ability to satisfy the performance standards at its rated load is unknown. Additionally, a bus model's compliance with FMVSS in an overloaded condition is also unknown, as bus chassis and chassis component warranties are contingent upon their usage within their weight ratings.

Therefore, we propose to modify the existing test to only load the bus up to its maximum weight rating, in contrast to the current procedure of loading the vehicle with a full complement of seated and standing passengers, even if

this would exceed the vehicle's weight rating. By testing within the rated passenger capacity of the bus model, all manufacturers would be treated equally as they would be specifying the capacity of their bus models. Under the proposed performance standards, FTA would require that Durability and Class 2 Reliability failures be remedied by the end of the test. Vehicle manufacturers should be aware that chassis and chassis component suppliers might not offer any remedies to these failures if they believe that overloading is causing the failure.

FTA proposes the following changes to the bus payloading procedure:

(1) Manufacturers are to specify, on the interior bulkhead of the bus, the maximum number of standee passengers their bus model is designed to carry.

(2) The maximum number of standee passenger loadings would be based on 150 pounds and 1.5 square feet of free floor space per standee passenger.

(3) Free floor space would exclude the designated areas for wheelchair passengers, ingress/egress areas, area under seats, area occupied by feet of seated passengers, and the vestibule area.

(4) Seated Load Weight (SLW) would be 150 pounds for every passenger seat, the driver's position, 600 pounds per wheelchair position, plus the curb weight of the bus.

(5) Gross Weight (GW) would be SLW plus the total standee weight (product of 150 pounds \* maximum (rated) number of standees).

The ability of a bus model to carry its full complement of seated, wheelchair, and standee passengers would be assessed by measuring the weight at each wheel position with the bus loaded to GW and comparing to the GVWR, the GAWRs, and the maximum wheel and tire load ratings. Buses that exceed any of their ratings when loaded to GW would not be tested until the passenger rating is within the rated weight capacity of the bus. FTA seeks comment on these proposed changes.

FTA is also proposing changing the definition of *Curb Weight* in the 665.5 of the rule from "*Curb weight* means the weight of the empty, ready-to-operate bus plus driver and fuel." to "*Curb weight* means the bus weight including maximum fuel, oil, and coolant; but without passengers or driver." so that it is the same as used in the current Bus Testing Program procedures and consistent with automotive industry practice. This change results in no new costs as the current practice remains the same.

#### *F.2. Elimination of On-Road Fuel Economy Testing*

FTA proposes that the Fuel Economy Test only be performed on the chassis dynamometer in conjunction with the emissions testing. The bus testing facility operator has been measuring fuel economy performance on both the test track and on the chassis dynamometer since the emission testing capability became available in 2010. A chassis dynamometer is a device used to replicate the motion resisting forces that act on a vehicle when it is driven. A chassis dynamometer consists of a large diameter drum, a drive system, and a control system. The drum is mounted indoors in the floor of the emissions test laboratory. The bus drive wheels are placed directly onto the top of the drum and the bus is physically restrained in place with chains and ratcheting straps. During the fuel economy/emissions testing the bus is driven at the speeds prescribed by each test duty cycle. The dynamometer applies a resistive load as it spins that replicates the total motion resistance the bus would experience if it was actually on a road.

While the duty cycles used in the dynamometer-based emission testing are not the same as those used during the on-road testing, they have proven to be comparable. The on-road (test track) fuel economy test determines fuel economy over three different duty cycles:

1. "Central Business District (CBD)" phase of 2 miles with 7 stops per mile and a top speed of 20 mph;

2. "Arterial" phase of 2 miles with 2 stops per mile and a top speed of 40 mph;

3. "Commuter" phase of 4 miles with 1 stop and a maximum speed of 40 mph.

The dynamometer fuel economy test is also conducted over three different duty cycles:

1. "Manhattan" phase of 2 miles with 9.5 stops per mile and a top speed of 25 mph;

2. "Orange County Bus Cycle" phase of 6 miles with 5 stops per mile and a top speed of 41 mph;

3. "HD-UDDS" phase of 5 miles with 2 stops per mile and a max speed of 58 mph. The CBD and the Manhattan cycles represent urban bus operation, the Arterial and the Orange County Bus Cycle represent suburban or express operation, and the Commuter and HD-UDDS cycles represent commuter type bus operations. While the test results for the same bus model will not be same for both urban, suburban, and commuter tests (on-track vs. dyno), the rank order relationships of the resulting fuel efficiencies has proven to be the same with the urban having the lowest and



the commuter having the highest. There is no compelling need for the dyno test cycles to be exactly the same as the on-track testing. Maintaining three distinct test cycles for our transit consumers is the primary objective.

FTA believes that the test results from the dynamometer test would be more accurate and more consistent than the on-road results, since the variables of wind and ambient temperature range are minimized or eliminated. The Manhattan and the Orange County Bus Cycle are real world measured duty cycles. The CBD, Arterial, and the Commuter are analytical representations of the real world that took into consideration the limitations of conducting the test on the test track. Elimination of the on-road fuel economy test would also reduce test program costs and shorten the length of the overall test schedule. FTA requests comments on this proposal.

#### *F.3. Bus Passenger Load for Emissions Testing*

The current Emissions test specifies a bus payload equal to two-thirds of the maximum seated passenger load. The origin of this requirement was from previous heavy vehicle exhaust emissions research.<sup>26</sup> FTA proposes that the Emission test be conducted at seated load weight (SLW), instead of two-thirds SLW, to enhance the efficiency of the testing process. In this way time and labor costs are reduced for bringing the SLW down to two-thirds SLW. This change results in a 4–6 percent increase in the total test weight, thereby slightly reducing measured fuel economy and slightly increasing emissions. All of the other bus performance tests are conducted at SLW. Maintaining consistency with past emission research does not provide additional value to the Bus Testing Program. Additionally, the Bus Testing Program Emissions test is not used to determine regulatory compliance other than the proposed performance standards in this notice. The proposed Emission performance standards were formulated to allow for the slight increase in vehicle test weight that this change would impart. FTA requests comments on this proposal.

#### *F.4. Bus Testing Entrance Requirements*

Currently, an entity desiring to test a bus enters into a contract with the bus testing facility operator, without any pre-approval or pre-authorization from FTA. Therefore, FTA proposes new procedural requirements for a bus to

enter the Bus Testing Program as follows: 1) Bus models submitted for testing must be from a transit vehicle manufacturer (TVM) whose Disadvantaged Business Enterprise (DBE) goals have been submitted to FTA, consistent with 49 CFR Part 26 *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. 2) Test model buses also must comply with applicable NHTSA requirements in 49 CFR Part 566 *Manufacturer Identification*; 49 CFR Part 567 *Certification*; and 49 CFR Part 568 *Vehicle Manufactured in Two or More Stages—All Incomplete, Intermediate and Final-Stage Manufacturers of Vehicle Manufactured in Two or More Stages*.

In order to commence testing, FTA proposes that test model buses would also need to identify the maximum quantity of standee passengers, be capable of negotiating the Durability Test course at the requisite test speed under all conditions of loading (curb weight, seated load weight, and gross weight), and be capable of following the test duty cycles used for Fuel Economy and Emissions Test within the established test procedure standard for allowable speed deviation.

#### *F.5. Buy America*

Lastly, FTA is proposing that bus models submitted for testing satisfy the domestic content requirement of FTA's Buy America regulation (see 49 CFR 661.11, *Rolling Stock Procurements*). FTA believes this change would not be a significant impediment to commencing testing, as section 665.11 of the bus testing regulation already requires test models to be "substantially fabricated and assembled using the techniques, tooling, and materials that will be used in production of subsequent uses of that model." This change would ensure that the buses and components tested would be similar, if not identical to, the vehicles ultimately manufactured for FTA recipients. FTA does not expect any change to the component costs because the test buses will be identical to the production models, however, FTA is seeking comment regarding component changes that might result in incremental costs to vehicle manufacturers.

#### *F.6. Scheduling of Testing*

Currently, the scheduling of a full test can be accomplished by going directly to the facility operator and completing a bus testing contract and submitting other required documentation ([http://www.altoonabustest.com/schedule\\_testing](http://www.altoonabustest.com/schedule_testing)). Request for partial testing must

go to the FTA Bus Testing Program Manager first for a determination of the set of tests necessary to bring the new bus model configuration into compliance with the rule with respect to its major changes in configuration. The bus manufacturer then submits the partial testing determination letter provided by FTA to the facility operator to schedule the partial test program.

FTA proposes that all requests for full or partial testing be submitted to the FTA Bus Testing Program Manager for review prior to scheduling a test with the Bus Testing Facility operator. All requests shall provide: A detailed description of the new bus model (or previously tested bus model incorporating major changes) to be tested; the service life category of the bus; engineering level documentation characterizing all major changes to the bus model, and documentation that demonstrates satisfaction of each one of the testing requirements outlined in paragraph 665.11(a). FTA would review the request and determine if the bus model is eligible for testing and which tests need to be performed. FTA would prepare a written response to the requester for use in scheduling the required testing with the Bus Testing Facility.

#### *F.7. Test Requirements Review Milestone*

FTA proposes the addition of a Test Requirements Review Milestone that examines the results from the initial check-in inspections of the bus (which occurs when the bus first arrives at the testing facility), passenger payloading results, and the results of initial testing operations. The purpose of this milestone is to verify that the bus matches the bus documented in the test request and has satisfied the program entrance criteria prior to the expenditure of FTA program funding on this bus model. The intent of this Test Requirements Review Milestone is to ensure that buses submitted to the Program are ready for testing. The review would be conducted during the expenditure of the 20 percent manufacturer fee and before the expenditure of the 80 percent Federal matching program funding. If the bus has met all of the requirements 49 CFR 665.11, testing of the bus model would continue.

#### *F.8. Penalty for Unauthorized Maintenance and Modification*

Unauthorized maintenance and repairs by bus manufacturer representatives, such as the replacement of vehicle parts or repairs that were not captured by the bus testing facility

<sup>26</sup> West Virginia University, Center for Alternative Fuels, Engines & Emissions, *Transit Vehicle Emissions Program*, Dr. Scott Wayne, FTA Project No. WV-26-7008, May 2013.

operator and recorded into the test report can lead to erroneous test results that are not reflective of the bus model in its documented configuration. To prevent this situation, FTA proposes that the Bus Testing Facility operator investigate each occurrence of unsupervised maintenance and repairs and determine the potential impact to the validity of the test results. Tests where the results may have been impacted would be repeated at the manufacturer's expense. Undocumented bus modifications can also lead to results that do not reflect accurately the performance capability of the documented configuration of the bus. FTA proposes that the facility operator perform all modifications on the test vehicle, consistent with the manufacturer's specifications, unless the operator determines that the nature of the modification is best performed by the manufacturer under the operator's supervision. Significant vehicle modifications performed after the test has started would first require review and approval by FTA. If the modification is determined to be a major change, some or all of the tests already completed may need to be repeated or extended. Additionally, the facility operator would halt testing after the occurrence of unapproved or unsupervised test vehicle modifications. The vehicle manufacturer would submit a new test request to FTA that addresses all the requirements in 49 CFR 665.11 to reenter the Bus Testing Program.

**F.9 Testing of Remanufactured Buses**

FTA is not proposing the application of the Bus Testing Program requirements to remanufactured bus models in this NPRM. However, FTA is

seeking comments related to the testing and the appropriate service life expectations of remanufactured buses. Previously performed in-house by transit agencies or by their contractor as part of one's fleet maintenance, rebuilt ("remanufactured") used transit buses are now being sold to FTA recipients by third-parties as an alternative to acquiring a newly-manufactured bus model. Bus testing requirements have never been applied to rebuilt or remanufactured buses (in-house or contracted) by the transit operators regardless of the level of configuration changes performed, as this was part of a transit agency's asset management obligations and the overall grant program risk was considered low. The availability of fully depreciated (service life requirement satisfied) used transit bus models with sound (at least perceived sound) structures at a low cost enables a potentially attractive value proposition to transit operators and enables a new business opportunity for bus rebuilders.

The current Bus Testing Program policy for new and used bus models is presented in Table F.9–1. Used buses and remanufactured bus models that retain their production design configuration are not subject to additional testing as long as the bus model already underwent a full test. Remanufactured bus models with a major change in configuration procured using procedures employed to acquiring new buses could be treated as "new" bus models and subject to testing. However, the regulation does not identify a service life requirement. For these reasons, FTA has not applied the program requirements to remanufactured bus models. However,

FTA seeks external input regarding the expectations and requirements for remanufactured bus models.

Specifically, FTA seeks answers and comments to these questions:

1. What, if any, problems are recipients experiencing with remanufactured buses? For example, are remanufactured buses being prematurely retired compared to reasonable expectations and in light of the assumed reduced purchase cost? Do such buses need more maintenance than should be reasonably expected?
2. If recipients are experiencing problems with remanufactured buses, can the problems be addressed by subjecting the buses to FTA testing and scoring? If so, what standards should FTA use for testing?
3. What types of buses and how many are being remanufactured annually?
4. What actions are performed when remanufacturing a bus?
5. What are common entrance criteria for a used bus entering into the remanufacturing process? Mileage limits? Age? Usage history?
6. What structural inspection techniques are employed during the selection of candidate buses?
7. Should FTA apply Bus Testing requirements to all remanufactured buses or just the ones procured through a bus acquisition project?
8. What service life length should be applied to remanufactured buses?
9. Is a prorated service life requirement based on the ratio of the acquisition cost as compared to a similar new bus model appropriate?
10. What information is available for estimating the benefits and costs of testing requirements and a scoring system for remanufactured buses?

**TABLE F.9–1—CURRENT BUS TESTING REQUIREMENTS FOR ALL BUS ACQUISITION PROJECTS SUBSIDIZED WITH FTA CAPITAL GRANTS**

	Completely new bus model	Existing bus model with a "major" change	New and used bus models	Used bus model (remanufactured with no design changes)	Used bus model (remanufactured with a major change)
Required Testing .....	Full test (all test categories).	Partial test to address design changes. Durability test required only if the chassis or body structure was altered or structure is loaded beyond the load level of the original test.	No testing if the model has been through a full test already.		Meets the definition of a "new bus model". Full or partial testing is required. Durability test required only if the chassis or body structure was altered or structure is loaded beyond the load level of the original test.

TABLE F.9-1—CURRENT BUS TESTING REQUIREMENTS FOR ALL BUS ACQUISITION PROJECTS SUBSIDIZED WITH FTA CAPITAL GRANTS—Continued

	Completely new bus model	Existing bus model with a “major” change	New and used bus models	Used bus model (remanufactured with no design changes)	Used bus model (remanufactured with a major change)
Durability Test Length ..... Ex: A 12-year/500,000 mile service life bus will be tested the equivalent of 125,000 miles (25% of 500K). Actual durability test distance is 12,500 miles as the test track was designed to provide a 1 to 10 mile acceleration factor.).	25% of manufacturer designated or <sup>1</sup> minimum required service life distance, whichever is greater.				Undetermined.

**G. Section By Section Analysis**

*Section 665.1 Purpose*

FTA proposes to amend the purpose of the regulation to reflect a new pass/fail test and scoring system.

*Section 665.3 Scope*

FTA proposes no changes, as the requirements of this part continue to apply to recipients of Federal financial assistance under 49 U.S.C. Chapter 53.

*Section 665.5 Definitions*

FTA proposes changing the definition of *Curb Weight* from “Curb weight means the weight of the empty, ready-to-operate bus plus driver and fuel.” to “Curb weight means the weight of the bus including maximum fuel, oil, and coolant; but without passengers or driver.”

FTA proposes changing the definition of *Gross Weight* from “Gross weight, also gross vehicle weight, means the curb weight of the bus plus passengers simulated by adding 150 pounds of ballast to each seating position and 150 pounds for each standing position (assumed to be each 1.5 square feet of free floor space).” to “the seated load weight of the bus plus 150 pounds of ballast for each rated standee passenger, up to and including, the maximum rated standee passenger capacity identified on the bus interior bulkhead”.

FTA proposes changing the definition of *Seated Load Weight* from “Seated load weight means the weight of the bus plus driver, fuel, and seated passengers simulated by adding 150 pounds of ballast to each seating position.” to “the curb weight of the bus plus seated passengers simulated by adding 150 pounds of ballast to each seating position and 600 pounds per wheelchair position.” This 600 pound figure is based on the minimum load-bearing capacity for wheelchair lifts and ramps in the USDOT’s accessible bus

specifications at 49 CFR § 38.23(b)(1) and (c)(1).

*Section 665.7 Certification of compliance*

FTA proposes to amend this section to reflect that the recipient must certify that a bus has received a passing test score, but acknowledges that parties may seek assistance from FTA, consistent with FTA’s role in reviewing partial testing requests as described in section 661.11(d). FTA is also removing the term “Grantee” from the section heading and throughout this part, as FTA now uses the term “recipient.”

*Section 665.11 Testing requirements*

FTA proposes additional requirements for a bus to enter the Bus Testing Program. New bus models submitted for testing would be from a Transit Vehicle Manufacturer that has submitted its DBE goals to FTA consistent with 49 CFR part 26. Test model buses would also comply with applicable requirements in 49 CFR part 566 *Manufacturer Identification*; 49 CFR part 567 *Certification*; and 49 CFR part 568 *Vehicle Manufactured in Two or More Stages—All Incomplete, Intermediate and Final-Stage Manufacturers of Vehicle Manufactured in Two or More Stages*. Bus models would also need to have the maximum rated quantity of standee passengers identified on the interior bulkhead in 2 inch tall or greater characters, be capable of negotiating the Durability Test course at the requisite test speed under all conditions of loading (curb weight, SLW, and GVW), and be capable of following the test duty cycles used for Fuel Economy and Emissions Tests within the test procedure for allowable speed deviation. Lastly, bus models submitted would satisfy the domestic content requirements for rolling stock in 49 CFR part 661, *Buy America Requirements*.

*Section 665.13 Test report and manufacturer certification*

FTA proposes adding language to this section for a requirement for the Bus Testing Facility operator to score the test results using the performance standards and scoring system outlined in Appendix A of this part. FTA also proposes that the bus testing facility operator obtain approval of the Bus Testing Report by the bus manufacturer and by FTA prior to its release and publication. Finally, FTA proposes that the bus testing facility operator to make the test results available electronically to supplement the printed copies.

*Section 665.21 Scheduling*

FTA proposes that all requests for testing, including requests for full or partial testing, be submitted to the FTA Bus Testing Program Manager prior to scheduling with the Bus Testing Facility operator. All test requests would provide: a detailed description of the new bus model to be tested, the service life category of the bus, engineering level documentation characterizing all major changes to the bus model, and documentation that demonstrates satisfaction of each one of the testing requirements outlined in paragraph 665.11(a). FTA would review the test request and determine if the bus model is eligible for testing and which tests need to be performed. FTA would prepare a written response to the requester for use in scheduling the required testing with the Bus Testing Facility operator.

*Section 665.23 Fees*

FTA is proposing a requirement that the manufacturer’s share of the test fee would be expended first during the testing procedure and that the bus testing facility operator would obtain approval from FTA prior to committing FTA program funds.

### *Section 665.25 Transportation of Vehicle*

FTA is not proposing any changes.

### *Section 665.27 Procedures During Testing*

FTA is proposing additional language for this section to require the Bus Testing Facility operator to inspect the bus model configuration upon arrival to compare it to that submitted in the test request; to compare the gross vehicle weight and gross axle weights to the ratings on the bus; to determine if the bus model can negotiate the test track and maintain proper test speed over the durability, fuel economy and emission drive cycles; and to provide these results to the bus manufacturer and FTA prior to conducting testing using FTA program funds.

FTA is also proposing additional language that requires the Bus Testing Facility operator to investigate each occurrence of unsupervised maintenance and assess the impact on the validity of the test results and to repeat any impacted test results at the manufacturer's expense. FTA proposes additional language to address modifications to bus models undergoing testing. Specifically, this section requires that the Bus Testing Facility operator perform or supervise and document the performance of bus modifications only after the modifications have been reviewed and approved by FTA. The language also states that testing would be halted after the occurrence of unsupervised bus modifications. The Bus Testing Facility operator would not continue testing until FTA has issued a testing determination regarding the modifications.

FTA proposes moving the test requirements from Appendix A into section 665.27 and assigning performance standards to each of the test categories as MAP-21 requires. FTA proposes amending the Performance Test category by removing the language regarding the Braking Performance Test and moving it into the Safety Test category. FTA also proposes adding the requirement for a review of the Class 1 failures documented in the Reliability Test category to the Safety Test category.

### *Appendix A to Part 665—Bus Model Scoring System and the Pass/Fail Standard*

FTA proposes adding a bus model scoring system and Pass/Fail Standard to Appendix A of Part 665 to outline the requirements of the Bus Model Scoring System and the Pass/Fail Standard.

## **H. Regulatory Analyses And Notices**

### *H.1. Executive Orders 13563 and 12866 and DOT Regulatory Policies and Procedures.*

This rulemaking is a significant regulatory action within the meaning of Executive Orders 13563 and 12866, and FTA has determined that it is also significant under DOT regulatory policies and procedures because of substantial State, local government, congressional, and public interest. However, this rule is not “economically significant,” as defined in Executive Order 12866.

This section explains: the purpose of the Bus Testing Program, why we are proposing a pass/fail requirement with a point-based system and how that fits within our mission, the alternative scoring systems we considered, the logic that we employed in determining the weights assigned to the different test categories, our rationale for prioritizing use of the manufacturer's portion of the testing fee, and our analysis of the costs and benefits.

#### **Purpose of the Bus Testing Program**

The Bus Testing Program was originally created to provide transit agencies an independent source of bus performance results that could be used to inform their bus procurement decisions. Without the program, transit agencies would have to rely on either manufacturer supplied information, information supplied by third parties (FTA is not aware of third parties currently providing performance information about buses), information from their own pilot bus demonstrations potentially supplemented with specific engineering laboratory test procedures, or on the experiences from other agencies with a particular bus model. Without a centralized independent testing program, FTA believes the introduction of new bus models would be limited, as the perceived procurement risk would be high. As a result, successful bus adaptation to new transit requirements would be slowed considerably.

Once the Bus Testing Program was established, the availability of a test report was considered an adequate safeguard from catastrophic and systemic failures of portions of a bus fleet. For popular bus types where there are several competing bus models, FTA believes this assumption holds true. However, for less common bus types, where there are at times only one or two manufacturers capable of supplying, the risk of the new bus model may be overshadowed by the risk to an agency of not having a new replacement for the

buses they are currently operating. The proposed Pass/Fail rule was designed prevent the risk of an inadequate bus model from being overshadowed by other priorities, such as financial resources available for new buses, vis a vis funds available for maintaining existing vehicles in a state of good repair.

#### **Alternative Scoring Systems Considered**

While reviewing and developing scoring systems to meet the MAP-21 requirements, FTA considered a number of alternatives. To begin, we considered the importance of the entirety of the safety tests within the existing Bus Testing Program. Noting how integral to the Bus Testing Program each of the testing categories were, we wanted to ensure that the buses that were tested, at the very least, met all of the minimum performance standards, regardless of the scoring system that we adopted. Stated differently, we resolved that the scoring system would have to preclude a bus model from passing the test solely by attaining additional points in other categories (while failing in one or more key categories), resulting in points greater than the threshold that we set for the pass/fail standard. We also wanted to ensure that whatever system we adopted would be relatively simple, straightforward, and easy to understand, and provide meaningful information to both transit agencies and manufacturers. As discussed below, using these principles, we assessed various systems that we could adopt or implement to meet the requirements of MAP-21.

We first considered various qualitative systems. We reviewed a “five-tier” based system, as used by other organizations. We liked the simplicity of the five-star system for grading buses that met the minimum requirement of passing all of the tests. While our review of various systems indicated that such qualitative systems are simple to implement, they can be very subjective. Moreover, the five-tier system did not capture the level of detail and differential information that we desired to convey to the transit industry and manufacturers. We also reviewed and considered an “A to D” based grading system. Again, while this would have resulted in a fairly simple and straightforward system, it did not convey the level of information or the level of detail that was our goal. Thus, we rejected these two qualitative systems. While they were simple, straightforward, and easy to understand, they did not meet our goal of providing meaningful information to transit agencies and manufacturers.

Next, we considered quantitative point-based systems with the minimum threshold requirement of passing all of the tests. We considered various scales. We rejected a 50-point based scale for lack of simplicity. We considered an 80-point scale (10 points for each test category) and rejected it because it did not capture the relative importance or weighting of the categories. We also considered various levels for the pass/fail threshold for each of the scales. Finally, we settled on a 100-point scale due to its universality. FTA initially considered a minimum passing score of 40 points, believing the 60 discretionary points would provide purchasers with a greater range with which to evaluate different vehicles, but given the grading systems used in schools and other applications, FTA established a minimum passing threshold of 60 points with 40 discretionary points. This quantitative scale with the minimum threshold of passing all of the tests met all of our goals that the scoring system is relatively simple, straightforward, and easy to understand, and will provide meaningful information to transit agencies and manufacturers.

#### Logic Used to Determine Weighting for Tests and Sub-Tests

After deciding to propose a 100-point scale for the Bus Testing Program, we had to weigh the importance of each of the test categories within the Bus Testing Program. After much deliberation and consultation, we determined that the Structural Integrity and Safety Tests were the most important components of the Bus Testing Program, as both were critical to the operation of the vehicle while on the road. Therefore, we allotted 50 of the total 100 points to these two tests. Between the two tests, we determined that, while both were important, the Structural Integrity Test was more important than the Safety Test, based on its greater importance in evaluating a vehicle's construction and design. Hence, we assigned 60 percent of the points for these tests to the Structural Integrity Test and the remaining 40 percent to the Safety Test.

Within the Structural Integrity Test are seven sub-tests categories, of which six are pass/fail tests. Thus, we allotted one point each for the Shakedown, Distortion, Static Towing, Dynamic Towing, Hydraulic Jacking, and Hoisting Tests. The Durability Test, as the most important component of the Structural Integrity Test, received the remaining 24 points. Within these Durability Tests, we allocated body and power train failures equal accord and

each category received 12 points based on their importance to daily operation.

For the Safety sub-tests, we determined that the Hazards Test was as important as the other two sub-tests within this category and allotted it one-half of the total 20 points. The Stability and Braking Tests have three component tests that require a pass/fail grading and one that is a performance based allocation. We valued each of these tests equally, based on their relative importance when evaluating a vehicle. Hence, we apportioned 25 percent of the remaining points to each test.

For the Maintainability and Reliability Tests, we assessed the Maintainability Test to be twice as important as the Reliability Test, but both tests to be as important as the remaining tests, as both directly affect a transit agency's operating costs. Maintainability reflects how much time and resources the transit agency should expect to budget over the course of a vehicle's service life to perform routine maintenance, and reliability reflects a vehicle's ability to meet its service life requirements without significant service disruptions caused by unscheduled maintenance. For ease of assigning points within the weightings, we allocated 24 points (or just less than one-half of the 50 points for the remaining tests) to these two tests. Hence, within our weighting scheme, the Maintainability Test received 16 percent of the total points and the Reliability Test received eight percent of the total points.

Assessing the remaining four tests, Fuel Economy, Emissions, Noise, and Performance Tests, we determined that each was about the same level of importance based on comments from transit agencies, but that two, Fuel Economy and Emissions Tests, were slightly more important in terms of helping a transit agency to budget for a vehicle's fuel consumption over its lifetime and in calculating the vehicle's incremental benefit towards meeting Clean Air Act requirements. Therefore, as opposed to assigning equal weighting to each of the remaining tests, we allocated slightly more weight to the Fuel Economy and Emissions Tests than the Noise and Performance Tests. This resulted in a point allocation of seven points or 27 percent of the remaining points for to the Fuel Economy and Emissions Tests and an average of six points or 23 percent of the remaining points for the Noise and Performance Tests.

The Fuel Economy Test allocates points on a performance basis determined by the output of the type of

fuel. For the Emissions Tests, we apportioned one-half point for each of the five Emissions Tests that are already regulated by other Federal agencies and the remaining points for the Carbon Dioxide Test. This weighting for carbon dioxide captures the importance of alternative fuels with respect to greenhouse gases.

The Noise Test allocates points on a performance basis determined by the level of decibels produced. We weighted the Interior Noise and Exterior Noise Test equally (3.5 points each). As for the Performance Test, we weighted the bus model performance on a 2.5 percent grade and the performance during the acceleration test as being equally important and together being worth 60 percent of the five points available. The performance on a 10 percent grade was valued at 40 percent of the Performance test category.

#### Testing Fee Prioritization

In order to preclude buses that are not ready to complete the Bus Testing Program, the NPRM proposes to exhaust the manufacturer's 20 percent contribution for the total testing fee prior to employing funds from FTA's 80 percent contribution. This prioritizing of the manufacturers' portion of the test fee is purposed to incentivize manufacturers to ensure that the bus model submitted will, at a minimum, clear the initial check-in inspections, passenger payloading, and initial testing operations. FTA estimates that, depending on the bus model, nearly 20 percent of the testing fee should encompass the check-in process and threshold tests.

Based on previous testing experience, FTA determined that bus models that fail these preliminary activities will not perform well during subsequent tests. This proposed policy minimizes the cost to FTA from bus models submitted before they are ready for testing, thereby conserving Federal resources and ensuring that the proper incentive structures are in place. This will encourage manufacturers to ensure their product can withstand the rigors of bus testing. FTA would continue to pay the 80 percent Federal match for one retest and would contribute no Federal funds for a third test or subsequent tests required to pass the instant test.

#### Benefit-Cost Analysis

This section contains FTA's analysis of the benefits and costs of the proposed rule. FTA estimated the proposed rule's benefits and costs through two steps: First, FTA identified and analyzed the benefits and costs of the existing Bus Testing program (baseline). Second,

FTA identified and analyzed the expected benefits and costs of the proposed rule relative to the baseline. To determine the benefits and costs of the proposed rule, FTA reviewed the test data for all bus models that had been tested at the Bus Testing Facility between January 2010, when the Environmental Protection Agency’s (EPA’s) current Diesel Engine Emission Standards took effect (40 CFR part 86, as amended, 66 FR 5002, January 18, 2001), and February 2013, when this rulemaking commenced. The resulting diesel engine exhaust after-treatment systems used to satisfy the 2010 requirements potentially impacted the reliability, maintainability, fuel economy, emissions, and noise test results for a portion of the 49 buses. Additionally, there were OEM product updates to many of the medium-duty chassis used by the five, seven, and ten year service life buses that would affect test results in several test categories. A total of 49 buses had been tested over this period. FTA believes that the test

results for these 49 bus models tested since 2010 provide the best available source of information for determining the cost of the proposed rule on future buses that would be tested (and the models they represent). All bus types and sizes are included in the group of 49, from accessible vans to 60-foot articulated bus models. Buses fueled by compressed natural gas (CNG), electricity, diesel, gasoline, and liquefied petroleum gas (LPG) were present within this group. To determine qualitative benefits, FTA also examined the test results and the transit experience with two bus models tested (prior to 2010) that failed to meet their service life requirements in transit service. FTA has placed the test results of the buses that it analyzed in the docket for this rulemaking.

A summary of the results of our cost analysis is presented in Table H–1. Eight categories of costs were identified, analyzed, and annualized:

1. *Cost of Required Bus Design Changes:* This category is the estimated

annual cost of applying the design changes and components necessary to comply with all of the proposed performance standards to all affected bus models produced in one year.

2. *Lost Value of Test Buses:* This category estimates the depreciation cost of a bus subjected to the testing process. For each of the 49 buses models tested from 2010 through 2012, the full retail value was estimated by identifying a recent purchase value from the 2013 APTA Fleet Report and applying a depreciation factor of 50% to bus models that underwent a durability test and a factor of 20% for bus models that only underwent performance and other non-durability related tests.

3. *Shipping of Test Buses:* This category estimates the cost of shipping the test buses to the Bus Testing and Research Center and back to the manufacturer. The actual/estimated distance that each of the 49 bus models traveled was determined and was used for our calculations. Table H–0 presents this data.

TABLE H–0—DISTANCE TRAVELED TO AND FROM TEST CENTER

Report No.	Service life	Actual/estimated shipping distance to and from test center	Shipped via truck to and from test center
1001	7	490	
1002	7	490	
1003	12	549	
1004	7	490	
1005	7	1014	
1006	10	490	
1007	12	310	
1008	7	490	
1009	7	490	
1010	10	975	
1011	12	780	
1012	7	490	
1014	7	490	
1015	12	1400	
1016	12	1400	X
1017	4	490	
1101	12	1400	
1102	7	490	
1103	7	1112	
1104	10	490	
1105	7	1112	
1106	7	490	
1107	12	574	X
1108	12	482	
1109	12	2676	X
1110	10	490	
1111	7	490	
1112	7	490	
1113	7	430	
1114	7	490	
1115	4	1112	
1116	7	1112	
1117	12	310	
1118	12	1400	X
1120	7	490	
1201	7	490	
1202	12	310	
1203	7	430	

TABLE H-0—DISTANCE TRAVELED TO AND FROM TEST CENTER—Continued

Report No.	Service life	Actual/estimated shipping distance to and from test center	Shipped via truck to and from test center
1204 .....	7	1112	
1205 .....	12	1400	
1206 .....	12	2676	X
1207 .....	7	1112	
1208 .....	7	430	
1210 .....	7	1112	
1211 .....	12	1400	
1212 .....	7	955	
1213 .....	12	482	
1214 .....	7	1112	X
1215 .....	4	490	

For 10-, 7-, 5-, and 4-year buses, a cost of \$2.00 per mile was used to estimate the shipping cost. This cost is based on a recent shipment of a mid-sized bus on a truck. For heavy-duty 12-year diesel fueled buses, a cost of \$1.61 per mile was used to cover the costs of driving the bus to the test center and back. The estimated fuel costs were calculated using the bus model’s measured highway fuel economy and a fuel price of \$3.00 per gallon was added. For heavy-duty buses powered by natural gas or electricity, a shipping cost of \$4.00 per mile was applied. This cost represents the cost to ship these bus models on a truck.

4. *Parts Consumed:* This cost category is for the cost of parts consumed during the test. FTA seeks comments on the average cost of parts consumed during the test process as FTA had no data on which it could estimate those costs.

5. *On-Site Personnel:* This cost category is for the cost of maintaining manufacturer personnel on-site at the test center. For each test of a heavy-duty bus, the cost of a mechanic’s labor (\$20.35 an hour), lodging, and per diem at State College, PA for three full months. Manufacturer personnel are often on-site during the testing of heavy-duty bus models.

6. *Paperwork Burden:* This cost category covers the costs to manufacturers of providing mandatory information to the Bus Testing Program.

7. *Manufacturer Testing Fees:* This cost category covers the 20 percent testing fees that the manufacturers pay to have testing conducted.

8. *FTA Program Cost:* This cost category covers the funding provided by FTA to cover 80 percent of the costs associated with testing a bus model.

FTA estimates the costs of the existing Bus Testing Program are as follows: The maximum total annual program cost is \$3,750,000 with 80 percent (\$3,000,000) covered by FTA and 20 percent (\$750,000) paid by transit vehicle manufacturers who submit a bus for testing. The current Paperwork Reduction Act reportable costs are \$9,016. The estimated annual cost of on-site manufacturer personnel is estimated to be \$76,673. The value of the parts consumed in the testing process is unknown. The annual estimated bus shipping costs for the current program is \$63,743.

The estimated annual test bus depreciation cost is \$1,591,714. The annual cost of bus design improvements as a result of the current program is assumed zero as there are no minimum

performance standards requirements. For the purpose of this analysis, FTA assumes that manufacturers do not take remedial action to buses when defects are identified through testing. FTA also assumes that there are zero costs resulting from buses being designed or manufactured differently in response to the existing testing requirements. FTA seeks comments on both these assumptions.

To estimate the costs of the proposed rule, FTA first identified all of the bus models in the study group of 49 that would fail to meet the proposed standards. The most significant cost, of those FTA was able to estimate, was the cost of retesting to validate the remedies needed to achieve passing test results. The testing fees for the program are broken down by test and sub-test categories, with manufacturers charged fees only for the tests that must be conducted. The fee schedule for the current program is shown in Table H-3. Next, FTA determined the performance issues that need to be remedied and the tests that would need to be repeated. Then FTA estimated the costs for retesting, and in two cases, the cost of a potential remedy. FTA provides a summary of this analysis in Table H-4.

TABLE H-1: Summary of Cost Analysis Results (all values in \$)

Item	Cost of Required Bus Design Changes	Lost Value of Test Buses	Shipping of Test Bus	Parts Consumed	On-Site Personnel test bus	Paper-work Burden	Manufacturer Testing Fees	FTA Program Cost
Baseline - Current Program	0	1,591,714	63,743	unknown	76,673	9,016	750,000	3,000,000
Proposed MAP-21 Minimum Performance Standards and Scoring Systems	unknown	0	2,209	unknown	5,103	767	33,362	133,448
Proposed Discretionary Program Changes	58,038	0	0	0	0	2,810	-15,328	-61,310
Revised Bus Payloading Procedures	58,038	0	0	0	0	1,488	-74	-294
Elimination of On-Road Fuel Economy Test	0	0	0	0	0	0	-16,000	-64,000
Revised Bus Passenger Load for Emissions Testing	0	0	0	0	0	0	-118	-470
Bus Testing Entrance Requirements	0	0	0	0	0	0	664	2,654
Revisions to the Scheduling of Testing Requirements	0	0	0	0	0	1,322	0	0
Test Requirements Review Milestone	0	0	0	0	0	0	0	0
Penalty for Unauthorized Maintenance and Modification	0	0	0	0	0	0	200	800
Estimated Program Costs (Baseline and all Proposals)	unknown	1,591,714	65,952	unknown	81,776	12,593	768,034	3,072,138
							Total	5,592,207
							Baseline Total	5,483,036
							Incremental Program Cost	109,171

The results from this analysis indicate that annual costs would increase in several areas. The impact of the proposed performance standards to the FTA program cost is estimated to be \$133,448. A total of \$33,362 in additional manufacturer's fees would be collected from the additional tests. An additional paperwork burden of \$767 would be incurred from the required failure analysis and remedy proposal process. An additional \$5,103 would be expended for on-site personnel expenses incurred performing test bus modifications at the test site. An

unknown amount of additional parts and components would be consumed during the retesting. FTA estimates that one of the eight failed buses would be returned to the manufacturer for systemic modifications incurring additional round-trip shipping expenses of \$2,034. FTA believes that the retesting process will not depreciate the test bus an additional amount beyond the first test. In many cases the test bus may be worth more once the failure modes have been resolved and test buses have inherent remaining value in the future as testing mules. FTA is not

able to quantify the additional cost of remedying buses in response to failing one or more performance standards. Nor is FTA able to estimate potential costs from design or manufacture changes made to buses to obtain higher testing scores. FTA seeks comments on the extent of such costs and requests information to develop estimates. However, FTA believes there are no additional costs to the program from implementing the proposed Bus Model Scoring System. The scores will be calculated automatically once the test results are finalized.



FTA also analyzed the costs of the discretionary program changes proposed in this NPRM. The proposed rule would modify two test procedures (payloading and emissions test payload) but does not impose any completely new testing procedures, and would eliminate the On-Road Fuel Economy Test procedure, thereby reducing the aggregate costs currently associated with the Bus Testing Program. For the revised bus

payloading procedures, FTA estimates an annual decrease in the program cost of \$294 and a decrease in testing fees of \$74. These are a result of labor cost savings from loading the mid-sized buses with fewer or no simulated standee passengers. FTA estimates an increase in the annual paperwork burden of \$1,488 from the increased manufacturer labor required to determine and report to FTA the total

passenger capacity of new bus models submitted to the program. The only other cost identified with this proposal is the new requirement to add a placard on the interior bulkhead of the bus identifying the maximum standee passenger rating in 2 inch or taller letters. FTA estimates the annual cost impact to new bus models is \$58,038. This cost analysis is presented in Table H-2.

TABLE H-2—COST OF STANDEE PASSENGER RATING PLACARD (\$)

Standee Rating Placard (source: <i>www.edecals.com</i> using a 2.5 inch tall lettering stating "XX Standees Maximum") Labor rate assumes a category of "assembler and fabricator" from bls.gov	Estimated cost per decal (using a quantity of 500)	Labor rate (hr)	Labor amount to install (hr)	Estimated cost per bus	Total annual cost
annual cost for new production transit buses (5600 units a year) .....	8.99	13.74	0.10	10.36	58,038

TABLE H-3—CURRENT BUS TESTING PROGRAM COSTS AND FEES

Test	500,000 mi—12 year service life	350,000 mi—10 year service life	200,000 mi—7 year service life	150,000 mi—5 year service life	100,000 mi—4 year service life
Check-In .....	3,000	3,000	3,000	3,000	3,000
Inspect for Accessibility .....	1,500	1,500	1,500	1,500	1,500
Maintainability (scheduled and unscheduled) .....	Included in the durability test cost				
Selected Maintainability .....	4,500	4,500	4,500	4,500	4,500
Reliability .....	Included in the durability test cost				
Safety .....	3,000	3,000	3,000	3,000	3,000
Performance .....	3,000	3,000	3,000	3,000	3,000
Brake .....	3,100	3,100	3,100	3,100	3,100
Shakedown .....	6,000	6,000	6,000	6,000	6,000
Distortion .....	3,000	3,000	3,000	3,000	3,000
Static Towing .....	1,500	1,500	1,500	1,500	1,500
Dynamic Towing .....	1,500	1,500	1,500	1,500	1,500
Jacking .....	1,500	1,500	1,500	1,500	1,500
Hoisting .....	1,500	1,500	1,500	1,500	1,500
Structural Durability .....	117,890	85,270	55,760	40,060	25,970
Fuel Economy .....	6,000	6,000	6,000	6,000	6,000
Interior Noise .....	1,500	1,500	1,500	1,500	1,500
Exterior Noise .....	1,500	1,500	1,500	1,500	1,500
Emissions .....	44,000	44,000	44,000	44,000	44,000
Total for Full Testing (100%) .....	203,990	171,370	141,860	77,660	60,570
Manufacturer's Portion Fee (20%) .....	40,798	34,274	28,372	15,532	12,114

TABLE H-4—SUMMARY OF THE COSTS FOR RETESTING FAILED BUS MODELS

Bus (report number)	Failed test category	Cost of required bus design changes	Lost value of test buses	Shipping of test bus back to manufacturer for modifications and return to Altoona	Additional parts consumed	On-site personnel	Paper-work burden	Testing fees (20%)	FTA program cost
<b>Cost of remedying and retesting bus models (2010–2013) that would fail a proposed performance standard (\$)</b>									
PTI-BT-1214 .....	Structural durability.	unknown—upper body structure failing.	0	0	unknown	4,374	215	11,152	44,608
PTI-BT-1208 .....	Structural durability.	unknown—body structure cracks.	0	0	unknown	4,374	215	11,152	44,608

TABLE H-4—SUMMARY OF THE COSTS FOR RETESTING FAILED BUS MODELS—Continued

Bus (report number)	Failed test category	Cost of required bus design changes	Lost value of test buses	Shipping of test bus back to manufacturer for modifications and return to Altoona	Additional parts consumed	On-site personnel	Paper-work burden	Testing fees (20%)	FTA program cost
PTI-BT-1110 .....	Structural durability.	unknown—body to frame interface is cracking. Potentially need a new bus body mount design..	0	0	unknown	4,374	215	17,054	68,216
PTI-BT-1108 .....	Powertrain durability.	unknown—multiple different powertrain failure modes need to be remedied.	0	2034	unknown	.....	710	23,578	94,312
	Maintainability .....	if powertrain durability failures are corrected this standard would be met as well.	0	0	unknown	.....	0	0	0
PTI-BT-1108 .....	Performance .....	unknown—the maximum propulsion power delivered to the wheels needs to be increased.	0	0	unknown	.....	0	600	2,400
PTI-BT-1009 .....	Powertrain durability.	unknown—multiple different powertrain failure modes need to be remedied.	0	0	unknown	2,187	215	11,152	44,608
PTI-BT-1107 .....	Structural durability.	\$130—radius rod mount was re-welded to correct manufacturing defect.	0	0	.....	.....	42	0	0
	Powertrain durability.	unknown—multiple different powertrain failure modes need to be remedied. Transmission cradle was the primary issue.	0	4,592	unknown	.....	380	23,578	94,312
	Performance .....	unknown—the maximum propulsion power delivered to the wheels needs to be increased.	0	.....	unknown	.....	42	600	2,400
	Safety-braking .....	additional test trials needed to achieve greater brake lining contact with brake rotors.	0	0	0	0	0	620	2,480
PTI-BT-1107 .....	Maintainability .....	0—if the powertrain durability failures are corrected this standard would be met as well.	0	0	unknown	.....	0	0	0

TABLE H-4—SUMMARY OF THE COSTS FOR RETESTING FAILED BUS MODELS—Continued

Bus (report number)	Failed test category	Cost of required bus design changes	Lost value of test buses	Shipping of test bus back to manufacturer for modifications and return to Altoona	Additional parts consumed	On-site personnel	Paper-work burden	Testing fees (20%)	FTA program cost
PTI-BT-1006 .....	Interior Noise .....	\$211—this trolley bus exceeded the proposed interior noise standard by 4 dB at the driver’s seating position. Commercially available (dynamat xtreme) sound dampening material applied to the floor and engine cover area would reduce the average noise level by 5 dB. 20 square feet of this material costs \$170.00 retail and a two hours of mechanic labor (2 × 20.35 = 40.70) to install.	0	0	0	0	133	300	1,200
PTI-BT-1010 .....	Interior Noise .....	\$211—this trolley bus exceeded the proposed interior noise standard by 4 dB at the driver’s seating position. Commercially available (dynamat xtreme) sound dampening material applied to the floor and engine cover area would reduce the average noise level by 5 dB. 20 square feet of this material costs \$170.00 retail and a two hours of mechanic labor (2 × 20.35 = 40.70) to install.	0	0	0	0	133	300	1,200
	Total Cost (\$) .....	unknown .....	0	6,626	0	15,309	2,300	100,086	400,344
	Annual Cost (\$) ..	unknown .....	0	2,209	0	5,103	767	33,362	133,448

The annual cost savings of eliminating the on-road fuel economy test is \$64,000 for the FTA program and \$16,000 in manufacturer test fees. FTA estimated that 15 on-road fuel economy tests would be eliminated annually and the cost of the dynamometer based fuel economy test is already captured in the cost for the emissions test. One full electric bus is expected to be tested annually. Electric bus models do not need to undergo emissions testing. As a

result, the cost for conducting one electric bus fuel economy test was not eliminated.

FTA is also proposing changing the bus passenger load for the emissions test from 2/3 seated load weight to full seated load weight. FTA estimates a cost reduction of \$470 for the FTA program portion and \$118 in reduced fees to the manufacturers. The cost savings is derived from eliminating the labor of unloading and reloading 1/3 of the seated

passenger load as all of the other non-durability performance tests are conducted at full seated load.

The proposed program entrance requirements are expected to increase the annual FTA program costs by \$2,654 and require \$664 in additional manufacturer costs. The additional costs are a result of the proposed Buy America bus configuration inspections conducted at bus check-in. The details

of this cost analysis are outlined in Table H-5.

TABLE H-5—BUY AMERICA CONFIGURATION INSPECTION COST

Labor category	Hourly rate	Source	Total hours per bus	Cost
diesel auto service tech .....	20.35	bls.gov	4	81.40
technical writer .....	31.49	bls.gov	4	125.96
			Cost per bus	207.36
			Total annual cost (16 buses)	\$3,318

The proposed revisions to the test scheduling process are expected to increase the annual paperwork burden to bus manufacturers by \$1,322. The test entrance requirements review milestone is not expected to add any costs to the program as only FTA will be reviewing the results of the check-in process and determining the outcome of the milestone review.

Lastly, the annual cost of the proposed penalty for unauthorized maintenance and modification is estimated to be \$800 for the FTA program cost portion and \$200 in fees to the manufacturers. The costs were determined by amortizing the cost of test track upgrades for physical security and surveillance over a 10-year period.

A summary of the estimated annual benefits of the Bus Testing Program is presented in Table H-6. Seven categories of program benefits were identified and analyzed:

1. *Greater probability of meeting service life and reduced unscheduled maintenance:* This category estimates the annual benefits achieved by all of the NPRM proposals that potentially improve the probability new model bus models entering the fleet will satisfy their service life requirement and the benefits obtained through a reduction of unscheduled maintenance in actual service. While we provide a potential estimate of this benefit, we do not include it in our quantitative analysis, but note that this will most likely be a

cost reduction (qualitative benefit) to the industry.

2. *Reduced safety risk:* This category estimates the benefits derived from the NPRM proposals that reduce the safety risk of new bus models entering transit service.

3. *Improved recipient awareness and accuracy of total bus passenger capacity:* This category of benefits examines the benefits obtained from determining and communicating the rated standee passenger capacity of a bus to recipients to inform their procurement process and their bus operations.

4. *Improved recipient knowledge of Buy America and Bus Testing production configuration:* This category improves knowledge of both Buy America and the Bus Testing provisions herein. We do not quantify these benefits.

5. *Increased confidence the delivered production buses will perform the same as the test bus:* This category examines the benefits of the proposals in increasing the understanding and confidence that the bus model a recipient procures and is delivered matches the bus tested with respect to its design configuration and major components. FTA requests comments on the extent recipients or the public is concerned that tested buses may not meet Buy America requirements.

6. *Faster comprehension of test results/scores and motivation for*

*improved bus performance:* This category examines the benefits derived from the proposals to increase the speed and depth of comprehension of the bus testing results.

7. *Simplified test scheduling process and elimination of unnecessary testing:* This category examines the benefits of maintaining one point and process of program entry and the benefits of eliminating unnecessary testing.

FTA was unable to provide monetized benefits for many of the benefit categories. For many of the categories where FTA believes there are benefits but was unable to quantify, the result is identified as “unknown”. For categories where FTA believes there is no benefit, the result was identified as “0”. The benefits of a greater probability of bus models meeting their service life was quantified, but only to inform our qualitative assumptions. FTA seeks comments related to the benefits of categories with an “unknown” result.

Overall, FTA believes that the current program provides potential benefits in all of the seven categories identified when the information generated by the program is used in the procurement decision process. FTA is not aware of any means to determine these benefits, but FTA believes the proposed minimum performance standards will reduce safety risks, reduce unscheduled maintenance, and ensure a greater probability of a bus model meeting its expected service life.

TABLE H-6—SUMMARY OF THE ESTIMATED ANNUAL BENEFITS FOR ALL PROPOSALS

Item	Greater probability of meeting service life and reduced unscheduled maintenance	Reduced safety risk	Grantee awareness and accuracy of total bus passenger capacity	Improved grantee knowledge of Buy America and bus testing production configuration	Increased confidence the delivered production buses will perform the same as the text bus	Faster comprehension of test scores and motivation for improved bus performance	Simplified test scheduling and process & elimination of unnecessary testing
Baseline—Current Program.	unknown .....	unknown .....	unknown .....	unknown .....	unknown .....	unknown .....	unknown
Proposed MAP-21 Minimum Performance Standards.	Cost reduction	unknown .....	0 .....	0 .....	0 .....	0 .....	0
Proposed Scoring System.	unknown .....	unknown .....	0 .....	0 .....	0 .....	unknown .....	0

TABLE H-6—SUMMARY OF THE ESTIMATED ANNUAL BENEFITS FOR ALL PROPOSALS—Continued

Item	Greater probability of meeting service life and reduced unscheduled maintenance	Reduced safety risk	Grantee awareness and accuracy of total bus passenger capacity	Improved grantee knowledge of Buy America and bus testing production configuration	Increased confidence the delivered production buses will perform the same as the text bus	Faster comprehension of test scores and motivation for improved bus performance	Simplified test scheduling and process & elimination of unnecessary testing
Proposed Discretionary Program Changes.	.....	.....	.....	.....	.....	.....	
Revised Bus Payloading Procedures.	unknown .....	unknown .....	unknown .....	0 .....	0 .....	0 .....	0
Elimination of On-Road Fuel Economy Test.	0 .....	0 .....	0 .....	0 .....	unknown .....	0 .....	Cost reduction
Revised Bus Passenger Load for Emissions Testing.	0 .....	0 .....	0 .....	0 .....	0 .....	0 .....	Cost reduction
Bus Testing Entrance Requirements.	0 .....	unknown .....	unknown .....	unknown .....	unknown .....	0 .....	unknown
Revisions to the Scheduling of Testing Requirements.	0 .....	0 .....	0 .....	0 .....	0 .....	0 .....	unknown
Test Requirements Review Milestone.	0 .....	0 .....	0 .....	0 .....	0 .....	0 .....	unknown
Penalty for Unauthorized Maintenance and Modification.	unknown .....	unknown .....	unknown .....	unknown .....	unknown .....	unknown .....	0
Estimated Program Benefit (Baseline and all Proposals).	Cost reduction	unknown .....	unknown .....	unknown .....	unknown .....	unknown .....	Cost reduction

TABLE H-7—BENEFITS ACHIEVED FROM THE MINIMUM PERFORMANCE STANDARDS  
 Projected benefit from the service life loss prevention resulting from the proposed durability requirements

Bus size	Service life category (yrs)	# of units sold in 2013 <sup>1</sup>	# of models tested 2010–2012	# of tested models that failed durability (structural or powertrain)	Estimated quantity of buses sold in 2013 that have failed the proposed durability standard	Average new bus value <sup>2</sup> (\$)	Estimated annual service life value loss (assumes bus retirement at 50% life) (\$)	Total cost of new transit buses procured in 2013
> 55 foot articulated ...	12	172	2	0	0	760,766	0	130,851,752
45 foot .....	12	18	2	0	0	449,712	0	8,094,816
40 foot .....	12	1,906	10	1	38	439,954	8,385,523	838,552,324
35 foot .....	12	373	2	1	37	286,972	5,352,028	107,040,556
30 foot .....	10	283	4	1	14	207,528	1,468,261	58,730,424
< 27 foot .....	4, 5, 7	2,892	29	3	60	62,410	1,867,135	180,489,720
Total .....	.....	5,644	49	6	149	.....	17,072,947	1,323,759,592

<sup>1</sup> Table 9A, FY 2013: [http://www.fta.dot.gov/about\\_FTA\\_16073.html](http://www.fta.dot.gov/about_FTA_16073.html).

<sup>2</sup> See APTA Public Transportation Vehicle Database. <http://www.apta.com/resources/statistics/Pages/OtherAPTASTatistics.aspx>.

FTA is not able to provide a monetized value for the safety risk reduction. Further, we have estimated potential benefits of bus models meeting their service life requirements, but we used this to inform our qualitative assumption that there would be aggregate benefits to the industry. We did not include this in our quantitative calculations because we were uncertain of the potential aggregate savings on a year-to-year basis into the future as the industry adapts to the instant rulemaking. The results of this analysis are presented in Table H-7.

The analysis presented in Table H-7 used the 2013 transit bus procurement data outlined in Table 9A in the FY 2013 FTA statistical summaries by bus size category and quantity. This analysis also estimated the average cost of a bus model in each size category using the cost information in Table 9A. FTA then determined the quantity of bus models tested in each of the size categories from 2010–2012 (49 buses total) and the number of those that failed the proposed durability performance standard (6). FTA estimated the quantity of bus models sold in 2013 that would have been restricted from FTA recipients in

each bus size category. This estimate assumes that 20 percent of the bus models sold in 2013 were bus models tested between 2010 and 2012. The other 80 percent of the sales were assumed to consist of existing bus models tested prior to 2010. FTA then estimated the projected quantity of failing buses by applying a ratio of the number of tested buses that would fail the proposed durability standard by the number of bus models tested in that size category to 20 percent of the 2013 bus sales figures. This resulting quantity of buses was multiplied by the average monetary value of that bus size category

and divided by two to obtain the average amount of service life value lost assuming that each of the failed buses only satisfied 50 percent of their service life requirement. FTA notes that this analysis assumes that all six models were not modified by the manufacturer prior to procurement, as the agency has no information concerning whether or not any modifications did in fact occur. If modifications did occur, then the potential benefits discussed here may be overstated.

We note here that though we conducted this analysis, we did not include these values in our quantitative

calculation of benefits. We conducted this analysis to inform our qualitative assumption of potential benefits. We found, as shown above in Table H-6, that potential for a major cost reduction for the industry is great, but we are uncertain of the potential aggregate savings on a year-to-year basis into the future as the industry adapts to the requirements enumerated herein. FTA seeks comments on this analysis.

As another baseline, the lost service life value of two tested bus models known to have failed in service but outside the study window from 2010–2012 was also estimated. The results of

this analysis are presented in Table H-8. Again, while we performed this analysis, we did not include these values in our quantitative calculation of benefits. We used this analysis to inform our qualitative assumption of potential benefits. We found again, as shown in Table H-8, that the potential for a major cost reduction for the industry is great, but we are uncertain of the potential aggregate savings on a year-to-year basis into the future as the industry adapts to the requirements enumerated herein. FTA seeks comment on this analysis.

**TABLE H-8—ESTIMATED SERVICE LIFE VALUE LOSS OF TWO FAILED BUS MODELS**

Estimated benefits from Service Life Loss Prevention of Proposed Durability Requirements with known bus models that failed in service from 2003 to 2013

Bus size	Quantity	Initial bus value (\$)	Estimated annual service life value loss (assumes bus retirement at 50% life) (\$)
60 foot articulated .....	226	451,328	51,000,064
23 foot hybrid electric .....	70	150,000	5,250,000
Total Service Value Loss .....			56,250,064
Estimated Annual Loss over 2003–2013 .....			5,625,006

FTA, though, was able to estimate the quantified benefits provided by the proposed durability performance standards in the form of reduced unscheduled maintenance, which we estimate to be \$531,990 per year. FTA

was only able to estimate the reduction in labor costs and not the associated reduction in the costs of replacement components. The basis for the reduction in labor costs was the estimated reduction in unscheduled maintenance

hours after the design remedies for structural and powertrain durability were applied to the failing bus models identified in the study group. The results of this analysis are presented in Table H-9.

**TABLE H-9—BENEFITS FROM REDUCED UNSCHEDULED MAINTENANCE**

[Benefit Derived from reduced bus maintenance requirements as a result of proposed durability standards]

Bus size	Service life category (yrs)	# of tested models that failed durability (structural or powertrain)	Average unscheduled maintenance hours per bus eliminated by durability standard during test (25% service life)	Average unscheduled maintenance hours per bus avoided over 50% service life (until early retirement)	Estimated quantity of buses sold in 2013 that have failed the proposed durability standard	Benefit from the reduction in maintenance hours @ 20.35/hr (diesel service technician) (\$)	Benefit from the reduction in the amount of components replaced
> 55 foot articulated	12	0	0	0	0	0	unknown
45 foot .....	12	0	0	0	0	0	unknown
40 foot .....	12	1	103	206	38	159,300	unknown
35 ft .....	12	1	113	226	37	170,167	unknown
30 ft .....	10	1	4	8	14	2,279	unknown
< 27 foot .....	4, 5, 7	3	82	164	60	200,244	unknown
Total .....		6			149	531,990	

FTA believes the proposed results scoring system will provide benefits in the areas of reduced unscheduled maintenance, reduced safety risk, with the faster comprehension of test results, and provide industry motivation to seek bus models with higher test scores. FTA seeks comments on the benefits of the proposed scoring system as it is

currently unable to quantify these benefits.

FTA is confident the proposed revisions to the bus payloading procedures that require the posting of the maximum rated standee passenger load on the interior bus bulkhead will provide benefits in the areas of greater probability of a bus meeting its service

life requirements, reduced amounts of unscheduled maintenance, reduced safety risk, and greater understanding of the total rated bus passenger capacity.

FTA believes that eliminating the current on-road fuel economy test and only publishing the fuel economy test results from the dynamometer based test will provide recipients more realistic

and reliable test results than the current on-road fuel economy test. Having only one set of fuel economy test results will also eliminate the potential confusion to recipients and manufacturers with respect to the scoring of the test results. FTA was unable to quantify the benefits, beyond the program cost reduction, of eliminating the on-road fuel economy test.

For the proposal to revise the bus passenger load for the emissions testing to seated load weight instead of the 2/3 seated load weight that was unique in the emission test. The benefit of this change is a minor cost reduction from the reduced labor of unloading and loading 1/3 of the seated load weight just for this test. FTA does not expect any other benefits from this proposal.

The proposed program entrance requirements are expected to provide benefits with reduced safety risk, greater awareness and accuracy of the bus passenger capacity, greater understanding of the Buy America

compliant bus configuration with respect to major component systems, and prevents unnecessary retesting due to bus production configuration anomalies discovered during or after the test is completed. FTA was unable to quantify these benefits.

The primary benefit of the revisions to the scheduling of testing requirements is that the process will be same whether it is a request for full testing or partial testing. By establishing a single point of entry for the program there will be less confusion about the program requirements and the process and consistency in the resulting determinations. FTA was not able to quantify this benefit.

The benefit of the proposed test requirements review milestone is a program event that will deliver the benefits of the bus entrance requirements. This event will provide all testing stakeholders (manufacturer, bus testing facility operator, FTA, and potentially a recipient) a clear

understanding of a new bus model's program eligibility and readiness for testing. FTA did not quantify the benefit of this proposal.

The proposed penalty for unauthorized maintenance and modification is the repeat of all potentially affected tests. This proposal provides benefits in all the categories identified except with the "simplified test scheduling and elimination of unnecessary testing" category. FTA was not able to directly quantify these benefits.

Using a 3 and 7 percent discount rate over a ten-year analysis period using the information developed above, FTA calculates that the Net Present Value of the changes encompassed within this proposed rule would yield a positive \$3,606,732 at 3 percent discount and a positive \$2,969,704 at 7 percent discount. Table H-10 shows our DCF analysis.

TABLE H-10—DISCOUNTED CASH FLOW ANALYSIS AND NET PRESENT VALUES

Year	Costs	Benefits	Net cash flow	Discount rate	DCF @ 3%	Discount rate	DCF @ 7%
1	\$109,171	\$531,990	\$422,819	0.03	\$410,504	0.07	\$395,158
2	109,171	531,990	422,819	0.03	398,547	0.07	369,306
3	109,171	531,990	422,819	0.03	386,939	0.07	345,146
4	109,171	531,990	422,819	0.03	375,669	0.07	322,567
5	109,171	531,990	422,819	0.03	364,727	0.07	301,464
6	109,171	531,990	422,819	0.03	354,104	0.07	281,742
7	109,171	531,990	422,819	0.03	343,791	0.07	263,310
8	109,171	531,990	422,819	0.03	333,777	0.07	246,085
9	109,171	531,990	422,819	0.03	324,056	0.07	229,986
10	109,171	531,990	422,819	0.03	314,617	0.07	214,940
				NPV	3,606,732	NPV	2,969,704

H.2. Executive Order 13132 (Federalism)

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 ("Federalism"). This NPRM does not include any regulation that has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

H.3. Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments)

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 13175 ("Consultation and Coordination with Indian Tribal Governments"). Because this NPRM does not have tribal implications and does not impose direct

compliance costs, the funding and consultation requirements of Executive Order 13175 do not apply.

H.4. Executive Order 13272 (Intergovernmental Review)

The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this rulemaking as the bus testing program does not involve direct Federal assistance, nor does it involve direct Federal development.

H.5. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601-611) requires each agency to analyze regulations and proposals to assess their impact on small businesses and other small entities to determine whether the rule or proposal will have a significant economic impact on a substantial number of small entities. Although the testing requirement imposes minor compliance costs on the

regulated industry, including bus manufacturers who meet the definition of "small businesses," Congress has authorized FTA to pay 80% of the bus manufacturer's testing fee, defraying the direct financial impact on these entities. FTA has estimated the additional costs and the projected benefits of this proposed rule, above. I hereby certify that this rulemaking would not have a significant economic impact on a substantial number of small entities.

H.6. Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1532, et seq.) requires agencies to evaluate whether an agency action would result in the expenditure by State, local and tribal governments, in the aggregate, or by the private sector, of \$151 million or more (as adjusted for inflation) in any one year, and if so, to take steps to minimize these unfunded mandates. FTA does not believe the

proposed rulemaking would result in expenditures exceeding this level.

#### H.7. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3520), a Federal agency must obtain approval from OMB before conducting or sponsoring a collection of information as defined by the PRA. Because the proposed regulation contains a new provision that would require manufacturers to provide technical specifications regarding their vehicles to FTA in order to receive approval to proceed with testing, FTA will submit a revised information collection estimate to OMB.

In compliance with the PRA, we announce that FTA is seeking comment on a new information collection.

*Agency:* Federal Transit Administration.

*Title:* Bus Testing Program.

*Type of Request:* Modified information collection.

*OMB Control Number:* 2132–0550.

*Form Number:* Not assigned.

Requested Expiration Date of Approval

Three years from the date of approval.

Summary of the Collection of Information.

In accordance with the Paperwork Reduction Act of 1995, this notice announces the intention of the Federal Transit Administration (FTA) to request the Office of Management and Budget (OMB) to update the following information collections for the FTA Bus Testing Program. The information to be collected for the Bus Testing Program is necessary to ensure that buses have been tested at the Bus Testing Center for maintainability, reliability, safety, performance (including braking performance), structural integrity, fuel economy, emissions, and noise and have met the required performance standards.

Description of the Need for the Information and Use of the Information

Title 49 U.S.C. Section 5323(c) provides that no federal funds appropriated or made available after September 30, 1989, may be obligated or expended for the acquisition of a new bus model (including any model using alternative fuels) unless the bus has met the requirements of FTA's Bus Testing Program. Title 49 U.S.C. Section 5318(a) further specifies that each new bus model is to be tested for maintainability, reliability, safety, performance (including braking performance), structural integrity, fuel economy, emissions, and noise. In addition, any

existing bus models being produced with a major change must also comply with the requirements of the Bus Testing Program. Upon completion of the testing of the vehicle, a bus testing report is provided to the manufacturer. 49 CFR part 665.7(a) states that a recipient of federal funds must certify that any new bus model acquired with FTA financial assistance has been tested in accordance with the requirements of Part 665, and that the recipient has received a copy of the applicable Bus Testing Report before expenditure of any FTA funding on a bus.

The Bus Testing Program (often referred to as "Altoona Testing" due to the location of the primary test facility) is operated by The Thomas D. Larson Pennsylvania Transportation Institute (LTI), an interdisciplinary research unit of The Pennsylvania State University in the College of Engineering. Founded in 1989, LTI operates the Bus Testing Center, conducts the tests, and documents the test results under a cooperative agreement with the Federal Transit Administration (FTA).

The Bus Testing Program has proven to be valuable to the transit industry. As of March 31, 2015, testing has been completed on 437 buses with a total of 9,214 bus malfunctions identified. Of those malfunctions, 44 could have resulted in serious injuries or significant property damage had they occurred in revenue service. Many of the other malfunctions would adversely impact transit service (e.g., resulting in mechanical breakdowns and stranded passengers), and all would increase maintenance costs by requiring corrective maintenance actions. By testing new bus models before they are purchased, recipients and manufacturers can often address problems before the fleet is built, potentially saving the federal government and grant recipients considerable money and time and avoiding inconveniencing passengers. The information collected by the Bus Testing Program is used to: (1) Determine the eligibility of a new bus model for testing as per 49 CFR 665.11; (2) determine the amount of testing necessary; (3) satisfy the legal and administrative requirements necessary for the Bus Testing Facility to schedule the testing of a new bus model; (4) to collect new bus model design, and component information for inclusion in the final report; (5) determine compliance with the fuel economy and emissions performance standards; and (6) determine the maximum rated standee passenger capacity of a new bus model.

Information addressing items 1 and 2 will be collected by FTA through a standardized electronic form to be available on the FTA internet site and used by FTA to process the request for new bus model testing. An outline of this proposed standard form is included as an information collection instrument in the ROCIS system. From the information collected on the standardized form and previous bus model testing history, if any, FTA will determine the amount of testing that is necessary. Once complete, FTA will provide the testing determination results to the requester and to the Bus Testing Facility operator if testing is required. If FTA determines that no testing is required, no additional information is collected for that request.

In order to schedule a bus test at the Bus Testing Center (item 3), bus manufacturers must submit a variety of information to LTI. The steps for submitting a vehicle for testing are outlined on LTI's Web site at [http://146.186.225.57/schedule\\_testing](http://146.186.225.57/schedule_testing). The first piece of information that must be submitted is two signed copies of the testing contract. The contract outlines that LTI is the official operator of the bus testing facility and that they are under a cooperative agreement with FTA to conduct testing of transit vehicles in accordance with FTA regulations and the established testing procedures. The contract can be found as an information collection instrument in the ROCIS system and online at [http://146.186.225.57/scheduling\\_pdfs/Contract\\_Dec\\_2013.pdf](http://146.186.225.57/scheduling_pdfs/Contract_Dec_2013.pdf). Additional information that must be submitted before testing begins includes; a spare parts inventory list, evidence of adequate liability and physical damage insurance coverage on the bus, and a check for the manufacturer's share of the testing fee.

To address item 4, bus manufacturers are required to complete the bus model information template. This information can be submitted at the time of test scheduling or later, as it is included in the final bus testing report to document the bus configuration tested. This template is included as an information collection instrument in the ROCIS system. For item 5, bus manufacturers need to submit a copy of their compliance documentation prepared to address the applicable Federal requirements of 49 CFR part 535, 40 CFR part 86, and 40 CFR part 1037 as evidence of satisfying the proposed FTA performance standards for "Fuel Economy" and "Emissions" outlined in the Bus Testing Pass/Fail NPRM.

The Pass/Fail NPRM also proposes that bus manufacturers identify the



maximum rated standee passenger capacity on the front interior bulkhead. This rating will be used for the purposes of payloading the test bus and will also inform FTA recipients about the total rated passenger capacity of the new bus models.

Description of the Likely Respondents

Bus manufacturers are the primary respondents.

Estimate of the Total Annual Reporting and Recordkeeping Burden Resulting From the Collection of Information

The hourly burden and cost to respondents is driven by the information collected during the test request process, the test scheduling process, and the report preparation and

the pass/fail compliance process. The program averages 46 requests for testing annually and assumed that the number of test requests will remain at 46 annually. FTA estimates that with the use of a new standardized form for requesting testing, that all 46 requests will require 0.75 hour for the respondent to complete regardless if the request is for full or partial testing. The estimated hourly burden and annualized cost to respondents for the test request process is outlined in Table H-10 below. The estimates assume that a mechanical engineer will complete the standardized test request form.

On average annual basis, five test requests were of a higher level of complexity that FTA needed more

information in order to assess the scope of the partial test program. The additional information consists of engineering drawings, 3-D depictions, finite element analyses, sub-system specifications, and similar documents. These items are already part of the bus manufacturers' normal product development process and FTA believes it would not require significant additional time or costs to create. FTA estimates that each of these five expanded information collections required an additional 4 hours each to prepare and send to FTA. Labor categories and rates from the Bureau of Labor Statistics (<http://www.bls.gov/oes/current/>) were used to estimate the annual labor costs.

TABLE H-10—ESTIMATED COST AND BURDEN OF THE TEST REQUEST PROCESS

Item	Labor category (BLS code/title)	Labor rate (\$/hr) (May 2013 BLS statistic)	Time (hrs)	Annual quantity	Total annual hours	Total annual cost (\$)
Standardized test request form.	17-2141 Mechanical engineer.	41.31	0.75	46	34.5	1425.20
Partial Test Determination Request (Expanded).	17-2141 Mechanical Engineer.	41.31	4.0	5	20.0	826.20
Total Annual Partial Test Determination Request Burden.	.....	.....	.....	.....	54.5	\$2251.40

The estimated hourly and cost burden related to scheduling a bus for testing with the bus testing facility operator is

presented in Table H-11 (see below). FTA estimates that a lawyer, accountant, mechanical engineer, and

admin personnel will be involved in the preparation of the request. An average of 16 tests is scheduled with LTI annually

TABLE H-11—ESTIMATED LABOR BURDEN AND COST FOR THE TEST SCHEDULING PROCESS

Item	Labor category (BLS code/title)	Labor rate (\$/hr) (May 2013 BLS statistic)	Preparation time (hrs)	Cost (\$)
Testing Contract .....	23-1011 Lawyer .....	63.46	1.0	63.46
Proof of Insurance .....	23-1011 Lawyer .....	63.46	1.0	63.46
Payment Check .....	13-2011 Accountant .....	34.86	1.0	34.86
Spare Parts Inventory List .....	17-2141 .....	41.31	3.0	123.93
Bus Design Characteristics Information .....	Mechanical Engineer .....	41.31	2.5	103.28
	17-2141 .....			
Assembling/Mailing of Test Scheduling Package	Mechanical Engineer .....	16.78	1.5	25.17
	43-000 .....			
Office/Admin Support .....	.....	.....	.....	8.63
Postage for package .....	.....	.....	.....	.....
Total burden per test request .....	10.0 .....	422.79	.....	.....
Total Annual Burden (16 tests a year) .....	160.0 .....	\$6764.64	.....	.....

There is an additional paperwork burden associated with submitting documentation to FTA and the Bus Testing Facility operator for the retesting of a failed performance standard. Bus manufacturers will need

to submit to FTA a failure analysis and a proposed corrective action report for bus models that fail to meet one or more of the proposed performance standards. They will also need to submit additional test fees associated with the tests that

are repeated. The estimated burden and cost is presented in Table H-12. Over the three-year study period, seven bus models would have required a request for retesting resulting in an average of 2.33 requests annually.

TABLE H-12—ESTIMATED BURDEN AND COST FOR THE REQUEST OF RETESTING TO ADDRESS A FAILED PERFORMANCE STANDARD

Item	Labor category (BLS code/title)	Labor rate (\$/hr) (May 2013 BLS statistic)	Preparation time (hrs)	Cost (\$)
Payment Check for Retesting Fees .....	13-2011 Accountant .....	34.86	0.5	17.43
Check Mailing .....	43-000 Office/Admin Support .....	16.78	1.0	16.78
Postage for package .....				5.60
Preparation of Failure Analysis and Modification Proposal.	17-2141 Mechanical Engineer .....	41.31	7.0	289.17
Total burden per test request .....	8.5	328.98		
Total Annual Burden (2.33 retest requests a year).	20	\$766.52		

One of the proposed revisions to the payloading process requires that the maximum standee passenger rating be placarded inside on the front bulkhead of the test bus. The estimated cost and labor burden for this information collection is presented in Table H-13.

TABLE H-13—ESTIMATED BURDEN AND COST FOR THE REVISED BUS PAYLOADING PROCEDURES

Item	Labor category (BLS code/title)	Labor rate (\$/hr) (May 2013 BLS statistic)	Preparation time (hrs)	Cost (\$)
Maximum Standee Passenger Capacity Calculation.	17-2141 Mechanical Engineer .....	41.31	2.0	82.62
Placard (source: www.edecals.com using a 2.5 inch tall lettering stating "XX Standees Maximum" and a quantity of 500).				8.99
Installation of Placard .....	51-2099 Assembler and Fabricator .....	13.74	0.10	1.37
Total burden per test bus .....	2.10	92.98		
Total Annual Burden (16 buses ) .....	33.6	\$1487.68		

The proposed revisions to test scheduling (49 CFR 665.11) introduce additional documentation requirements during the test requesting process. The manufacturer must verify that the vehicle complies with applicable FMVSS requirements and that the vehicle meets the Buy America content requirements in 49 CFR 661.11. The estimated cost and labor burden of these requirements for this information collection is presented in Table H-14.

TABLE H-14—ESTIMATED BURDEN AND COST FOR THE REVISED TEST SCHEDULING REQUIREMENTS

Item	Labor category (BLS code/title)	Labor rate (\$/hr) (May 2013 BLS statistic)	Preparation time (hrs)	Cost (\$)
Submission of Documentation for 49 CFR part 565 Vehicle Identification Number Requirements; 49 CFR part 566 Manufacturer Identification; 49 CFR part 567 Certification; and where applicable, 49 CFR part 568 Vehicle Manufactured in Two or More Stages—All Incomplete, Intermediate and Final-Stage Manufacturers of Vehicle Manufactured in Two or More Stages.	17-2141 Mechanical Engineer .....	41.31	1.0	41.31
Submission of Documentation for Buy America U.S. content requirements of 49 CFR § 661.11, Rolling Stock Procurements.	17-2141 Mechanical Engineer .....	41.31	1.0	41.31
Total burden per test bus .....	2.0	82.62		
Total Annual Burden (16 buses ) .....	32.0	\$1321.92		

The total burden and cost for this NPRM is summarized in Table H-15. FTA estimates the total annual burden and cost of the information collections resulting from the proposals in this NPRM as 300 hours and \$12,593. The previous burden estimate for the existing program was 210 hours and \$9,016.

TABLE H-15—TOTAL ESTIMATED ANNUAL BURDEN AND COST OF THE PROPOSED BUS TESTING PASS/FAIL NPRM

Information collection	Annual burden (hr)	Annual cost (\$)
Test Request Process .....	54.5	\$2251.40
Test Scheduling Process .....	160.0	6764.64
Request of Retesting to Address a Failed Performance Standard .....	20	766.52
Revised Bus Payloading Procedures .....	33.6	1487.68
Revised Test Scheduling Requirements .....	32.0	1321.92
Total .....	300.1	12,592.16

Comments are invited on:

- Whether the collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility.
  - Whether the Department’s estimate for the burden of the information collection is accurate.
  - Ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.
- Please submit any comments, identified by the docket number in the heading of this document, by any of the methods described in the ADDRESSES section of this document. Comments are due by August 24, 2015.

**H.8. Regulation Identifier Number (RIN)**

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document may be used to cross-reference this action with the Unified Agenda.

**H.9. National Environmental Policy Act**

The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321–4347), requires Federal agencies to consider the consequences of major federal actions and prepare a detailed statement on actions significantly affecting the quality of the human environment. FTA has determined that this rulemaking is categorically excluded pursuant to 23 CFR 771.118(c)(4).

**H.10. Privacy Act**

Anyone is able to search the electronic form for all comments received into any of our dockets by the name of the individual submitting the comments (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT’s complete Privacy Act Statement in the **Federal Register**

published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit [www.regulations.gov](http://www.regulations.gov).

**H.11. Executive Order 12898 (Environmental Justice)**

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” and DOT Order 5610.2(a), “Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (see, [www.fhwa.dot.gov/environment/environmental\\_justice/ej\\_at\\_dot/order\\_56102a/index.cfm](http://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/order_56102a/index.cfm)), require DOT agencies to achieve environmental justice (EJ) as part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects, of their programs, policies, and activities on minority populations and low-income populations in the United States. The DOT Order requires DOT agencies to address compliance with the Executive Order and the DOT Order in all rulemaking activities. To meet this goal, FTA has issued additional final guidance in the form of a circular (Circular 4703.1, “FTA Policy Guidance for Federal Transit Recipients,” July 17, 2012; [http://www.fta.dot.gov/legislation\\_law/12349\\_14740.html](http://www.fta.dot.gov/legislation_law/12349_14740.html)), to implement Executive Order 12898 and DOT Order 5610.2(a).

FTA evaluated this proposed rule under the Executive Order, the DOT Order, and the FTA Circular. Environmental justice principles, in the context of establishing a quantitative scoring system for public transit vehicles, fall outside the scope of applicability.

Nothing inherent in this proposed regulations would disproportionately impact minority or low income populations, as the primary parties affected by this proposal are those transit vehicle manufacturers who would be subject to the bus testing procedures and the new quantitative scoring system. FTA has determined that the

proposed regulations, if finalized as proposed, would not cause disproportionately high and adverse human health and environmental effects on minority or low income populations.

**List of Subjects in 49 CFR Part 665**

Buses, Grant programs—transportation, Public transportation, Motor vehicle safety, Reporting and recordkeeping requirements.

Issued in Washington, DC, under the authority delegated at 49 CFR 1.91.

**Therese McMillan,**  
*Acting Administrator.*

For the reasons stated in the preamble and under the authority of 49 U.S.C. 5323(c), 5318, and the delegations at 49 CFR 1.91, the Federal Transit Administration proposes to revise Part 665 of Title 49, Code of Federal Regulations, to read as follows:

**PART 665—BUS TESTING**

**Subpart A—General**

- Sec.
- 665.1 Purpose.
- 665.3 Scope.
- 665.5 Definitions.
- 665.7 Certification of compliance.

**Subpart B—Bus Testing Procedures**

- 665.11 Testing requirements.
- 665.13 Test report and manufacturer certification.

**Subpart C—Operations**

- 665.21 Scheduling.
- 665.23 Fees.
- 665.25 Transportation of vehicle.
- 665.27 Procedures during testing.
- Appendix A to Part 665—Bus Model Scoring System and Pass/Fail Standard

**Authority:** 49 U.S.C. 5318 and 49 CFR 1.91.

**Subpart A—General**

**§ 665.1 Purpose.**

An applicant for Federal financial assistance for the purchase or lease of buses with funds obligated by the FTA shall certify to the FTA that any new bus model acquired with such assistance has been tested and has received a passing test score in accordance with this part. This part contains the information necessary for a

recipient to ensure compliance with this provision.

### § 665.3 Scope.

This part shall apply to an entity receiving Federal financial assistance under 49 U.S.C. Chapter 53.

§ 665.5 Definitions. As used in this part—

*Administrator* means the Administrator of the Federal Transit Administration or the Administrator's designee.

*Automotive* means that the bus is not continuously dependent on external power or guidance for normal operation. Intermittent use of external power shall not automatically exclude a bus of its automotive character or the testing requirement.

*Bus* means a rubber-tired automotive vehicle used for the provision of public transportation service by or for a recipient of FTA financial assistance.

*Bus model* means a bus design or variation of a bus design usually designated by the manufacturer by a specific name and/or model number.

*Bus Testing Facility* means the facility used by the entity selected by FTA to conduct the bus testing program, including test track facilities operated in connection with the program.

*Bus Testing Report* means the complete test report for a bus model, documenting the results of performing the complete set of bus tests on a bus model.

*Curb weight* means the weight of the bus including maximum fuel, oil, and coolant; but without passengers or driver.

*Emissions* means the components of the engine tailpipe exhaust that are regulated by the United States Environmental Protection Agency (EPA), plus carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>).

*Emissions control system* means the components on a bus whose primary purpose is to minimize regulated emissions before they exit the tailpipe. This definition does not include components that contribute to low emissions as a side effect of the manner in which they perform their primary function (e.g., fuel injectors or combustion chambers).

*Final acceptance* means the formal approval by the recipient that the vehicle has met all of its bid specifications and the recipient has received proper title.

*Gross weight* (Gross Vehicle Weight, or GVW) means the seated load weight of the bus plus 150 pounds of ballast for each standee passenger, up to and including, the maximum rated standee passenger capacity identified on the bus interior bulkhead.

*Hybrid* means a propulsion system that combines two power sources, at least one of which is capable of capturing, storing, and re-using energy.

*Major change in chassis design* means, for vehicles manufactured on a third-party chassis, a change in frame structure, material or configuration, or a change in chassis suspension type.

*Major change in components* means:

(1) For those vehicles that are not manufactured on a third-party chassis, a change in a vehicle's engine, axle, transmission, suspension, or steering components;

(2) For those that are manufactured on a third-party chassis, a change in the vehicle's chassis from one major design to another.

*Major change in configuration* means a change that is expected to have a significant impact on vehicle handling and stability or structural integrity.

*Modified third-party chassis or van* means a vehicle that is manufactured from an incomplete, partially assembled third-party chassis or van as provided by an OEM to a small bus manufacturer. This includes vehicles whose chassis structure has been modified to include: a tandem or tag axle; a drop or lowered floor; changes to the GVWR from the OEM rating; or other modifications that are not made in strict conformance with the OEM's modifications guidelines where they exist.

*New bus model* means a bus model that—

(1) Has not been used in public transportation service in the United States before October 1, 1988; or

(2) Has been used in such service but which after September 30, 1988, is being produced with a major change in configuration or a major change in components; or

*Operator* means the operator of the Bus Testing Facility.

*Original equipment manufacturer (OEM)* means the original manufacturer of a chassis or van supplied as a complete or incomplete vehicle to a bus manufacturer.

*Parking brake* means a system that prevents the bus from moving when parked by preventing the wheels from rotating.

*Partial testing* means the performance of only that subset of the complete set of bus tests in which significantly different data would reasonably be expected compared to the data obtained in previous full testing of the baseline bus model at the Bus Testing Facility.

*Partial testing report*, also *partial test report*, means a report documenting, for a previously-tested bus model that is produced with major changes, the results of performing only that subset of

the complete set of bus tests in which significantly different data would reasonably be expected as a result of the changes made to the bus from the configuration documented in the original full Bus Testing Report. A partial testing report is not valid unless accompanied by the corresponding full Bus Testing Report for the corresponding baseline bus configuration.

*Public transportation service* means the operation of a vehicle that provides general or special service to the public on a regular and continuing basis consistent with 49 U.S.C. Chapter 53.

*Recipient* means an entity that receives funds under 49 U.S.C. Chapter 53, either directly from FTA or through a direct recipient.

*Regenerative braking system* means a system that decelerates a bus by recovering its kinetic energy for on-board storage and subsequent use.

*Retarder* means a system other than the service brakes that slows a bus by dissipating kinetic energy.

*Seated load weight* means the curb weight of the bus plus the seated passenger load simulated by adding 150 pounds of ballast to each seating position and 600 pounds per wheelchair position.

*Service brake(s)* means the primary system used by the driver during normal operation to reduce the speed of a moving bus and to allow the driver to bring the bus to a controlled stop and hold it there. Service brakes may be supplemented by retarders or by regenerative braking systems.

*Small bus manufacturer* means a secondary market assembler that acquires a chassis or van from an OEM for subsequent modification or assembly and sale as 5-year/150,000-mile or 4-year/100,000-mile minimum service life vehicle.

*Tailpipe emissions* means the exhaust constituents actually emitted to the atmosphere at the exit of the vehicle tailpipe or corresponding system.

*Third party chassis* means a commercially available chassis whose design, manufacturing, and quality control are performed by an entity independent of the bus manufacturer.

*Unmodified mass-produced van* means a van that is mass-produced, complete and fully assembled as provided by an OEM. This shall include vans with raised roofs, and/or wheelchair lifts, or ramps that are installed by the OEM or by a party other than the OEM provided that the installation of these components is completed in strict conformance with the OEM modification guidelines.

*Unmodified third-party chassis* means a third-party chassis that either has not been modified, or has been modified in strict conformance with the OEM's modification guidelines.

#### § 665.7 Certification of compliance.

(a) In each application to FTA for the purchase or lease of any new bus model, or any bus model with a major change in configuration or components to be acquired or leased with funds obligated by the FTA, the recipient shall certify that the bus was tested at the Bus Testing Facility and that the bus received a passing test score as required in this part. The recipient shall receive the appropriate full Bus Testing Report and any applicable partial testing report(s) before final acceptance of the first vehicle.

(b) In dealing with a bus manufacturer or dealer, the recipient shall be responsible for determining whether a vehicle to be acquired requires full testing or partial testing or has already satisfied the requirements of this part. A bus manufacturer or recipient may request guidance from FTA.

#### Subpart B—Bus Testing Procedures

##### § 665.11 Testing requirements.

(a) In order to be tested at the Bus Testing Facility, a new model bus shall—

(1) Be a single model that complies with NHTSA requirements at 49 CFR part 565 *Vehicle Identification Number Requirements*; 49 CFR part 566 *Manufacturer Identification*; 49 CFR part 567 *Certification*; and where applicable, 49 CFR part 568 *Vehicle Manufactured in Two or More Stages—All Incomplete, Intermediate and Final-Stage Manufacturers of Vehicle Manufactured in Two or More Stages*;

(2) Have been produced by an entity whose Disadvantaged Business Enterprise DBE goals have been submitted to FTA pursuant to 49 CFR part 26;

(3) Identify the maximum rated quantity of standee passengers on the interior bulkhead in 2 inch tall or greater characters;

(4) Meet all applicable Federal Motor Vehicle Safety Standards, as defined by the National Highway Traffic Safety Administration in part 571 of this title;

(5) Meet the Buy America U.S. content requirements of § 661.11 of this chapter; and

(6) Be substantially fabricated and assembled using the techniques, tooling, and materials that will be used in production of subsequent buses of that model.

(b) If the new bus model has not previously been tested at the Bus

Testing Facility, then the new bus model shall undergo the full tests requirements for Maintainability, Reliability, Safety, Performance (including Braking Performance), Structural Integrity, Fuel Economy, Noise, and Emissions Tests.

(c) If the new bus model has not previously been tested at the Bus Testing Facility and is being produced on a third-party chassis that has been previously tested on another bus model at the Bus Testing Facility, then the new bus model may undergo partial testing in place of full testing.

(d) If the new bus model has previously been tested at the Bus Testing Facility, but is subsequently manufactured with a major change in chassis or components, then the new bus model may undergo partial testing in place of full testing.

(e) The following vehicle types shall be tested:

(1) Large-size, heavy-duty transit buses (approximately 35'–40' in length, as well as articulated buses) with a minimum service life of 12 years or 500,000 miles;

(2) Medium-size, heavy-duty transit buses (approximately 30' in length) with a minimum service life of ten years or 350,000 miles;

(3) Medium-size, medium duty transit buses (approximately 30' in length) with a minimum service life of seven years or 200,000 miles;

(4) Medium-size, light duty transit buses (approximately 25'–35' in length) with a minimum service life of five years or 150,000 miles; and

(5) Other light duty vehicles such as small buses and regular and modified and unmodified vans with a minimum service life of four years or 100,000 miles.

(f) Tests performed in a higher service life category (*i.e.*, longer service life) need not be repeated when the same bus model is used in lesser service life applications.

##### § 665.13 Test report and manufacturer certification.

(a) The operator of the Bus Testing Facility shall implement the performance standards and scoring system set forth in this part.

(b) Upon completion of testing, the operator of the facility shall provide the scored test results and the resulting test report to the entity that submitted the bus for testing and to FTA. The test report will be available to recipients only after both the bus manufacturer and FTA have approved it for release. If the bus manufacturer declines to release the report, or if the bus did not achieve

a passing test score, the vehicle will be ineligible for FTA financial assistance.

(c)(1) A manufacturer or dealer of a new bus model or a bus produced with a major change in component or configuration shall provide a copy of the corresponding full Bus Testing Report and any applicable partial testing report(s) to a recipient during the point in the procurement process specified by the recipient, but in all cases before final acceptance of the first bus by the recipient.

(2) A manufacturer who releases a report under paragraph (c)(1) of this section also shall provide notice to the operator of the facility that the test results and the test report are to be made available to the public.

(d) If a tested bus model with a Bus Testing Report undergoes a subsequent major change in component or configuration, the manufacturer or dealer shall advise the recipient during the procurement process and shall include a description of the change. Any party may ask FTA for confirmation regarding the scope of the change.

(e) A Bus Testing Report shall be available publicly once the bus manufacturer makes it available during a recipient's procurement process. The operator of the facility shall have copies of all the publicly available reports available for distribution. The operator shall make the final test results from the approved report available electronically and accessible over the internet.

(f) The Bus Testing Report and the test results are the only official information and documentation that shall be made publicly available in connection with any bus model tested at the Bus Testing Facility.

#### Subpart C—Operations

##### § 665.21 Scheduling.

(a) All requests for testing, including requests for full, partial, or repeat testing, shall be submitted to the FTA Bus Testing Program Manager for review prior to scheduling with the operator of the Bus Testing Facility. All test requests shall provide: a detailed description of the new bus model to be tested; the service life category of the bus; engineering level documentation characterizing all major changes to the bus model; and documentation that demonstrates satisfaction of each one of the testing requirements outlined in § 665.11(a).

(b) FTA will review the request and determine if the bus model is eligible for testing and which tests must be performed. FTA will prepare a written response to the requester for use in scheduling the required testing.

(c) To schedule a bus for testing, a manufacturer shall contact the operator of the Bus Testing Facility and provide the FTA response to the test request. Contact information and procedures for scheduling testing are available on the operator's Bus Testing Web site, <http://www.altoonabustest.com>.

(d) Upon contacting the operator, the operator shall provide the manufacturer with the following:

- (1) A draft contract for the testing;
- (2) A fee schedule; and
- (3) The test procedures for the tests that will be conducted on the vehicle.

(e) The operator shall process vehicles FTA has approved for testing in the order in which the contracts are signed.

#### § 665.23 Fees.

(a) The operator shall charge fees in accordance with a schedule approved by FTA, which shall include different fees for partial testing.

(b) Fees shall be prorated for a vehicle withdrawn from the Bus Testing Facility before the completion of testing.

(c) The manufacturer's portion of the test fee shall be used first during the conduct of testing. The operator of the Bus Testing Facility shall obtain approval from FTA prior to continuing testing of each bus model at the Bus Testing Program's expense after the manufacturer's fee has been expended.

#### § 665.25 Transportation of vehicle.

A manufacturer shall be responsible for transporting its vehicle to and from the Bus Testing Facility at the beginning and completion of the testing at the manufacturer's own risk and expense.

#### § 665.27 Procedures during testing.

(a) Upon receipt of a bus approved for testing the operator of the Bus Testing Facility shall:

- (1) Inspect the bus design configuration and compare it to the configuration documented in the test request;
- (2) Determine if the bus, when loaded to Gross Weight, does not exceed its Gross Vehicle Weight Rating, Gross Axle Weight Ratings, or maximum tire load ratings;
- (3) Determine if the bus is capable of negotiating the durability test track at curb weight, seated load weight, and Gross Vehicle Weight;
- (4) Determine if the bus is capable of performing the Fuel Economy and Emissions Test duty cycles within the established standards for speed deviation.

(b) The operator shall present the results obtained from the activities of § 665.27(a) and present them to the bus manufacturer and the FTA Bus Testing

Program Manager for review prior to initiating testing using the Bus Testing Program funds.

(c) The operator shall perform all maintenance and repairs on the test vehicle, consistent with the manufacturer's specifications, unless the operator determines that the nature of the maintenance or repair is best performed by the manufacturer under the operator's supervision.

(d) The manufacturer shall be permitted to observe all tests. The manufacturer shall not provide maintenance or service unless requested to do so by the operator.

(e) The operator shall investigate each occurrence of unauthorized maintenance and repairs and determine the potential impact to the validity of the test results. Tests where the results could have been impacted must be repeated at the manufacturer's expense.

(f) The operator shall perform all modifications on the test vehicle, consistent with the manufacturer's specifications, unless the operator determines that the nature of the modification is best performed by the manufacturer under the operator's supervision. All vehicle modifications performed after the test has started will first require review and approval by FTA. If the modification is determined to be a major change, some or all of the tests already completed shall be repeated or extended at FTA's discretion.

(g) The operator shall halt testing after any occurrence of unapproved, unauthorized, or unsupervised test vehicle modifications. Following an occurrence of unapproved or unsupervised test vehicle modifications, the vehicle manufacturer shall submit a new test request to FTA that addresses all the requirements in 665.11 to reenter the Bus Testing Program.

(h) The operator shall perform eight categories of tests on new bus models. The eight tests and their corresponding performance standards are described in the following paragraphs.

(1) *Maintainability Test*—(i) The Maintainability test shall include bus servicing, preventive maintenance, inspection, and repair. It shall also include the removal and reinstallation of the engine and drive-train components that would be expected to require replacement during the bus's normal life cycle. Much of the maintainability data should be obtained during the Bus Durability Test. All servicing, preventive maintenance, and repair actions shall be recorded and reported. These actions shall be performed by test facility staff, although manufacturers shall be allowed to

maintain a representative on-site during the testing. Test facility staff may require a manufacturer to provide vehicle servicing or repair under the supervision of the facility staff. Since the operator may not be familiar with the detailed design of all new bus models that are tested, tests to determine the time and skill required for removing and reinstalling an engine, a transmission, or other major propulsion system components may require advice from the bus manufacturer. All routine and corrective maintenance shall be carried out by the operator in accordance with the manufacturer's specifications.

(ii) The Maintainability Test Report shall include the frequency, personnel hours, and replacement parts or supplies required for each action during the test. The accessibility of selected components and other observations that could be important to a bus purchaser shall be included in the report.

(iii) The performance standard for Maintainability is that no greater than 125 hours of total unscheduled maintenance shall be accumulated over the execution of a full test.

(2) *Reliability Test*—(i) Reliability shall not be a separate test, but shall be addressed by recording all bus failures and breakdowns during all other testing. The detected bus failures, repair time, and the actions required to return the bus to operation shall be presented in the report.

(ii) The performance standard for Reliability is that the vehicle under test experience no more than one uncorrected Class 1 failure and two uncorrected Class 2 failures over the execution of a full test. Class 1 failures are addressed in the Safety Test, below. An uncorrected Class 2 failure is a failure mode not addressed by a design or component modification that would cause a transit vehicle to be unable to complete its transit route and require towing or on-route repairs. A failure is considered corrected when a design or component modification is validated through sufficient remaining or additional reliability testing in which the failure does not reoccur.

(3) *Safety Test*—(i) The Safety Test shall consist of a Handling and Stability Test, a Braking Performance Test, and a review of the Class 1 reliability failures that occurred during the test.

(ii) The Handling and Stability Test shall be an obstacle avoidance double-lane change test performed on a smooth and level test track. The lane change course will be set up using pylons to mark off two 12 foot center to center lanes with two 100 foot lane change areas 100 feet apart. Bus speed shall be

held constant throughout a given test run. Individual test runs shall be made at increasing speeds up to a specified maximum or until the bus can no longer be operated safely over the course, whichever speed is lower. Both left- and right-hand lane changes shall be tested. The performance standard is that the test vehicle can safely negotiate and remain within the lane change test course at a speed of no less than 45 mph.

(iii) The functionality and performance of the service, regenerative (if applicable), and parking brake systems shall be evaluated at the test track. The test bus shall be subjected to a series of brake stops from specified speeds on high, low, and split-friction surfaces. The parking brake shall be evaluated with the bus parked facing both up and down a steep grade. There are three performance standards for braking. The stopping distance from a speed of 45 mph on a high friction surface shall satisfy the bus stopping distance requirements of FMVSS 105 or 121 as applicable. The bus shall remain within a standard 12-foot lane width during split coefficient brake stops. The parking brake shall hold the test vehicle stationary on a 20 percent grade facing up and down the grade for a period of 5 minutes.

(iv) A review of all the Class 1 failures that occurred during the test shall be conducted as part of the Safety Test. Class 1 failures include those failures that, when they occur, could result in a loss of vehicle control; in serious injury to the driver, passengers, pedestrians, or other motorists; and in property damage or loss due to collision or fire. The performance standard is that at the completion of testing with no uncorrected Class 1 failure modes. A failure is considered corrected when a design or component modification is validated through sufficient remaining or additional Reliability Tests in which the failure does not reoccur over a number of miles equal to or greater than the additional failure up to 100% of the durability test mileage for the service life category of the tested bus.

(4) *Performance Test*—(i) The Performance Test shall measure the maximum acceleration, speed, and gradeability capability of the test vehicle. In determining the transit vehicle's maximum acceleration and speed, the bus shall be accelerated at full throttle from rest until it achieves its maximum speed on a level roadway. The performance standard for acceleration is that the maximum time that the test vehicle requires to achieve 30 mph is 18 seconds on a level grade. The gradeability test of the test vehicle

shall be calculated based on the data measured on a level grade during the Acceleration Test. The performance standard for the gradeability test is that the test vehicle achieves a sustained speed of at least 40 mph on a 2.5 percent grade and a sustained speed of at least 10 mph on a 10 percent grade.

(ii) [Reserved].

(5) *Structural Integrity Test*—Seven individual Structural Integrity Tests shall be performed.

(i) *Shakedown Test*—A shakedown of the bus structure shall be conducted by loading and unloading the bus with a distributed load equal to 2.5 times the load applied for the gross weight portions of testing. The bus shall then be unloaded and inspected for any permanent deformation on the floor or coach structure. This test shall be repeated a second time, and shall be repeated one more time if the permanent deflections vary significantly between the first and second tests. The performance standard shall be that the maximum measured permanent deflection is no greater than 0.006 inch after the third loading cycle.

(ii) *Distortion Test*—The bus shall be loaded to GVW, with one wheel on top of a curb and then in a pothole. This test shall be repeated for all four wheels.

The test verifies:

(A) Normal operation of the steering mechanism and;

(B) Operability of all passenger doors, passenger escape mechanisms, windows, and service doors. A water leak test shall be conducted in each suspension travel condition. The performance standard shall be that all vehicle passenger exits remain operational throughout the test.

(iii) *Static Tow Test*—Using a load-equalizing towing sling, a static tension load equal to 1.2 times the curb weight shall be applied to the bus towing fixtures (front and rear). The load shall be removed and the two eyes and adjoining structure inspected for damages or permanent deformations. The performance standard shall be that no permanent deformation is experienced at static loads up to 1.2 times the vehicle curb weight.

(iv) *Dynamic Tow Test*—The bus shall be towed at CW with a heavy wrecker truck for 5 miles at 20 mph and then inspected for structural damage or permanent deformation. The performance standard shall be that the vehicle is towable with a standard commercial vehicle wrecker without experiencing any permanent damage to the vehicle.

(v) *Jacking Test*—With the bus at CW, probable damages and clearance issues due to tire deflating and hydraulic

jacking shall be assessed. The performance standard shall be that the vehicle is capable of being lifted with a standard commercial vehicle hydraulic jack.

(vi) *Hoisting Test*—With the bus at CW, possible damages or deformation associated with lifting the bus on a two post hoist system or supporting it on jack stands shall be assessed. The performance standard shall be that the vehicle is capable of being supported by jack stands rated for the vehicle's weight. (vii) *Structural Durability Test*—The Structural Durability Test shall be performed on the durability course at the test track, simulating twenty-five percent of the vehicle's normal service life. The bus structure shall be inspected regularly during the test, and the mileage and identification of any structural anomalies and failures shall be reported in the Reliability Test. There shall be two performance standards for the Durability Test, one to address the vehicle frame and body structure and one to address the bus propulsion system. The performance standard for the vehicle frame and body structure shall be that there are no uncorrected failure modes of the vehicle frame and body structure at the completion of the full vehicle test. The performance standard for the vehicle propulsion system is that there are no uncorrected powertrain failure modes at the completion of a full test.

(6) *Noise Test*—(i) The Noise Test shall measure interior noise and vibration while the bus is idling (or in a comparable operating mode) and driving, and also shall measure the transmission of exterior noise to the interior while the bus is not running. The exterior noise shall be measured as the bus is operated past a stationary measurement instrument. There shall be two minimum noise performance standards: One to address the maximum interior noise during vehicle acceleration from a stop, and one to address the maximum exterior noise during vehicle acceleration from a stop. The performance standard for interior noise while the vehicle accelerates from 0–35 mph shall be no greater than 80 decibels A-weighted. The performance standard for exterior noise while the vehicle accelerates from 0–35 miles per hour shall be no greater than 83 decibels A-weighted.

(ii) [Reserved]

(7) *Emissions Test*—(i) The Emissions Test shall measure tailpipe emissions of those exhaust constituents regulated by the United States EPA for transit bus emissions, plus carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>), as the bus is operated over specific repeatable transit

vehicle driving cycles. The Emissions test shall be conducted using an emission testing laboratory equipped with a chassis dynamometer capable of both absorbing and applying power.

(ii) The Emissions Test is not a certification test, and is designed only to enable FTA recipients to relatively compare the emissions of buses operating on the same set of typical transit driving cycles. The results of this test are not directly comparable to emissions measurements reported to other agencies, such as the EPA, or for other purposes.

(iii) The emissions performance standard shall be the prevailing EPA emissions requirements for heavy-duty vehicles outlined in 40 CFR part 86 and 40 CFR part 1037.

#### **Appendix A to Part 665—Bus Model Scoring System and the Pass/Fail Standard**

##### **1. Bus Model Scoring System**

The Bus Model Scoring System shall be used to score the test results using the performance standards in each category. A bus model that fails to meet a minimum performance standard shall be deemed to have failed the test and will not receive an aggregate score. For buses that have passed

all the minimum performance standards, an aggregate score shall be generated and presented in each Bus Testing Report. A bus model that just satisfies the minimum baseline performance standard and does not exceed any of the standards shall receive a score of 60. The maximum score a bus model shall receive is 100. The minimum and maximum points available in each test category shall be as shown below in Table A.

##### **2. Pass/Fail Standard**

The passing standard shall be a score of 60. Bus models that fail to meet one or more of the minimum baseline performance standards will be ineligible to obtain an aggregate passing score.

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**TABLE A: Performance Standards, Scoring System, and Pass/Fail**

Test Category		Performance Standard	All Performance Standards Met?		
			No	Yes → Assess Score	
				Base Score	+ Prorated Points for Measured Test Performance
<b>Structural Integrity</b> (30 pts.)	Shakedown	Maximum permanent chassis deflection ≤ 0.006 inch after 3 load cycles		1.0	
	Distortion	All exits remain operational under each distortion loading condition		1.0	
	Static Towing	No significant deformation under 120% curb weight load		1.0	
	Dynamic Towing	Bus is towable with standard wrecker		1.0	
	Jacking	Bus is liftable with a standard jack		1.0	
	Hoisting	Bus stable on jacks		1.0	
	Durability	No uncorrected frame & body structure failures remaining at completion of test		12.0	
No uncorrected powertrain failures remaining at completion of test		12.0			
<b>Safety</b> (20 pts.)	Hazards	No uncorrected Class 1 reliability failures remaining at test completion	10.0		
	Stability	Lane change speed no less than 45 mph	2.5		
	Braking	Stopping distance from 45 mph within 158 feet as per FMVSS 105 & FMVSS 121	0.5		Stopping distance from 45 mph (ft) 158 ←————→ 80 Points: 0.0      2.0
		Bus remains within lane during split coefficient brake stops	2.5		
		Parking brake holds on 20% grade	2.5		
<b>Maintainability</b> (16 pts.)		Accumulation of no more than 125 hours of unscheduled maintenance	2.0	Hours: 125      0 ←————→ Points: 0.0      14.0	
<b>Reliability</b> (8 pts.)		No more than 2 uncorrected Class 2 failures remaining at completion of test	2.0	Failures: 2      0 ←————→ Points: 0.0      6.0	

<b>Fuel Economy</b> (7 pts.)  (Only 1 fuel type scored)	Liquid Fuels (Diesel, Gasoline, LPG, LNG)	<b>Compliant with 49 CFR Part 535 MEDIUM- AND HEAVY-DUTY VEHICLE FUEL EFFICIENCY PROGRAM- Heavy-Duty Vocational Vehicle Fuel Consumption Standards</b>	<b>1.0</b>	MPG: 1 — 13
	CNG			Points: 0.0 — 6.0
	Hydrogen			SCF/mi: 50 — 10
	Electric			Points: 0.0 — 6.0
<b>Emissions</b> (7 pts.)  (All emissions categories scored)	Carbon Dioxide (CO <sub>2</sub> )	<b>Compliant with all applicable EPA exhaust emissions regulations at date of manufacture including:</b>  <b>40 CFR Part 86 CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES</b>  <b>40 CFR Part 1037 CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES</b>	<b>1.0</b>	Points: 0.0 — 6.0
	Carbon Monoxide (CO)			SCF/mi: 98 — 15
	Total Hydrocarbon (THC)			Points: 0.0 — 6.0
	Non-Methane Hydrocarbon (NMHC)			kW-hr/mi: 3 — 1
	Nitrogen Oxides (NO <sub>x</sub> )			Points: 0.0 — 6.0
	Particulate Matter (PM)			MPG: 1 — 13
<b>Noise</b> (7 pts.)	Interior - acceleration 0-35 mph	No greater than 80 decibels (dB(A))	0.5	Grams/mi: 4000 — 0
	Exterior - acceleration 0-35 mph	No greater than 83 decibels (dB(A))	0.5	Points: 0.0 — 4.0
<b>Performance</b> (5 pts.)	Acceleration	Time from 0-30 mph no greater than 18 sec	1.5	Grams/mi: 20 — 0
	Gradeability	Sustained speed on 2.5% grade no less than 40 mph	1.5	Points: 0.0 — 0.4
		Sustained speed on 10% grade no less than 10 mph	2.0	Grams/mi: 3 — 0
<b>Overall Result</b>	<b>FAIL</b>		<b>60</b>	Points: 0.0 — 0.4
	<b>PASS</b>			<b>+</b> <b>0</b> — <b>40</b>
<b>Maximum Aggregate Score</b>			<b>100</b>	



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Part IV

## Federal Communications Commission

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47 CFR Parts 0, 1, 2, *et al.*

Shared Commercial Operations in the 3550–3650 MHz Band; Final Rule

## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Parts 0, 1, 2, 90, 95, and 96

[GN Docket No. 12–354; FCC 15–47]

#### Shared Commercial Operations in the 3550–3650 MHz Band

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** In this document, the Federal Communications Commission (FCC or Commission) adopts rules to establish a new Citizens Broadband Radio Service in the 3550–3700 MHz band. This document implements a three-tiered spectrum authorization framework in the 3550–3700 MHz band to facilitate a variety of small cell and other broadband uses of the band on a shared basis with incumbent federal and non-federal users.

**DATES:** Effective July 23, 2015, except for §§ 96.17(d), 96.21(a)(3), 96.23(b), 96.29, 96.33(b), 96.35(e), 96.39(a), 96.39(c)–(g), 96.41(d)(1), 96.43(b), 96.45(b), 96.45(d), 96.49, 96.51, 96.57(a)–(c), 96.59(a), 96.61, 96.63, and 96.67(b)–(c) which contain information collection requirements that are not effective until approved by the Office of Management and Budget. The FCC will publish a document in the **Federal Register** announcing the effective date for those sections.

**FOR FURTHER INFORMATION CONTACT:** Paul Powell, Mobility Division, Wireless Telecommunications Bureau, at (202) 418–1613 or by email at [paul.powell@fcc.gov](mailto:paul.powell@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order in GN Docket No. 12–354, FCC 15–47, adopted April 17, 2015 and released April 21, 2015. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street SW., Washington, DC 20554. The complete text may be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street SW., Room CY–B402, Washington, DC 20554, (202)488–5300, facsimile (202) 488–5563, or via email at [fcc@bcpweb.com](mailto:fcc@bcpweb.com). The full text may also be downloaded at: [www.fcc.gov](http://www.fcc.gov). Alternative formats are available to persons with disabilities by sending an email to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or by calling the Consumer & Governmental Affairs Bureau at 202–418–0530 (voice), 202–418–0432 (tty).

The Commission will send a copy of this Report & Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

#### Ex Parte Presentations

This proceeding shall continue to be treated as a “permit-but-disclose” proceeding in accordance with the Commission's *ex parte* rules.<sup>1</sup> Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with section 1.1206(b).<sup>2</sup> In proceedings governed by section 1.49(f)<sup>3</sup> or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

We note that our *ex parte* rules provide for a conditional exception for all *ex parte* presentations made by NTIA or Department of Defense

representatives.<sup>4</sup> This proceeding raises significant technical issues implicating federal and non-federal spectrum allocations and users. Staff from NTIA, DoD, and the FCC have engaged in technical discussions in the development of this Report and Order and we anticipate these discussions will continue after this Report and Order is released. These discussions will benefit from an open exchange of information between agencies, and may involve sensitive information regarding the strategic federal use of the 3.5 GHz Band. Recognizing the value of federal agency collaboration on the technical issues raised in this Report and Order, NTIA's shared jurisdiction over the 3.5 GHz Band, the importance of protecting federal users in the 3.5 GHz Band from interference, and the goal of enabling spectrum sharing to help address the ongoing spectrum capacity crunch, we find that this exemption serves the public interest.

#### Comment Filing Procedures

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.

- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW–A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any

<sup>1</sup> 47 CFR part 1, subpart H.

<sup>2</sup> 47 CFR 1.1206(b).

<sup>3</sup> 47 CFR 1.49(f).

<sup>4</sup> See 47 CFR 1.1204.

envelopes and boxes must be disposed of *before* entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington DC 20554.

*People with Disabilities:* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

### Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980,<sup>5</sup> the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) and an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules adopted and proposed in this document, respectively. The FRFA is set forth in Appendix B. The IRFA is set forth in Appendix C. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this *Report and Order* as set forth on the first page of this document, and have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>6</sup> In addition, the *Report and Order* and FRFA (or summaries thereof) will be published in the **Federal Register**.<sup>7</sup>

### Paperwork Reduction Act

The Report and Order contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new information collection requirements contained in this proceeding.

<sup>5</sup> See 5 U.S.C. 603-04.

<sup>6</sup> See 5 U.S.C. 603(a).

<sup>7</sup> See *id.*

### Congressional Review Act

The Commission will send a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA), *see* 5 U.S.C. 801(a)(1)(A).

### Synopsis of the Report and Order

#### I. Introduction

With this *Report and Order (Report and Order or R&O)*, we adopt rules for commercial use of 150 megahertz in the 3550-3700 MHz band (3.5 GHz Band), and in so doing open a new chapter in the history of the administration of one of our nation's most precious resources—the electromagnetic radio spectrum. Wireless broadband is transforming every facet of American life. We live in a world of wirelessly connected people, apps, and things. The 3.5 GHz Band has physical characteristics that make it particularly well-suited for mobile broadband employing small cell technology. The creation of our new Citizens Broadband Radio Service in this band will therefore add much-needed capacity to meet the ever-increasing demands of wireless innovation. As such, it represents a major contribution toward our collective goal of making 500 megahertz newly available for broadband use.

Advances in radio and computing technologies provide new tools to facilitate more intensive spectrum sharing. Our new rules use these tools to dissolve some age-old regulatory divisions, between commercial and federal users, exclusive and non-exclusive authorizations, and private and carrier networks. Starting from some of the recommendations of the President's Council of Advisors on Science and Technology (PCAST), these rules incorporate a wide range of viewpoints and information collected through three rounds of notice and comment. Over time, some of the approaches we advance in the 3.5 GHz “innovation band” could lead to greater productivity in other parts of the radio spectrum.

The R&O establishes a roadmap for making the entirety of the 3.5 GHz Band available for commercial use in phases. The 3550-3650 MHz band segment is currently allocated for use by Department of Defense (DoD) radar systems. The National Telecommunications and Information Administration (NTIA) first proposed making the band available for shared use in its 2010 “Fast Track Report.” Based on technical assumptions available at the time, NTIA's analysis showed that large exclusion zones

would be required to protect the DoD radar systems. Last year's *Further Notice of Proposed Rulemaking (FNPRM or 3.5 GHz FNPRM)* (79 FR 31247, June 2, 2014) sought comment on the Fast Track exclusion zones, but mentioned ongoing discussions among federal agencies on ways to reevaluate the zones. On March 24, 2015, NTIA filed a letter recommending a framework that would reduce the geographic area of the zones by approximately 77 percent. NTIA's letter also recommended the use of sensor technology to permit commercial use inside the zones, providing a roadmap to full nationwide commercial use of the band.

This federal/non-federal sharing arrangement is part of a broader three-tiered sharing framework enabled by a Spectrum Access System (SAS). Incumbent users represent the highest tier in this framework and receive interference protection from Citizens Broadband Radio Service users. Protected incumbents include the federal operations described above, as well as Fixed Satellite Service (FSS) and, for a finite period, grandfathered terrestrial wireless operations in the 3650-3700 MHz portion of the band. The Citizens Broadband Radio Service itself consists of two tiers—Priority Access and General Authorized Access (GAA)—both authorized in any given location and frequency by an SAS. As the name suggests, Priority Access operations receive protection from GAA operations. Priority Access Licenses (PALs), defined as an authorization to use a 10 megahertz channel in a single census tract for three years, will be assigned in up to 70 megahertz of the 3550-3650 MHz portion of the band. GAA use will be allowed, by rule, throughout the 150 megahertz band. GAA users will receive no interference protection from other Citizens Broadband Radio Service users.

Our new rules advance a potential solution to a long-standing problem in spectrum policy: how to select the most appropriate commercial authorization or licensing mechanism for a new band. The record has brought us back to first principles. We have considered ideas from three major traditions in spectrum management: flexible-use geographic licensing, site-based frequency coordination, and unlicensed authorization. Ultimately, we adopt a hybrid framework that selects, automatically, the best approach based on local supply and demand. Where competitive rivalry for spectrum access is low, the GAA tier provides a low-cost entry point to the band, similar to unlicensed access. Where rivalry is high, an auction resolves mutually

exclusive applications in specific geographic areas for PALs. Finite-term licensing facilitates evolution of the band and an ever-changing mix of GAA and Priority Access bandwidth over time. The SAS serves as an advanced, highly automated frequency coordinator across the band. It protects higher tier users from those beneath and optimizes frequency use to allow maximum capacity and coexistence for both GAA and Priority Access users.

This regulatory adaptability should make the 3.5 GHz Band hospitable to a wide variety of users, deployment models, and business cases, including some solutions to market needs not adequately served by our conventional licensed or unlicensed rules. Carriers can avail themselves of “success-based” license acquisition, deploying small cells on a GAA basis where they need additional capacity and paying for the surety of license protection only in targeted locations where they find a demonstrable need for more interference protection. Real estate owners can deploy neutral host systems in high-traffic venues, allowing for cost-effective network sharing among multiple wireless providers and their customers. Manufacturers, utilities, and other large industries can construct private wireless broadband networks to automate processes that require some measure of interference protection and yet are not appropriately outsourced to a commercial cellular network. Smart grid, rural broadband, small cell backhaul, and other point-to-multipoint networks can potentially access three times more bandwidth than was available under our previous 3650–3700 MHz band rules. All of these applications could share common wireless technologies, providing economies of scale and facilitating intensive use of the spectrum.

In specifying rules for the SAS—the lynchpin of the Citizens Broadband Radio Service—we balance a need for clear definition of its role, purposes, and functions against a desire to allow market forces and industry standards to inform the specifics of implementation. We will open a process by which multiple entities can apply for certification to operate as SAS Administrators. Through this approval process, applicants will demonstrate their ability to perform the enumerated SAS functions. Because the regime depends on a high degree of interaction among different users, the approval process will be designed to confirm the ability of an SAS to ensure that lower tiers do not transgress the rights of higher tiers. This will be especially important with respect to incumbent

military users of the band. A similar approach will also apply to the authorization and operation of the Environmental Sensing Capability (ESC).

This *Report and Order* initiates a comprehensive regulatory scheme to promote development of innovative technologies and services in the 3.5 GHz Band. Nonetheless, there are a few, highly technical areas where we have concluded that additional record development would provide beneficial clarity or consensus to shape some specific parts of the rules.

## II. Background

### A. Policy Context

America’s appetite for wireless broadband service is surging. According to Cisco, North American mobile traffic grew 63 percent in 2014 and will continue to grow at a near-50 percent compound annual growth rate over the next five years. In this context, the FCC, NTIA, and federal agencies have worked collaboratively to make additional spectrum available to meet demand.

In March 2010, the *National Broadband Plan* recommended that the Commission make 500 megahertz available for broadband use by 2020, with 300 megahertz suitable for mobile use by 2015. It supported the development of opportunistic technologies to enable dynamic shared access to spectrum. The *National Broadband Plan* also recommended that the Commission and NTIA work together to identify spectrum that can be made available for wireless broadband use, on an exclusive, shared, licensed, and/or unlicensed basis.

On June 28, 2010, President Obama released a Presidential Memorandum entitled “Unleashing the Wireless Broadband Revolution,” which directed NTIA to collaborate with the FCC to make available 500 megahertz of spectrum available for commercial wireless services while ensuring no loss of critical government capabilities.

Pursuant to this Presidential Memorandum, in October 2010, NTIA released its “Fast Track” Report, which identified 3550–3650 MHz as one of several federal bands that could be made available for commercial wireless broadband by 2015. As discussed below, this band has long been allocated for use by military radar systems. Based on a preliminary electro-magnetic compatibility analysis, the Fast Track Report included significant restrictions on broadband use to protect existing DoD radars from commercial systems and vice-versa.

In July, 2013, PCAST released its report. Given the increasing demand for commercial wireless spectrum and the continuing critical needs of federal users, the report concluded that the best way to increase the availability of broadband spectrum is to promote spectrum sharing between federal and commercial users through the use of new technologies. PCAST recommended that shared spectrum be organized into three tiers. The first tier would consist of incumbent federal users. These users would be entitled to full protection for their operations within their deployed areas, consistent with the terms of their assignments. The second tier would consist of users that would receive short-term priority authorizations to operate within designated geographic areas. Secondary users would receive protection from interference from third tier users but would be required to avoid interference with and accept interference from Federal Primary users. Third tier users would be entitled to use the spectrum on an opportunistic basis and would not be entitled to interference protection. Coordination among different tiers would be accomplished through a database-driven SAS. The use of low-power small cells for broadband would facilitate spectral reuse and sharing, increasing overall efficiency. PCAST recommended that the Federal Government identify 1,000 megahertz of federal spectrum for shared use under this system to create the first “shared use spectrum superhighways.”

On June 13, 2013, President Obama released another Presidential Memorandum entitled “Expanding America’s Leadership in Wireless Innovation.” Echoing the PCAST report, this second Memorandum directed the executive branch to increase broadband access to spectrum through sharing with federal users (78 FR 37431, June 20, 2013).

### B. Spectrum Environment

#### 1. 3550–3650 MHz Band

The 3550–3650 MHz band is allocated to the Radiolocation Service (RLS) and the Aeronautical Radionavigation Service (ARNS) (ground-based), on a primary basis for federal use (47 CFR 2.104(h)(4) and 2.1(c)). Footnote G59 states that all federal non-military RLS use of the 3500–3650 MHz band shall be on a secondary basis to military RLS operations (47 CFR 2.106, note G59). Footnote G110 states that federal ground-based stations in the ARNS may be authorized in the 3500–3650 MHz band when accommodation in the 2700–2900 MHz band is not technically

and/or economically feasible (47 CFR 2.106, note G110).

Both fixed and mobile high-powered DoD radar systems on ground-based, shipborne, and airborne platforms operate in this band. These radar systems are used in conjunction with weapons control systems and for the detection and tracking of air and surface targets. The U.S. Navy uses the band for radars on guided missile cruisers. The U.S. Army uses the band for a firefinder system to detect enemy projectiles. The U.S. Air Force uses the band for airborne radar Station Keeping Equipment throughout the United States and Possessions to assist pilots in formation flying and to support drop-zone training.

The 3500–3600 MHz and 3600–3650 MHz bands are allocated to RLS on a secondary basis for non-federal use (47 CFR 2.106).

The 3600–3650 MHz band is also allocated to the FSS (space-to-Earth) on a primary basis for non-federal use and, per footnote US245, use of this FSS downlink allocation is limited to international inter-continental systems and is subject to case-by-case electromagnetic compatibility analysis. The Commission has licensed primary FSS earth stations to receive frequencies in the 3600–3650 MHz band in 35 cities. Airbus DS SatCom Government, Inc. operates two gateway earth stations (located northeast of Los Angeles and New York City) that provide feeder links for Inmarsat's L-band mobile-satellite service system.

## 2. 3650–3700 MHz Band

The 3650–3700 MHz band is also allocated for terrestrial non-federal use. In March 2005, the Commission adopted a Report and Order that amended Part 90 by adding new Subpart Z—Wireless Broadband Services in the 3650–3700 MHz Band (*3.65 GHz Order*, 70 FR 24712, May 11, 2005). Such service is authorized through non-exclusive nationwide licenses and requires the registration of individual fixed and base stations. All stations operating in this band must employ a contention-based protocol (47 CFR 90.1305). Base and fixed stations are limited to 25 watts per 25 megahertz equivalent isotropically radiated power (EIRP) and the peak EIRP power density shall not exceed 1 watt in any 1 megahertz slice of spectrum; mobile and portable stations are limited to 1 watt per 25 megahertz EIRP and the peak EIRP density shall not exceed 40 mW in any 1 megahertz slice of spectrum (47 CFR 90.1321). Base and fixed stations may only be located within 150 kilometers of an FSS earth station if the licensee of the earth station

agrees to such operation (47 CFR 90.1331). Requests for base or fixed station locations closer than 80 kilometers to three Federal Government radiolocation facilities are only approved upon successful coordination by the Commission with NTIA. Mobile and portable stations may operate only if they can positively receive and decode an enabling signal transmitted by a base station; airborne operations are prohibited (47 CFR 90.1333).

The 3650–3700 MHz band is allocated for primary use by the federal RLS at three designated sites (47 CFR 2.106, note US348). The 3650–3700 MHz band is also allocated for use by ship stations located at least 44 nautical miles from shore in offshore ocean areas on a non-interference-basis (47 CFR 2.106, note US349).

## 3. Adjacent Bands

*Below 3550 MHz.* Several of the allocations discussed above extend below 3550 MHz. Of particular relevance to this proceeding are the primary allocations for shipborne, airborne, and ground-based radars operated by DoD.

*Above 3700 MHz.* FSS, which has a co-primary allocation at 3600–3650 MHz, also makes extensive use of the 3700–4200 MHz band (C-Band) in the United States and globally in order to provide video distribution, mobile voice and data backhaul, retail services, aeronautical applications, and other uses, to commercial and government customers. Terrestrial microwave services licensed under Part 101 of the Commission's rules also operate in this band (*See* 47 CFR 101.17 and 101.101).

## C. Procedural History

### 1. 3.5 GHz NPRM

The *3.5 GHz NPRM* furthered the Commission's ongoing efforts to address the growing demand for fixed and mobile broadband capacity by proposing to make an additional 100 megahertz (or up to 150 megahertz under a supplemental proposal) of spectrum available for shared wireless broadband use. Specifically, the NPRM proposed to create a new Citizens Broadband Radio Service under Part 95 of the Commission's rules. The proposed service built on our existing TVWS rules (*See* 47 CFR 15.701, *et seq.*). First, technical rules would focus on the use of low-powered small cells to drive increases in broadband capacity and spectrum reuse. Second, an SAS would coordinate multiple tiers of commercial use.

The NPRM proposed that the SAS would accommodate three service tiers:

(1) Incumbent Access; (2) Priority Access; and (3) General Authorized Access. Incumbent Access users would include authorized federal and grandfathered FSS users currently operating in the 3.5 GHz Band. These users would have protection from harmful interference from all other users in the 3.5 GHz Band. In the Priority Access tier, the NPRM proposed that the Commission authorize certain users with critical quality-of-service needs (such as hospitals, utilities, and public safety entities) to operate with some interference protection in portions of the 3.5 GHz Band at specific locations. Finally, in the GAA tier, the NPRM proposed that users be authorized to use the 3.5 GHz Band opportunistically within designated geographic areas. GAA users would be required to not cause interference to, and accept interference from Incumbent and Priority Access tier users. The NPRM also included a supplemental proposal to expand the proposed licensing and authorization model to an additional adjacent 50 megahertz of spectrum in the 3650–3700 MHz band, making up to 150 megahertz available for shared wireless broadband access.

The NPRM noted that the technical characteristics of the 3.5 GHz Band and the existence of important incumbent operations in the band in many areas of the country make the band an ideal platform to explore innovative approaches to shared spectrum use and small cell technology. NTIA's Fast Track Report recommended, based on technical assumptions typical of traditional macrocell deployments of commercial wireless broadband technology, that new commercial uses of the band occur outside of large "exclusion zones" to protect Federal Government operations. Given that the exclusion zones would cover approximately 60 percent of the U.S. population and because of limited signal propagation in the band, the band did not appear to be well-suited for macrocell deployment. However, the NPRM stated that these very disadvantages could be turned into advantages if the band were used to explore spectrum sharing and small cell innovation.

We received 65 comments and 26 reply comments in response to the NPRM. These comments, and those received in subsequent rounds, are summarized and referenced in this *Report and Order* where appropriate.

### 2. Licensing Public Notice

In November 2013, in response to record comments received up to that point, the Commission released the

*Licensing PN* (78 FR 73794, December 9, 2013), which described a Revised Framework that elaborated upon some of the licensing concepts and alternatives set forth in the *NPRM*. The Revised Framework retained the three-tier model proposed in the *NPRM* but expanded eligibility for access to the Priority Access tier with competitive bidding for assigning licenses within that tier. Like the *NPRM*'s main proposal, the Revised Framework cited the unique capabilities of small cell and SAS technologies to enable sharing among users in the Priority Access and GAA tiers. Specifically, the Revised Framework contained the following core concepts:

- An SAS to dynamically manage frequency assignments and automatically enforce access to the Priority Access and GAA tiers;
- Expansive eligibility for Priority Access tier use;
- Granular, but administratively streamlined licensing of the Priority Access tier;
- Exclusive spectrum rights for Priority Access subject to licensing by auction in the event of mutually exclusive applications;
- A defined “floor” of GAA spectrum availability, to ensure that GAA access is available nationwide (subject to Incumbent Access tier use);
- Additional GAA access to unused Priority Access bandwidth, as identified and managed by the SAS, to maximize dynamic use of the unutilized portion of the band and ensure productive use of the spectrum;
- Opportunities for Contained Access Users to obtain targeted priority spectrum use within specific facilities (such as buildings) meeting certain requirements to mitigate the potential for interference to and from Incumbent Users and other Citizens Broadband Radio Service users; and
- A set of baseline technical standards to prevent harmful interference and ensure productive use of the spectrum.

We received 35 comments and 27 reply comments in response to the *Licensing PN*.

### 3. Workshops

We convened two workshops to discuss technical issues related to this proceeding. The first workshop, held on March 13, 2013, explored broad issues that emanated from the original *NPRM*. The second workshop, held on January 14, 2014, further explored the technical requirements, operational parameters, and architecture of the proposed SAS (SAS Workshop). A group of engineers representing industry stakeholders,

trade associations, and academia submitted technical papers in advance of the workshop and participated in panels throughout the day.

### 4. Further Notice of Proposed Rulemaking

In April 2014, the Commission released the *3.5 GHz FNPRM*, proposing specific rules for a new Citizens Broadband Radio Service in the 3.5 GHz Band to be codified in a new proposed Part 96. The *FNPRM* built upon the concepts and proposals set forth in the *NPRM* and the *Licensing PN* and reflected the extensive record generated in the proceeding. Notably, the *3.5 GHz FNPRM* proposed to:

- Implement the three-tier authorization model proposed in the *NPRM*;
- Establish Exclusion Zones based on recommendations set forth in the Fast Track Report to ensure compatibility between incumbent federal operations and Citizens Broadband Radio Service users;
- Create an open eligibility authorization system for Priority Access and GAA operations;
- Establish granular, exclusive spectrum rights for the Priority Access tier, consistent with parameters discussed in the *Licensing PN*;
- Set a defined “floor” for GAA spectrum availability, to ensure that GAA access is available nationwide (subject to Incumbent Access tier use);
- Set guidelines to allow Contained Access Users to request up to 20 megahertz of reserved frequencies from the GAA pool for use within their facilities;
- Establish baseline technical rules for fixed or nomadic base stations operating in the 3.5 GHz Band;
- Set guidelines for the operation and certification of SASs in the band.

The *FNPRM* also sought comment on: (1) Protection criteria for Incumbent Users; (2) potential protection of FSS earth stations in the C-Band; (3) competitive bidding procedures for resolving mutually exclusive applications for PALs; and (4) the possible extension of the proposed rules to include the 3650–3700 MHz band.

## III. Discussion

### A. Allocation

*Background.* In the *NPRM*, the Commission requested comment on the allocation structure that should be used to accommodate the Citizens Broadband Radio Service at 3550–3650 MHz. Specifically, the *NPRM* proposed to retain the primary allocation for existing federal radar systems, and also allocate

that band for non-federal fixed and mobile use. In addition, the *NPRM* proposed to restrict primary non-federal FSS earth station use in the upper half of the band (3600–3650 MHz) to the FSS earth stations licensed or applied for as of the effective date of the *Report and Order* in this proceeding. The Commission noted the existence of primary federal allocations for aeronautical radionavigation service and ground-based radars, and stated that the Commission would work with NTIA regarding the continued need for those allocations. The *NPRM* sought comment on the potential for interference to and from existing and future international FSS operations in the 3.5 GHz Band. In the *NPRM*, the Commission noted its belief that its proposed framework met the requirements for allocation of flexible use spectrum under Section 303(y) of the Act. In this regard, it noted that a non-federal Fixed and Mobile allocation is consistent with international allocations for use of the 3.5 GHz Band, that the proposed framework would spur innovation and investment in new wireless technologies with little to no impact on incumbent uses, and that the framework was structured to prevent interference between users through the SAS and technical and operational rules proposed therein.

In the *FNPRM*, the Commission refined the proposals initially made in the *NPRM*. The Commission proposed to add non-federal fixed and land mobile allocations to the 3550–3650 MHz band on a primary basis to permit commercial use of the band consistent with the Commission's accompanying licensing and service rule proposals. Additionally, the Commission proposed to remove the secondary radiolocation service allocation from the 3550–3650 MHz band in the non-Federal Table, and to add three US footnotes to: (1) Permit non-federal stations in the radiolocation service that were licensed or applied for prior to the effective date of this *Report and Order* to continue to operate on a secondary basis until the end of the equipment's useful lifetime; (2)(a) limit primary FSS use of the 3600–3650 MHz band to earth stations authorized prior to, or granted as a result of, an application filed prior to, the effective date of this *Report and Order* and constructed within 12 months of initial authorization; (2)(b) specify that FSS use of the 3600–3650 MHz band for all other earth stations will be on a secondary basis to non-federal stations in the fixed and land mobile services; and (3) specify provisions for federal use of the aeronautical radionavigation



(ground-based) and radiolocation services and for non-federal use of the fixed and land mobile services in the 3550–3650 MHz band. The Commission sought comment on these proposals. The *FNPRM* also sought comment on whether federal fixed and mobile operations should be permitted in the 3.5 GHz Band, and what the implications would be of such federal use on non-federal use of the band.

A small number of commenters addressed these allocation proposals. The Utilities Telecom Council, Edison Electric Institute, and National Rural Electrical Cooperative Association (Utility Groups) and Motorola Mobility support the proposals for non-federal fixed and mobile allocation of the 3550–3650 MHz band, and for the restrictions on the primary FSS earth station use to those earth stations licensed or applied for as of the effective date of the *Report and Order* in this proceeding. Motorola Mobility argues that this limitation will result in more robust use of the band for the Citizens Broadband Radio Service, and for this same reason, argues that the Commission should not permit federal fixed and mobile operations in the 3.5 GHz Band. On the other hand, the Satellite Industry Association (SIA) opposes a primary allocation for the Citizens Broadband Radio Service, but argues that if the Citizens Broadband Radio Service is granted primary status, such status should not preclude future FSS deployment because it would be contrary to the Commission's stated premise that the FSS and Citizens Broadband Radio Service can share spectrum. SIA contends that the proposal to relegate future FSS operations to secondary status would unnecessarily limit the much-needed flexibility of satellite network operators and strand existing investment in 3600–3650 MHz space stations, harming satellite operators, their customers, and their investors.

As detailed in Section III(G)(1), NTIA generally supports the FCC's proposal to add a co-primary, non-federal fixed and mobile allocation to the band. NTIA describes a phased approach to implementing protection criteria of federal operations, including the approval of an ESC to detect signals from federal radar systems. The ESC input would be used by the SAS to direct Priority Access licensees and GAA users to another portion of the 3.5 GHz Band or, if necessary, to cease transmissions to avoid potential interference to federal radar systems. NTIA also encourages the Commission to retain the federal allocation for airborne radar systems subject to the same type of approach used in the

AWS–3 proceeding (*i.e.*, commercial operations will accept interference from federal airborne systems), including a clear statement in the rules that the airborne radars will not seek protection from Citizens Broadband Radio Service Devices (CBSD). NTIA also requests that the Commission reinstate the protections for a site in Pascagoula, MS in the 3650–3700 MHz band. NTIA asserts that the DoD informed NTIA that it still has an active assignment in use at that location on a regular basis.

*Discussion.* After review of the record, we adopt allocation proposals largely consistent with the *FNPRM* proposals, as amended to reflect the NTIA Letter. The allocations are appropriate to permit both robust development of the Citizens Broadband Radio Service and protection of Incumbent Users. We believe that the Citizens Broadband Radio Service has the potential to provide a valuable new service to address broadband capacity shortages. Accordingly, we are adding primary fixed and mobile except aeronautical mobile allocations to the 3550–3650 MHz band in the non-federal table. We are also limiting the primary FSS operations in the band to those authorized prior to, or granted as a result of an application filed prior to the effective date of this *Report and Order*, and constructed within 12 months of the initial authorization. We are also removing the non-federal radiolocation allocation and agreeing to continued federal use of airborne radars in the band based on the NTIA Letter. Finally, we sunset the freeze we imposed on new earth station applications in the *NPRM*. The freeze will expire on the effective date of this *Report and Order*, which replaces the freeze with a rule making such facilities secondary to non-federal stations in the fixed and land mobile services.

We also find that these changes to the Table of Allocations are made consistent with the Commission's authority under Section 303(y) of the Communications Act. We adopt our tentative conclusion and find that: (1) the allocations are in the public interest; (2) new and revised uses of the band would not deter investments in communications services and systems or technology development; and (3) new and revised uses of the band would not result in harmful interference among users of the band. Adding non-federal co-primary fixed and mobile (except aeronautical mobile) allocations in the 3550–3650 MHz band will add much needed capacity to meet the rapidly increasing demands of wireless innovation, and promote investment in new services and technologies for use in that band. In

addition, the allocation plan we adopt today will create a system for shared use of the band with incumbent federal users in a way that maximizes efficient use of spectrum through the combination of small cell technology and more sophisticated spectrum management techniques through the SAS designed to prevent harmful interference. Moreover, we note that these allocations are consistent with the ITU Region 2 Allocation Table.

The non-federal co-primary fixed and mobile except aeronautical mobile allocations will allow for shared use of the band between Citizens Broadband Radio Service and incumbent federal Radiolocation and Aeronautical Radionavigation and non-federal FSS services. These allocations are consistent with prior Commission actions to repurpose certain bands for new broadband uses. To ensure that essential federal radiolocation systems operating in the band continue their operations without impact from the sharing arrangements, we are prohibiting CBSDs from causing harmful interference to, or claiming protection from, federal stations aboard vessels (shipborne radars) and at designated ground-based radar sites. In addition, authorized users of CBSDs must not claim protection from airborne radars and airborne radar receivers must not claim protection from CBSDs operating in the Citizens Broadband Radio Service. We therefore establish rules to protect federal radar systems from Citizens Broadband Radio Service operations as described below. These rules are reflected in footnote US433 to the Table of Allocations. Also, we will take such actions as are necessary to amend the Commission's rules to reflect any modification to the list of sites designated by NTIA where federal radar systems will operate.

We will continue to permit primary operations in the 3600–3650 MHz band for those FSS earth stations authorized prior to, or granted as a result of an application filed prior to, the effective date of this *Report and Order*, and constructed within 12 months of their initial authorization. However, we will not accept applications for modifications to existing FSS earth station facilities after the effective date of the *Report and Order*, except for changes in polarization, antenna orientation, or ownership. We will also allow modifications to increase the antenna size to mitigate interference from new services. In addition, we will consider reasonable waiver requests from existing FSS licensees to accommodate additional modifications, including facility relocation, on a case-

by-case basis. Any new FSS earth stations in the 3600–3650 MHz band, applied for following the effective date of the *Report and Order*, will be authorized on a secondary basis to non-federal stations in the fixed and land mobile services. These provisions are reflected in footnote US107 to the Table of Allocations. We believe these changes to the Table of Allocations are necessary to ensure the ongoing stability of the band and ensure its availability for mobile broadband services. We will also coordinate with the border countries as necessary to ensure that the Citizens Broadband Radio Service does not cause harmful interference to international FSS operations in the band as set forth in Section III(G)(3).

While we appreciate SIA's concerns that the proposed allocation changes may impact existing FSS growth and the investment in the band, these changes are consistent with Commission policies adopted more than 14 years ago for sharing in the adjacent 3650–3700 MHz band, wherein existing FSS earth stations were grandfathered on a primary basis and new FSS earth stations were permitted to operate on a secondary basis.<sup>8</sup> Further, as noted above, there is a co-primary FSS allocation in the 3700–4200 MHz band that can be used to accommodate future FSS earth station growth that cannot be accommodated in the 3600–3650 MHz band (47 CFR 2.106). We also disagree with SIA that these changes are contrary to the Commission's stated premise that the FSS and Citizens Broadband Radio Service can share spectrum. The purpose of the 2012 freeze was to "ensure a stable spectral ecosystem for the proposed Citizens Broadband [Radio] Service." Moreover, there will

<sup>8</sup> See Amendment of the Commission's Rules With Regard to the 3650–3700 MHz Government Transfer Band, ET Docket No. 98–237, RM–9411; The 4.9 GHz Band Transferred from Federal Government Use, WT Docket No. 00–32; *First Report and Order and Second Notice of Proposed Rule Making*, 65 FR 69451 (November 17, 2000) (*3650–3700 MHz First R&O*) (allocating the 50 megahertz of spectrum in the 3650–3700 MHz band to fixed and mobile services on a primary basis to facilitate the provision of a broad range of services, including traditional voice telephony and broadband data and video services; while "grandfathering" existing primary FSS earth stations and permitting new secondary FSS earth station use of that band). While allowing existing sites to freely relocate could cause instability in the band and endanger spectrum access for Citizens Broadband Radio Service users, we acknowledge that such relocations may occasionally be necessary. Therefore, to accommodate what SIA represents would be the "quite rare" need for "[r]elocation or addition of an FSS earth station," as when a licensee is unable to extend its lease at any existing site or when that site is damaged, we will entertain applications for waivers for site relocations within 16.1 km of existing facilities. See SIA *FNPRM* Comments at 19–20.

continue to be FSS use of the 3600–3650 MHz band, with grandfathered operations on a co-primary basis with the Citizens Broadband Radio Service and new uses on a secondary basis to the Citizens Broadband Radio Service.

We emphasize that CBSDs are prohibited from causing harmful interference to any FSS earth stations authorized prior to the effective date of this *Report and Order*, as those earth stations will retain primary status. The approach we adopt in the 3600–3650 MHz band is similar to the one we adopted in the 3650–3700 MHz band and will permit the FSS to continue to make productive use of that band, without increasing impairments to the new Citizens Broadband Radio Service use.

In addition, we will eliminate the non-federal radiolocation allocation in the 3550–3650 MHz band. There are a number of other bands available for non-federal radiolocation use, and we see no need to continue to authorize use for such radiolocation services in the 3550–3650 MHz band, especially considering the impact of potential interference to Citizens Broadband Radio Service. However, we will continue to permit non-federal radiolocation stations that were licensed or had filed an application for authorization prior to the effective date of this *Report and Order* to continue to operate on a secondary basis until the end of the equipment's useful lifetime. These provisions are reflected in footnote US105 to the Table of Allocations.

No commenting party addressed the potential addition of a federal fixed and mobile allocation for the 3.5 GHz Band in response to the *NPRM* and *FNPRM*'s request for comment on federal Citizens Broadband Radio Service use of the band in addition to non-federal use. At this time we will not include a federal fixed and mobile allocation in the 3.5 GHz Band. However, if and when federal agencies determine they may benefit from use of Citizens Broadband Radio Service equipment, we will work with NTIA to ensure use by the federal agencies is consistent with the rules adopted herein.

We will continue to allow federal airborne radar use in the band, with some qualifications. As NTIA noted, in the AWS–3 proceeding, we allowed federal airborne radar use to continue in the band and required commercial systems to accept interference from these systems. Unlike the AWS–3 band, there are no federal airborne radar systems currently operating in the 3550–3650 MHz band. However, NTIA recommends an approach that would

allow federal incumbent users to retain the flexibility to deploy radar systems in the band. We do not believe that the potential future deployment of federal airborne radar systems will significantly impact the commercial viability of the Citizens Broadband Radio Service. Accordingly, we adopt NTIA's recommendation for preserving the allocation allowing federal airborne radar systems in the 3550–3650 MHz band, with the proviso that such systems shall not be entitled to interference protection from Citizens Broadband Radio Service users in the band. As described below in Section III(G)(1)(b), Citizens Broadband Radio Service users will also have to accept the risk of interference from airborne systems.

Finally, in the 3650–3700 MHz band, footnote US 109 establishes an 80 kilometer protection zone around two federal government radiolocation facilities at Saint Indigoes MD and Pensacola FL (47 CFR 2.106, note US109). As specified in 47 CFR part 90.1331, commercial fixed and mobile operations within the protection zone must be coordinated with NTIA (47 CFR 90.1331). Prior to 2012, an additional site located in Pascagoula, MS had also been protected in the band. That site was removed in the 2012 *Notice of Proposed Rulemaking and Order* implementing the results of the 2007 WRC (WRC–07) (77 FR 76250, December 27, 2012). The NTIA Letter notes that DoD has an active frequency assignment at the Pascagoula, MS location that regularly uses the 3650–3700 MHz portion of the band. Therefore, we revise footnote US 109 to include the Pascagoula, MS site and protect it from harmful interference consistent with other protected federal radiolocation sites in the band.

#### B. Access Model and Bandplan

We adopt an access model for the 3.5 GHz Band consistent with the proposals set forth in the *NPRM*, *Licensing PN*, and *FNPRM*. We also adopt the supplemental proposal to include the 3650–3700 MHz band in the authorization framework. We will immediately effectuate three-tiered sharing, with Priority Access Licenses authorized in the bottom 100 megahertz of the combined band. By adopting a flexible access model across the entire band, we aim to create a versatile 150 megahertz band for shared wireless broadband use that can adapt to market and technological opportunities.

##### 1. Three-Tier Access Model

*Background.* In the *FNPRM*, we proposed to implement the three-tier

authorization framework originally described in the *NPRM* and further discussed in the *Licensing PN*. Under this framework, existing primary operations—including authorized federal users and grandfathered FSS earth stations—would make up the Incumbent Access tier and would receive protection from harmful interference consistent with the proposed rules. The Citizens Broadband Radio Service would be divided into Priority Access and GAA tiers of service, each of which would be required to operate on a non-interference basis with the Incumbent Access tier. GAA users would also be required to operate on a non-interference basis with respect to Priority Access Licensees. We also proposed that any party that meets basic eligibility requirements under the Communications Act be eligible to hold a PAL or, when authorized, operate a CBSD on a GAA basis in the Citizens Broadband Radio Service. In addition, we proposed to apply the three-tier authorization model across the entire 3.5 GHz Band. We sought comment on these proposals and encouraged commenters to consider the costs and benefits of any alternative proposals.

We received a varied record on this topic, with many commenters supporting the immediate implementation of the three-tier approach and others arguing for a “transitional” approach. Numerous commenters supported the use of a three-tier framework. This group included BLiNQ, Dynamic Spectrum Alliance, Federated Wireless, Google, Interdigital, Motorola Mobility, PISC, White Space Alliance, the Wireless Innovation Forum, and WISPA. In a joint filing, PISC, the White Space Alliance, and the Dynamic Spectrum Alliance contend that immediate adoption of a three-tier framework would benefit the economy by enabling intensive use of the band, promoting additional broadband development in rural areas, and lowering the barriers to entry for a diverse range of users.

Federated Wireless asserts that delaying implementation of the three-tiered authorization model—even temporarily—would reduce spectral and economic efficiency and introduce uncertainty into the band, reducing network deployments. Federated also contends that SAS-based sharing between GAA and Priority Access users is conceptually no different than sharing between Priority Access and Incumbent Users. Therefore, according to Federated Wireless, the perceived risk of GAA interference should not pose an impediment to three-tier sharing or the

development of a full functional SAS capable of managing three-tiers of users.

Google agrees that the three-tier framework would meet the Commission’s goals more effectively than the two-tier or “transitional” approaches advocated by other commenters. Google also argues that the SAS can effectively manage three-tiers of service without any negative effects on Priority Access networks and that some features of the SAS could help promote efficient use of the band by Priority Access Licensees. Google contends that moving immediately to a three-tier sharing framework for the entire 3.5 GHz Band will promote investment and the deployment of innovative broadband technologies in the band. Google recently demonstrated a prototype SAS, which it asserts is capable of managing three tiers of authorized users in the 3.5 GHz Band.

Other commenters, including 4G Americas, Alcatel-Lucent, AT&T, CTIA, Ericsson, Mobile Future, Qualcomm, PCIA, and Verizon argue for a “transitional” band plan that would divide the 3.5 GHz Band between two-tier and three-tier authorization models, at least initially, or phase in GAA use only after an SAS is tested and proven. While these commenters differ on the specific bandplan that should be adopted, they generally argue that the SAS, as proposed, is a complex system that will require extensive testing and development prior to deployment. They believe that the inclusion of GAA use in the band increases this complexity significantly. They therefore argue in favor of more traditional exclusive licensing in a portion of the band before the eventual transition to a three-tier framework.

Verizon believes that moving to a three-tier framework is ultimately desirable, but that the Commission should designate a portion of the band for short-term deployment of existing technologies for a fixed period of time. Verizon proposes that the band should initially be divided into three segments: (1) The “transitional band” for Priority Access and Incumbent Users only; (2) the “experimental” band for the Commission’s three-tiered sharing approach; and (3) a portion of the band for GAA and Incumbent Use only. According to Verizon, the two-tier model is a proven technology and designating a portion of the band for this use would promote near term investment and deployment of LTE networks while allowing industry to develop technology to support the three-tier framework in the “experimental” portion of the band. Verizon argues that its proposed framework would

ultimately lead to a fully developed unified band without sacrificing short-term investment.

AT&T argues that the Commission should initially divide the band into licensed and unlicensed segments, with a significant amount of spectrum reserved for both types of users. In its view, licensed users should be afforded longer license terms with a renewal expectation and reasonable performance requirements to provide licensees with the regulatory certainty necessary to encourage investment. During the “transition” period, AT&T argues that users should not be permitted to use channels assigned to licensed users on an opportunistic basis, though such use could be allowed after the “transition” window.

Some network equipment and technology providers, including Nokia Solutions and Networks (NSN) and Qualcomm, continue to argue for the merits of a two-tier Licensed Shared Access (LSA) framework, whereby, in portions of the band assigned to Priority Access users, no GAA use would be allowed. They contend that two-tier sharing technology has already been proven to be effective in other markets and that adoption of a two-tier model would allow for rapid Priority Access development in the band. The proposals are consistent with the two-tier sharing model advocated by Verizon, AT&T, and others for the exclusively licensed portion of the band during the “transition” period.

As described in detail in Section III(J), the record divides over whether to include the 3650–3700 MHz band in the proposed Citizens Broadband Radio Service authorization framework. Many commenters support the proposal to create a 150 megahertz contiguous block of spectrum for the Citizens Broadband Radio Service. Others oppose changing the existing framework for the 3650–3700 MHz band. Still others suggest that if we decide to include 3650–3700 MHz in the Citizens Broadband Radio Service we must do so in a manner that sufficiently protects existing investment in the band. These commenters propose that we adopt additional protections for 3650–3700 MHz band incumbents in order to mitigate any impact on existing operations.

*Discussion.* After thorough review of the record, we generally adopt the three-tier authorization model proposed in the *NPRM* and *FNPRM* for the 3550–3650 MHz band. We conclude that moving immediately to a three-tier authorization model, rather than adopting a “transitional” approach to the band, is technologically feasible and will promote innovation and investment in

the band. We also conclude that the 3650–3700 MHz band should be included in the Part 96 authorization regime, subject to the conditions set forth in Sections 90.1307, 90.1311, 90.1338 and 96.21, but that the 3650–3700 MHz band should be reserved for GAA users and Grandfathered Wireless Broadband Licensees at this time. As we explain in detail in Section III(J) below, we find that including the 3650–3700 MHz band for these uses and subject to these conditions will further the development of the Citizens Broadband Radio Service while respecting the investments that current licensees have made in the band.

We agree with numerous commenters that immediately adopting the three-tier access model for the 3550–3650 MHz band will best serve the public interest, encourage innovation, and spur investment in the band. Indeed, as Federated Wireless notes, “[m]ovement away from the three tier model. . . will reduce spectral and economic efficiencies, and temporarily adopting two sets of rules for the band will introduce regime uncertainty, reducing deployments.” Even commenters advocating “transition” plans agree that a three-tier access model would be advantageous as soon as it becomes technically feasible. We believe that a three-tier framework is technically feasible in the near term, while adopting an “interim” plan could create more challenges to any eventual transition to a three-tier model. We also observe that we cannot predict with certainty what the demand for spectrum will be for use of the spectrum by PALs at any given location and over time. A three-tiered approach will better ensure that use of the spectrum can adapt to market and user demands. Therefore, the public interest will best be served by launching the Citizens Broadband Radio Service with the three-tier model in place from the outset.

While we appreciate the creative “transition plans” put forth by various commenters, we are not convinced that this approach is necessary or desirable. We disagree with commenters that argue that the three-tier framework entails untested and unproven sharing elements that will require significant testing and development—beyond that which would be required for two-tier sharing—prior to commercial deployment. Rather, we agree with the Dynamic Spectrum Alliance, Federated Wireless, Google, PISC, Spectrum Bridge, the White Space Alliance, WISPA, and other commenters who have argued that the development of an SAS capable of managing three-tiers of authorized users will not be an

impediment to rapidly deploying service across three tiers of service in the band. Indeed, several current TVWS database providers support the Commission’s proposal and believe that, while the SAS will be a more complex system than the TVWS databases, the technology already exists to effectively manage the three tiers of users in the band. Notably, as mentioned above, Google claims that it has already developed a prototype SAS capable of managing three tiers of users in the band to the specifications proposed by the *FNPRM*.

We believe that the technological development of an SAS capable of managing a “transitional” bandplan would not be significantly less burdensome than the development of a fully functional SAS. Even a two-tier or “transitional” approach would require Commission review and approval of some form of SAS to manage interactions between Incumbent Users and a variety of Priority Access Licensees prior to initial commercial deployment. Using the “proven” technologies available for two-tier sharing would entail some period of testing, development, and review prior to the issuance of PALs in the context of our proposed Citizens Broadband Radio Service. To ensure that a three-tier authorization model is developed, a two-tier sharing system would likely need to be designed from the outset to later accommodate a third tier after the transition period. Therefore, we adopt the three-tier approach for the entire 3550–3650 MHz band to encourage the development of fully functional SASs without delay. While we acknowledge that the development and approval of a fully functional SAS may take some time, as described in Sections III(H)(1) and III(H)(3)(b), we are convinced that the technology to implement the three-tier authorization framework exists or is in late-stage development and that the public interest benefits of moving directly to this model significantly outweigh any possible risk of delay. These benefits include the promotion of wide-scale investment and deployment based on assured availability to both PAL and GAA users, as well as the critical need to provide for the most efficient use of the spectrum by providing users with the simultaneous option of bidding at auction for priority PAL use in areas where they need and are willing to pay for it, while obtaining shared use on a GAA basis in all other scenarios.

We are also unconvinced by arguments that a portion of the band must be, at least temporarily, set aside for more traditional licenses to

encourage investment in the band. We address the specific elements of these licensing proposals in more detail below. For now, we note that implementation of the “transition” plans advocated by AT&T, Verizon, Ericsson, CTIA, and others could effectively prevent the three-tier authorization model from ever taking hold in the “transitional” portion of the band. The combination of fixed channel assignments for PALs and indefinite license renewals could permanently prevent GAA use of certain portions of the band, particularly in regions of high commercial interest, even after the “transition” period concludes. These proposals could also preclude investment from a newer generation of Priority Access Licensees in the future. Indeed, any plan that rests upon the assumption that a licensee will be able to renew a license for a fixed channel assignment in perpetuity can hardly be called “transitional.” In addition, the record includes substantial evidence from commenters that are interested in investing in a three-tier band and, as such, we do not believe that it is in the public interest to delay or compromise its implementation. Moreover, our framework depends on providing potential PAL bidders with simultaneous economic choices of bidding for higher priority PAL licenses in areas where such priority is critical to their needs and relying on shared GAA use where it is not.

However, while we decline to subdivide the 3550–3650 MHz band, nothing in the rules we adopt should be read to preclude industry agreement on a common bandplan, so long as the bandplan complies with the rules, including the band-wide operability requirements described in Section III(F)(2)(c). We acknowledge that SAS Administrators, potential licensees, and other industry stakeholders will need to develop various implementation details to facilitate development of the Citizens Broadband Radio Service. As described elsewhere in this *Report and Order*, we believe that many of these issues can be addressed during the SAS Approval Process and through the efforts of a multi-stakeholder group. For example, a bandplan similar to the one shown in Figure 1 could promote efficient use of the band and simplify coordination between SAS Administrators. If industry stakeholders do not develop such a convention, the Commission may revisit this issue in the future.

## 2. Frequency Assignment

### a. Apportionment Between Priority Access and GAA Tiers

*Background.* In the *FNPRM*, we proposed to adopt rules governing frequency assignments that would balance the needs of Priority Access Licensees and GAA users. To foster a robust GAA ecosystem, a meaningful amount of the 3.5 GHz Band must be reserved for GAA use in any given geographic area. To that end, we proposed to reserve for GAA use a minimum of 50 percent of the 3.5 GHz Band in any given census tract—after accounting for any frequencies used by Incumbent Access tier operators in the area—with the remainder to be assigned as PALs. We sought comment on this proposed apportionment of spectrum between the GAA and Priority Access tiers.

Some commenters, including NSN and PCIA contend that the proposed GAA floor is too high. NSN argues that the proposed 50 percent floor will not provide sufficient spectrum to encourage potential Priority Access Licensees to invest in the band. T-Mobile argues that a minimum of 40 megahertz of spectrum should be reserved for Priority Access Licensees in each license area as well as 50 percent of any additional available spectrum. Verizon asks that the Commission confirm that the 50 percent GAA floor will not remain static if Priority Access Licenses have been assigned in a given area and Incumbent Users later make use of a portion of the spectrum. According to Verizon, in such cases, Priority Access Licensees should be assigned channels before GAA users.

Others, including WISPA, the Wi-Fi Alliance, UTC, the American Petroleum Institute, Motorola Mobility, and Shared Spectrum Company support reserving at least 50 percent of available frequencies in any given area for GAA use. Motorola Solutions supports the proportional assignment approach proposed by the Commission but proposes that 60 percent of available frequencies be reserved for GAA use. Others support the proposed GAA floor but contend that users should have at least a fixed minimum amount of the band available instead of utilizing a proportional approach. Notably, PISC and Microsoft ask that the Commission reserve the greater of 50 megahertz or 50 percent of available spectrum for GAA use.

*Discussion.* We continue to believe that ensuring that a stable and significant quantity of spectrum is available for both Priority Access Licensees and GAA will foster innovation, encourage efficient use of

the band, and create an environment conducive to a wide array of potential users and uses. However, we modify the proposed approach to better serve the public interest in this band. We recognize that the proportional frequency assignment method proposed in the *FNPRM* could create uncertainty in the marketplace, particularly in areas where the band may be partially used by Incumbent Users. Therefore, we conclude that a maximum of 70 megahertz may be reserved for PALs in any given license area at any time and the remainder of the available frequencies should be made available for GAA use.

This approach will benefit Priority Access Licensees and GAA users alike. Priority Access Licensees will have more predictable access to spectrum. GAA users will potentially have access to all 150 megahertz in the band in areas where there are no PALs issued or in use and up to 80 megahertz where all PALs are in use. We note, however, that both PAL and GAA spectrum access will necessarily be constrained by the need to protect Incumbent Users throughout the band. We believe that moving from proportional frequency reservations to fixed frequency reservations—coupled with opportunistic access to spectrum for GAA users across 150 megahertz—will increase band access, stability, and predictability for all Citizens Broadband Radio Service users.

We agree with those commenters who contend that a percentage-based reservation for GAA use in any given area could cause confusion and lead to uncertainty regarding the amount of available spectrum in any given area. As Verizon points out, under the *FNPRM* proposal, if the amount of available spectrum in a given area were to be reduced due to Incumbent Access use, Priority Access Licensees could lose access to capacity that they had been assigned through auction. While the need to protect Incumbent Users makes it impossible to completely avoid this risk, moving to a non-proportional Priority Access reservation model should minimize it substantially.

While we agree with PISC and Microsoft that GAA users should have access to a significant amount of spectrum, we do not agree that 50 megahertz of the band should *always* be reserved for GAA use. The presence of Incumbent Users could affect the amount of spectrum available for both GAA and PAL users. Circumstances may occur where incumbent use of the band leaves less than 50 megahertz available for GAA (or PAL) use in a given location. Nevertheless, we believe

that the policies we adopt in this order, including the ability to access “unused” channels assigned to Priority Access Licensees, will ensure that substantial spectrum capacity is available in all geographic areas for GAA use.

With regard to the amount of spectrum available for GAA and Priority Access use, we believe that reserving a maximum of 70 megahertz—*i.e.*, seven channels—for Priority Access Licensees in any given license area appropriately balances the needs of these two types of access. Seven PAL channels represent an increase from the five PAL channels that would have been available under the baseline *FNPRM* proposal (*i.e.*, 3550–3650 MHz) while providing a greater degree of certainty for potential licensees. This increase in Priority Access spectrum availability will likely encourage more licensees to enter the band in any given area or allow more licensees to pursue higher bandwidth applications (through channel aggregation). Considered alongside the inclusion of the 3650–3700 MHz band, the bandplan and frequency assignment model we adopt herein would generally provide all users with more and greater spectrum availability than they would have had under our proposal in the *FNPRM*. Where the band is not utilized by Incumbent Access users or Grandfathered Wireless Broadband Licensees, GAA users will have access to a minimum of 80 megahertz, more than the proportional 50 percent of the band proposed in the *FNPRM*. Thus, both Priority Access Licensees and GAA users will benefit from our revised approach to the assignment of frequencies in the band.

### b. Opportunistic Access to Priority Access Licenses

*Background.* In the *NPRM* and *FNPRM* we proposed to allow GAA users access to frequencies not yet assigned to PALs—or where assigned bandwidth is not in actual use by Priority Access Licensees—on an opportunistic basis. We sought comment on whether to allow opportunistic access to channels assigned to Priority Access Licensees and, if so, how to determine whether such channels are actually “in use.”

Commenters offered varied opinions on whether opportunistic use of Priority Access channels should be permitted and proposed a variety of ways to determine whether such channels are actually “in use.” Commenters including the Dynamic Spectrum Alliance, Federated, Interdigital, Microsoft, PISC, Shared Spectrum Company, White Space Alliance, Wi-Fi Alliance, and WISPA support the

proposal to allow opportunistic access to Priority Access channels by GAA users. Some others, like Ericsson, contend that opportunistic GAA use should not be permitted after network facilities have been deployed by Priority Access Licensees in a given channel and license area. CTIA contends that further study is needed before the Commission determines that it is feasible to allow opportunistic access to licensed spectrum.

Other commenters support opportunistic access, with certain caveats. AT&T argues that GAA use of channels assigned to Priority Access Licensees should only be permitted if, at the end of a license term, there is spectrum or geography not in actual use by the Priority Access Licensee. According to AT&T, the Commission should utilize 3GPP standards for TD-LTE channel occupancy to determine channel usage. Verizon contends that the definition of “use” should not be limited to actual operations. For example, Priority Access Licensees should be permitted to use all or some of a given license area as a guard band to protect its network from interference. T-Mobile asserts that GAA users should only be permitted to use channels assigned to PALs until the licensee notifies an SAS that such channels are in operation. WISPA proposes a technical definition of use based on the specific number of data “packets” received by any CBSD within a five minute period.

TIA contends that the Commission’s proposal would effectively make GAA rights in the band superior to Priority Access rights by allowing GAA users to access channels assigned to Priority Access Licensees without allowing Priority Access Licensees to do the same. The Wi-Fi Alliance counters that this is not the case since GAA users will always be prohibited from using channels assigned to Priority Access Licensees when they are in actual use and, as such, Priority Access rights will always be superior to GAA tier rights under the Commission’s proposed framework.

*Discussion.* We find that permitting opportunistic access to unused Priority Access channels would maximize the flexibility and utility of the 3.5 GHz Band for the widest range of potential users. By allowing GAA users to access bandwidth that is not used by Priority Access Licensees, we can ensure that the band will be in consistent and productive use. We believe the record demonstrates the benefits of allowing GAA users some degree of opportunistic access to “unused” Priority Access channels.

We disagree with AT&T’s contention that GAA use of PAL channels should only be allowed if the licensee is not using a portion of its assigned spectrum or geography at the end of its license term. This proposed model is incompatible with the three-tier authorization framework adopted herein and would undermine the Commission’s objectives for more efficient spectrum use in this band. Under AT&T’s model, channels assigned to PALs would effectively lie fallow until the Priority Access Licensee chooses to deploy its network in a given area, precluding opportunistic use of the spectrum and limiting the scope of potential GAA deployments. Thus, AT&T’s suggested policy could encourage spectrum warehousing and disincentivize efficient use of the band. We believe that it is in the public interest to ensure that the 3.5 GHz Band is made widely available to Citizens Broadband Radio Service users—regardless of their operational tier—and that Priority Access Licensees should not be permitted to exclude other authorized users unless and until their networks are in use.

#### c. Frequency Assignment by SAS

*Background.* In the *FNPRM*, we proposed that, in place of fixed channel assignments, the SAS would assign bandwidth within given geographic areas to Priority Access Licensees and GAA users. Under this proposal, the SAS would ensure that Priority Access Licensees have access to 10 megahertz channels and that GAA users would have access to the remaining portions of the band. However, the exact frequencies defining any given authorization, whether Priority Access or GAA, would not be fixed. For example, a licensee might have Priority Access rights for a single PAL, but the specific channel location assigned to that user would be assigned by the SAS and could be reassigned from time to time (e.g., from 3550–3560 MHz to 3630–3640 MHz). Individual GAA users would be assigned available bandwidth of a size and frequency range determined by the SAS. The SAS would assign and maintain appropriate frequency assignments and ensure that lower tier users do not interfere with higher tier users. To the extent that some level of regional or national consistency of assignment facilitates the provision of service, SAS providers would be free to agree upon a common assignment convention. However, such a convention was not specified in the proposed rules, in order to allow the greatest degree of operational flexibility. We sought comment on these proposals.

The record reflects a sharp division between those who favor the assignment of frequencies by the SAS and those who prefer static frequency assignments. Commenters including PISC, White Space Alliance, Dynamic Spectrum Alliance, Federated Wireless, Interdigital, Google, Shared Spectrum Company, Spectrum Bridge, and the Wireless Innovation Forum support the Commission’s proposal to allow the SAS to dynamically assign frequencies in the band for both Priority Access Licensees and GAA Users. Google asserts that SAS-directed spectrum sharing will ensure that Citizens Broadband Radio Service users will have access to the best available channel in any given spectral environment and that dynamic frequency assignment is a necessary component of any sharing regime that requires secondary users to change their operations in response to higher tier users. Similarly, PISC states that frequency assignment through the SAS will confer a number of public interest benefits, including: (1) Better accommodation of Incumbent Access Users; (2) more intensive and productive use of the band; and (3) improved coexistence of small cell and higher power uses. Federated Wireless contends that static frequency assignments for PALs: (1) Are inconsistent with the efficient, SAS-driven spectrum assignment model the Commission proposes; (2) would threaten interoperability in the band; and (3) are unnecessary for incumbent protection.

Other commenters, including AT&T, CTIA, Ericsson, 4G Americas, HKT Limited, NSN, and UK Broadband oppose the Commission’s proposal and argue that Priority Access Licensees should be given static frequency assignments. Many of these commenters contend that static frequency assignments are the simplest and most effective way to license PALs to wireless broadband providers. AT&T and T-Mobile argue that dynamic frequency assignment would undermine carriers’ essential network management functions, frustrate their ability to plan network deployments, and discourage investment in the band. T-Mobile asserts that current network technology does not support dynamic frequency assignment.

Google disagrees and states that SAS management of frequency assignments is wholly compatible with LTE system architecture. Indeed, Google asserts that dynamism in frequency assignment would provide greater certainty to Priority Access Licensees since the loss of any specific channel in a specific license area would not necessarily result

in the loss of Priority Access functionality. Google also stresses that reassignment should only be used to avoid situations where PALs might otherwise lose access to assigned PAL frequencies.

Seeking to balance concerns on both sides of the issue, Verizon notes that SAS-based frequency assignment has potential benefits and drawbacks. As a result, Verizon contends that additional information on incumbent frequency use is needed to perform a complete and accurate cost-benefit analysis of the Commission's proposals.

*Discussion.* After review of the record, we conclude that frequencies in the 3.5 GHz Band will be assigned by an SAS. This approach is consistent with the Revised Framework and the proposals set forth in the *FNPRM*. We believe that flexible band management is essential to effective spectrum sharing between the three tiers of authorized users in the band. However, we also acknowledge commenters' concerns about frequency predictability and stability. To address these concerns, we adopt provisions to ensure that Priority Access channel assignments remain as stable and consistent as possible for licensees holding multiple channels within the same license area or in contiguous license areas.

We agree with commenters who assert that SAS-controlled frequency assignment is an essential component of the three-tiered authorization framework adopted in this *Report and Order*. Notably, automated frequency assignment is necessary to ensure consistent spectrum access for Citizens Broadband Radio Service users and to ensure protection of Incumbent Users. Under the framework described in Section III(B)(1), Incumbent Access users have superior spectrum rights at all times and in all areas over Priority Access Licensees and GAA Users. As such, all Citizens Broadband Radio Service users must be capable of discontinuing operation or changing frequencies at the direction of the SAS to protect Incumbent Users. If PAL assignments were entirely static, as AT&T and others propose, Priority Access Licensees would have no choice but to discontinue operations when an Incumbent User begins operating on its assigned channel in a given license area. Indeed, as PISC notes, the need to protect Incumbent Users coupled with static channel assignments could require Priority Access Users to shut down indefinitely or even permanently. For example, assume that a Priority Access Licensee is given a fixed channel assignment of 3550–3560 MHz in a designated License Area. If an

Incumbent User begins using those frequencies, the Priority Access Licensee would lose access to the channel. Without the ability to reassign channels dynamically, the Priority Access Licensee would lose the use of a channel it had acquired at auction for the duration of the Incumbent User's operations. Thus, static channel assignments for Priority Access Licensees would lead to unpredictable spectrum availability, undermining the very stability that commenters claim is needed to encourage investment in the band. However, with automated frequency assignment, Priority Access Licensees could be relocated to unencumbered channels and allowed to continue providing service.

We also find that SAS-based frequency assignments will increase the flexibility and utility of the 3.5 GHz Band. We agree with PISC's assertion that automated frequency assignment will allow more users to access spectrum in a given geography, leading to more productive and intense spectrum use by both Priority Access Licensees and GAA users. Coupled with the requirement that CBSDs be capable of operating across the entire 3.5 GHz Band, SAS-controlled assignment will ensure that individual users are provided with flexible, stable access to the band and that Citizens Broadband Radio Service users as a whole are able to access as much spectrum as possible at any given time and place.

We are not convinced that frequency assignment by the SAS is incompatible with wireless broadband network planning as T-Mobile, AT&T, and CTIA claim. We realize that operators traditionally have planned their networks with certain static assumptions about frequency assignments, reflecting the exclusive-use licenses they hold in other bands. However, we do not agree that static assignments are always necessary to plan and operate a network—particularly a network with “islands” of small cell clusters—or that utilizing a flexibly assigned band would disrupt network deployments. To the contrary, as explained above, we believe that automated assignment will benefit wireless broadband providers by providing an additional measure of resiliency and flexibility.

We believe that our SAS rules will ensure a stable spectral environment for Priority Access Licensees and GAA users alike while providing the flexibility needed to accommodate and protect Incumbent Access users. To address the concerns raised by AT&T, Verizon, and others, the SAS will be responsible for ensuring that Priority

Access Licensees are provided with consistent channel authorizations across contiguous geographic areas and contiguous channels within the same geographic area where feasible. We address these rules in greater detail in Sections III(H)(2)(c) and III(c)(2)(a).

Contrary to some of the arguments made in the record, SAS-based frequency assignment is compatible with international harmonization to achieve ecosystem scale and permit global roaming. In considering this issue, we believe it is necessary to distinguish air interface compatibility—the primary focus of international standards efforts, including those within 3GPP—from channel assignment. Indeed, irrespective of the method of channel assignment, we expect that any standardized device that uses the new 3.5 GHz Band would be able to tune across the band (and, in fact, we mandate such capability with a band-wide operability requirement). Automated channel assignment by an SAS will simply involve instructions to these devices to use a specific channel, at a specific place and time, within this tuning range. As noted above, the rules contain provisions to promote stability of the spectral environment. Therefore, based on the record before us, it is our predictive judgment that SAS-mandated channel changes, guided by the requirement to preserve consistency and contiguity for PAL spectrum assignments where feasible, will generally occur relatively infrequently rather than on a millisecond-by-millisecond basis as some commenters fear.

This mode of automated frequency assignment is consistent with most prevalent networking standards. Indeed, modern networks typically have control features that allow for automated or managed channel selection. Finally, we note that unlike many other countries that have fully reallocated the 3.5 GHz Band for commercial broadband uses, we must accommodate a spectral environment that includes, and will continue to include, extensive use of the band by military radar systems. Many of the policies we adopt in this *Report and Order* are intended to address this unique situation and ensure that the band is made available for commercial use while protecting important incumbent operations. As such, industry standards may need to evolve to accommodate some of the policies we adopt herein. We believe that standardization should be addressed, at least in part, during the SAS approval process and may be informed by the work of a multi-stakeholder group as



described in Sections III(K) and III(H)(3)(b).

### C. Priority Access Tier

#### 1. Eligibility

*Background.* Based on comments received in response to our original *NPRM* and *Licensing PN*, we proposed in the *FNPRM* to make eligibility for PALs open to any prospective licensee who meets basic FCC qualifications, rather than to a more limited group of “mission critical” users. The record we received in this proceeding generally supports expanding eligibility to the Priority Access tier to a broader class of users than we proposed in the *NPRM*.

*Discussion.* The Commission has broad authority to prescribe “citizenship, character, and financial, technical, and other qualifications” for its licensees (47 U.S.C. 308(b)). Based on the record in this proceeding, and for the reasons we have previously outlined in a number of other wireless broadband services, we determine that it is in the public interest to allow any entity that is eligible to hold an FCC license to also be eligible to apply for, and hold, a PAL. All applicants for PALs must demonstrate their qualification to hold an authorization and demonstrate how a grant of authorization would serve the public interest (*See* 47 U.S.C. 303, 307, 309, 310). Qualifications include those under Section 310 of the Act regarding foreign ownership (*See* 47 U.S.C. 310(b)) as well as the bar on participation in spectrum auctions with respect to any person “who has been, for reasons of national security, barred by any agency of the Federal Government from bidding on a contract, participating in an auction, or receiving a grant (47 U.S.C. 1404; 47 CFR 1.2105(a)(2)(xi)).”

For the same reason that we have determined to expand the size of the tier, we conclude that expanded eligibility for access to the Priority Access tier will promote more intensive use of the 3.5 GHz Band. The increasing growth in demand for wireless broadband service has led to increasing demands for spectrum to accommodate that growth. As T-Mobile explains, many entities besides mission critical users seek access to the type of “quality assured” spectrum that PALs provide. The Consumer Electronics Association notes that “[c]ommercial operations benefit from reliable, prioritized access to spectrum and a predictable quality of service, which will support investment and innovation in the 3.5 GHz Band.” Google states that “[o]pening the Priority Access tier will encourage deployment of systems that require reliable access to spectrum to deliver

higher quality service.” Accordingly, subject to the qualification rules discussed above, any entity, is eligible to be a Priority Access Licensee.

#### 2. PAL Configuration

##### a. Frequencies

*Background.* We proposed to authorize PALs as 10 megahertz unpaired channels. With this proposal we intended to balance several objectives. First, as we have concluded in other services suitable for wireless broadband deployment, 10 megahertz channels are well suited for high data rate technologies both in terms of deployment and scalability. Second, 10 megahertz channels divide evenly into either the 100 megahertz (10 channels) or 150 megahertz of spectrum (15 channels) that would be available in either our main proposal or the supplemental proposal to include 3650–3700 MHz. Third, 10 megahertz channels will allow us to license multiple Priority Access users in each geographic area, particularly where protection of incumbents limits the amount of spectrum available for commercial use. Fourth, 10 megahertz licenses would provide useful “building blocks” for licensees that might wish to aggregate larger amounts of spectrum in a given area. We sought comment on the appropriate bandwidth for PALs.

*Discussion.* Based on the general consensus in the record, we adopt our proposal to authorize PALs to operate over 10 megahertz unpaired channels. Ten megahertz channels provide a flexible, scalable, and practically deployable bandwidth for high data rate technologies, permitting multiple Priority Access Licensees to operate in the same geographic area. We agree with T-Mobile, that 10 megahertz blocks “strike the appropriate balance between permitting multiple entities access to licensed 3.5 GHz Band spectrum and ensuring that the blocks are large enough to support customer traffic.” Further, some commenters see beneficial consistency with the 3GPP Bands 42 and 43 channelization scheme. Such alignment should encourage investment in and development of new equipment for this innovation band.

Although a few commenters advocated for larger or smaller channels, the record generally supports our proposal to utilize 10 megahertz channels for PALs with the ability to aggregate multiple channels. Spectrum Bridge, for example, notes that 10 MHz channels are compatible with broadband technology and operations. NSN and T-Mobile also point out that

10 MHz licenses would harmonize with the worldwide use of existing global 3GPP Bands 42 and 43 for Long Term Evolution Time Division Duplex use. As NSN further explains, “[b]and class harmonization helps achieve economies of scale, enables global roaming, reduces equipment design complexity and improves spectrum efficiency.”

As discussed in Section III(C)(2)(a), all channels will be assigned by the SAS. The exact frequencies of specific assigned channels, however, may be changed by the SAS, if necessary. To the extent feasible, we will require the SAS to assign multiple channels held by the same Priority Access Licensee to contiguous channels in the same license area. The SAS may temporarily reassign individual PALs to non-contiguous channels only to the extent necessary to protect Incumbent Users from harmful interference or if necessary to perform its required functions. However, while a Priority Access Licensee may initially request a particular channel or frequency range, any particular request will not be guaranteed. Nevertheless, SAS administrators would be required to maintain consistent and contiguous frequency assignments for licensees with multiple PALs in the same or adjacent license areas whenever feasible. Thus, our rules aim to create a flexible, responsive spectral environment while retaining much of the stability of traditional static channel assignments.

##### b. Area

*Background.* In the *FNPRM*, we proposed to authorize PALs at the census tract level and to permit geographic aggregation across license areas. As we explained, census tracts offer a variety of benefits, including geographic sizes varying by population density, nesting into other political subdivisions including city lines, and aligning with other natural features that track population density. Under our proposal, PAL applicants could target specific geographic areas in which they need additional coverage and avoid applying for areas that they do not intend to serve. Our proposal reflected the unique technical characteristics of small cells to promote a high degree of spectral and spatial reuse while facilitating flexible, targeted deployment of CBSDs.

We received a diverse record in response to our proposal to use census tracts as a licensing area. Some commenters agree with our proposal. Others argue that census tracts are inappropriate because the borders of census tracts frequently divide streets and their relatively small size would



make license administration and co-channel coordination between Priority Access Licensees more difficult. Other commenters suggest that even smaller geographic areas, such as census block groups would allow for granular and demand-focused assignments. Still others proposed larger, more traditional license areas such as Economic Areas (EAs), Cellular Market Areas (CMAs), or counties. Google suggests license boundaries be based on proposed network parameters and actual contours, as determined and enforced by the SAS, rather than fixed geographic areas. Google further maintains that small license areas which “track the radiofrequency characteristics of proposed deployments or rely on a pixel-based approach, will maximize use of the licensed spectrum in the 3.55 GHz band.”

*Discussion.* We adopt census tracts as the appropriate geographic license size for PALs. Among our goals in this proceeding is to establish the geographic component of PALs in a way that allows flexible and targeted network deployments, promoting intensive and efficient use of the spectrum, but also allowing easy aggregation to accommodate a larger network footprint. We find that licensing PALs at the census tract level will serve the public interest and provide a middle ground between commenters who sought license areas larger than census tracts and those who supported even smaller license areas.

Census tracts will provide a number of other benefits. Currently, there are over 74,000 census tracts in the United States targeted to an optimum population of 4,000. Census tracts vary in size depending on the population density of the region, with tracts as small as one square mile or less in dense urban areas and up to 85,000 square miles in sparsely populated rural regions. Census tracts generally nest into counties and other political subdivisions. In turn, they nest into the standardized license areas commonly used by the Commission (e.g., CMAs, EAs, and Partial Economic Areas). Census tracts also generally align with the borders of political boundaries (e.g., city lines) and often to natural features, which may affect population density (e.g., rivers). Census tracts, therefore, may naturally mirror key considerations in targeted deployment by service providers, such as tracking existing customers, plant, and permits or rights-of-way. In addition, the inclusion of census tracts in census geospatial databases may ease the incorporation of geographic and demographic data into an SAS.

Census tract-level licensing also aligns well with small cell deployment. Due to their low power and small size, small cells can provide broadband coverage and capacity in targeted geographic areas. This applies whether small cells are used to offer independent broadband service, supplemental coverage for a macrocell network, or private network functions. PAL authorization in a highly localized fashion, i.e., at the census tract level, will promote the use of the band for clusters of small cells.

In our view, other proposals in the record have limitations. Like Spectrum Bridge, we believe that geographic license areas significantly smaller than census tracts will “significantly increase the complexity and data management requirements [in the band], with diminishing and no obvious improvement in spectral efficiency.” Regarding Google’s proposal to assign licenses according to interference protection requirements rather than by fixed geographic areas, we believe that such a proposal adds unnecessary uncertainty and complexity to the licensing process and would complicate the competitive bidding process by creating irregular “lots” for auction. Google subsequently proposed a “pixel-based” approach to Priority Access licensing but we believe the enormous volume of licenses that would result would be challenging to administer. We agree with WISPA that proposals to assign licenses based on point/radius methodology will result in license areas that do not conform to natural boundaries and will “complicate[] mutual exclusivity determinations.”

As noted above, some commenters argue that to encourage investment in this shared band, we should license PALs in larger geographic areas such as those used in other licensed mobile bands. These commenters argue that introducing a new license scheme in the band will create uncertainty and delay deployment in the band. We disagree. As noted above, the mandate of Section 309(j) strongly supports our goal, particularly in “prescrib[ing] area designations (47 U.S.C. 309(j)(4)(c)),” of providing economic opportunity to a wide variety of applicants. That mandate is particularly compelling in light of the opportunities for participation with much lower capital investment requirements associated with smaller service areas, as we have previously recognized in other services in trying to address the substantial challenges faced by new entrants. The larger, traditional license areas favored by some commenters are inconsistent with our desire to promote innovative,

low power uses in this band, such as small cells, which align well with small, targeted geographic areas such as census tracts. Further, traditional licensing areas will not allow users of the band to acquire PALs only for those specific geographic areas they intend to serve. Divesting large, unwanted swaths through secondary markets transactions could impose significant transactions costs. On the other hand, should users of the band desire to provide service within traditional geographic license areas, they can aggregate multiple contiguous census tracts, which as discussed above, nest into the standardized license areas commonly used by the Commission.

We continue to believe that census tracts are the appropriate middle ground among the competing proposals developed in the record and provide an equitable means of achieving the Commission’s public interest goals consistent with our statutory mandates. As WISPA stated, “[t]he range of views suggests that, while not perfect, census tracts probably strike the appropriate balance with regard to size and are therefore the best alternative.” Census tracts are sufficiently granular to promote intensive use of the band and are large enough, either on their own or in aggregate, to support a variety of use cases, including small cell base stations and backhaul. As Cantor Telecom states, “census tracts may offer certain benefits such as geographic sizes varying by population densities which would allow PAL applicants to target specific areas that they intend to serve.” Moreover, by defining license areas in a granular fashion and allowing geographic aggregation, operators should be able to acquire enough PALs to cover their desired network footprint without having to over-acquire licenses. Accordingly, each PAL shall consist of a single census tract as defined, initially, in the 2010 census.

#### c. Term

*Background.* In the FNPRM, we proposed that PALs would have a one year, non-renewable term. PALs would automatically terminate after one year and would not be renewed. We reasoned that a one-year term, while shorter than the 10- or 15-year terms typically associated with geographic area-licensed wireless services, would be appropriate for this band. First, licensees would be permitted to aggregate up to 5 consecutive 1-year terms to replicate the predictability of a longer-term license while providing the flexibility inherent in shorter-term spectrum authorizations. Second, the use of a shorter, non-renewable license

term could simplify the administration of the Priority Access tier by obviating the need for renewal, discontinuance, and performance requirements typically associated with longer-term licenses. Third, shorter terms would allow for a wider variety of innovative uses and encourage efficient use of spectrum resources. Fourth, short term licenses could promote greater fungibility and liquidity in the secondary market. Finally, allowing applications for multiple years of PALs would provide Priority Access Licensees with the certainty they may need to make capital investment in PALs. We sought comment on the appropriate duration of PALs and our aggregation proposal and invited commenters to suggest other proposals.

Commenters differed on the appropriate term for PALs. Some commenters supported one-year terms for PALs with the option to aggregate multiple years. Others argued for license terms shorter than one year, while Microsoft agreed with the one-year proposal but argued for a prohibition on term aggregation. Alternatively, numerous commenters including Ericsson, NSN, and Qualcomm supported a more traditional licensing model with longer license terms. These commenters argue that short, one-year licenses will not provide operators with sufficient certainty to invest the necessary resources in the band. Instead, commenters argue, longer, more traditional license terms will make the spectrum more attractive for investment. AT&T for example states that “a one-year, non-renewable license is insufficient assurance to spark investment in the 3.5 GHz band [and may] raise the possibility of stranded investment.”

Commenters also differed on the appropriate temporal aggregation limit for PALs. For example, WISPA suggests a four-year aggregation cap, Public Knowledge and the New America Foundation suggest a three-year cap, Motorola Solutions suggests only two years, and Microsoft suggests we not permit term aggregation (effectively a one-year availability in the licensing window). AT&T, by contrast, suggests that licensees be permitted to retain their authorizations indefinitely for areas in which they have deployed equipment and provided service within one year.

*Discussion.* Based on the record in this proceeding, and in the context of our particular regulatory scheme for this band, we adopt a longer license term than originally proposed: three-year rather than one-year terms. At the end of its three-year license term, a PAL will

automatically terminate and may not be renewed. However, solely during the first application window, we will permit an applicant to apply for up to two consecutive three-year terms for any given PAL available during such first application window, for a total of six years. During subsequent regular application windows, only the next three-year license term will be made available for any given PAL. If sufficient interest is expressed by prospective Priority Access Licensees, we will also open interim filing windows for unassigned PALs, in which case any newly auctioned PAL term will expire at the end of the three-year period associated with previously auctioned PALs, so that all PALs will be made available for bidding in the next regular window. This practice will avoid staggered PAL terms.

Among our goals in this proceeding is to promote more efficient wireless network architectures and innovative approaches to spectrum management. To this end, we identified the 3.5 GHz Band as “an ideal ‘innovation band,’ well suited to exploring the next generation of shared spectrum technologies, to drive greater productivity and efficiency in spectrum use.” In our view, the flexibility inherent in shorter license terms should allow for a wider variety of innovative uses in the band and encourage efficient use of scarce spectrum resources. Commenters in this proceeding, however, hold widely varying views on the appropriate license terms for PALs. While some commenters support our initial proposal for one-year terms, many others argue that longer license terms will best spur investment in this repurposed band.

We believe that three-year non-renewable license terms—with the ability to aggregate up to six years upfront—strike a balance between some commenters’ desire for flexibility with other commenters’ need for certainty. This belief is consistent with our goal of creating greater opportunities for new and innovative uses to secure the priority benefits associated with PAL licenses governed by the mandates of Section 309(j) described above. As recognized by OTI/PK, shorter, non-renewable licenses “will promote deployments by a wide range of service providers.” Further, OTI/PK reasons that the cost of such short duration licenses covering small geographic areas “will dramatically lower the barriers to entry for innovation and competition in the band.” At the same time, we acknowledge that a license term longer than one year “will foster more robust deployment and strengthen

innovation.” We believe our rule appropriately addresses the competing public interest concerns expressed in the record.

We believe that, as part of the overall set of rules established for the Citizens Broadband Radio Service, time-limited PAL terms will promote investment by traditional and non-traditional providers of wireless broadband service. We are not persuaded by arguments put forth by AT&T, T-Mobile, and others that non-renewable PALs will diminish investment in the band. Several considerations jointly and severally weigh in this determination. In our view, these considerations applicable to the 3.5 GHz Band do not support traditional justifications for renewal expectancies appropriate in exclusively licensed bands.<sup>9</sup>

First, we expect that Citizens Broadband Radio Service users will have similar incentives to invest under the GAA rules as unlicensed users in other bands. Ample experience with tens of millions of unlicensed wireless devices deployed under our non-exclusive Part 15 rules demonstrates that significant investment can occur under a non-exclusive use authorization. Moreover, unlike the traditional exclusive licensing regime in which the Commission has established renewal expectancies, even a PAL licensee who does not obtain PAL rights for the succeeding three-year term retains the ability to use the same equipment in the same area as a GAA licensee. The investment is thus not stranded. In this context, PALs simply provide additional economic incentives, over and above GAA authorizations, for those users seeking greater interference protection in specific locations for a specific three-year period.

Second, return-on-investment determinations for PALs in the 3.5 GHz Band likely involve a lower cost hurdle than in other bands permitting higher-power transmissions. The economics and upgrade cycles for the (predominant) small cell use case, applied in the context of census tract license areas over three-year license terms, may resemble those for enterprise and carrier Wi-Fi deployments rather than traditional macro cell deployments common to other bands.

Third, where a prospective user of the band does require a PAL as a predicate to investment, our rules do permit the user to bid for and acquire, as a

<sup>9</sup> Such justifications include: (1) Rewarding proven performance over much longer license terms; (2) encouraging investment; or (3) avoiding haphazard restructuring of the industry. See generally *Central Florida Enterprises, Inc. v. FCC*, 683 F.3d 503, 507 (D.C. Cir. 1982).

condition to its investment, at the time of the initial PAL auctions, two successive three-year licenses. A Priority Access Licensee would also have subsequent opportunities to participate in auctions assigning PALs for subsequent three-year terms, or secondary market transactions. Moreover, the non-fixed frequency assignment model and band-wide equipment operability rule we adopt herein increase the substitutability of PALs in a given area. This model also substantially reduces the risk to a Priority Access Licensee of not winning a comparable license in a subsequent auction. Additionally, it is possible that a Priority Access Licensee with a proven business case that depends on access to Priority Access tier channels could value a subsequent PAL in the same license area more highly than a new entrant in that area, further increasing the incumbent's odds of winning a new PAL.<sup>10</sup> In a service in which we have determined to permit shared (albeit prioritized) uses of the same technology, it seems more appropriate to tie prioritized use to the ongoing desire to pay for it at auction.

Finally, industry structure may adapt in ways that obviate any remaining perceived risks associated with term-limited licensing in this band. For example, "neutral host" business models common to the distributed antenna systems (DAS) industry may also apply to small cell networks operating in the 3.5 GHz Band. A venue network operator (e.g., an enterprise, facilities owner, or their agent) could install small cell equipment and provide service directly or pursuant to agreements with several different wireless carriers. In this situation, this venue operator may be the lowest-cost provider of service, as it brings to the table some of the key inputs (mounting points, backhaul, etc.) and the ability to coordinate network sharing inside its facility (which further reduces costs). A venue operator inhabiting the underlying real estate will therefore likely be a party to any provision of small cell service in the area. As a consequence, it has incentives to invest in network infrastructure regardless of

<sup>10</sup> We recognize that a new entrant using new technologies or business practices may outbid an incumbent Priority Access Licensee. Such an instance is precisely when it makes economic sense for a new licensee to replace the old. Moreover, we believe that combining term-limited PALs with the kind of renewal expectancy traditionally awarded to commercial wireless licenses (with longer terms and higher capital costs) would not be consistent with our statutory responsibility to promote "efficient and intensive use of the electromagnetic spectrum." 47 U.S.C. 309(j)(3)(D).

who holds the local PALs at any given time.

For similar reasons, we believe our rules prescribing three-year, non-renewable license terms for PALs, coupled with the absence of a renewal expectancy, will operate in combination with our rules permitting opportunistic GAA use and the relatively inexpensive deployment costs in this band to ensure that winning bidders for PAL licenses at auction will have sufficient incentive to deliver service so as to avoid the need for prescribing any further performance requirements. Bidders who purchase PALs at auction will likely have an interest in putting the spectrum into productive use.

### 3. Spectrum Aggregation Limits

*Background.* In the *FNPRM*, we proposed to allow licensees to hold up to three out of an anticipated five PALs in one census tract at one time (i.e., 30 megahertz in one census tract at any time). We indicated that, given the unique circumstances of this band, a specific aggregation limit applicable to all PAL licensees would promote access to the band.

Several commenters advocate for the adoption of a spectrum aggregation limit on the number of PALs that can be held in each license area. WISPA and Cantor Telecom support the proposed limit of 30 megahertz of PALs in each license area, with caveats. Motorola Mobility suggests that the actual cap should be the larger of either the 30 megahertz fixed limit or a percentage of Priority Access spectrum, such as 55 percent. PISC, Sony Electronics, and Motorola Solutions contend that a 20 megahertz limit on PALs would be more appropriate to allow future entrants and new competitors to enter the marketplace.

Verizon Wireless and AT&T oppose any cap on Priority Access channel aggregation. Verizon argues that adopting a spectrum cap will harm consumers by impeding the development and deployment of innovative services in the 3.5 GHz Band, particularly given that providers require large contiguous blocks of spectrum to deliver broadband service. AT&T also claims that the Commission has not identified any public interest harm associated with allowing licensees to aggregate as much spectrum as they require.

*Discussion.* In this *Report and Order*, we adopt an aggregation limit, as proposed, but increase the limit to allow licensees to hold no more than four PALs in one census tract at one time (i.e., 40 megahertz out of 70 megahertz allocated to PALs in one census tract at

any time). We find that, on balance, the potential public interest benefits of adopting a limitation on the aggregation of PALs outweigh the potential public interest harms of such limits.<sup>11</sup> In particular, we conclude that a limit of 40 out of the maximum of 70 megahertz of PALs that may be available in each license area will facilitate competition, innovation, and the efficient use of the 3.5 GHz Band, ensuring that it is assigned in a manner that serves the public interest, convenience, and necessity.<sup>12</sup>

We evaluate the potential benefits and costs of a spectrum aggregation limit in the context of the licensing framework that we adopt for the 3.5 GHz Band, which would make available up to 80 megahertz of GAA spectrum when PALs are assigned and accordingly, up to 70 megahertz of PAL spectrum. In considering whether to adopt a mobile spectrum holdings limit for the licensing of a particular band through competitive bidding, as well as what type of limit to apply, the Commission assesses how such a limit would likely affect the quality of communications services or result in the provision of new or additional services to consumers. In its consideration, the Commission evaluates whether the public interest could potentially be negatively affected if multiple licensees would not have access to sufficient spectrum to be able to compete

<sup>11</sup> While we adopt a band-specific limit on the aggregation of PALs, we do not find that PALs are suitable and available for the provision of mobile telephony/broadband services in the same manner as other spectrum bands that currently are included in the Commission's spectrum screen as applied to secondary market transactions. See *Policies Regarding Mobile Spectrum Holdings Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, WT Docket No. 12–269, GN Docket No. 12–268, *Report and Order*, 79 FR 39977 (July 11, 2014) ("*Mobile Spectrum Holdings Report and Order*"). We make this finding based on the combination of the unique characteristics of this band—multiple tiers of many users including Federal incumbents, sophisticated rules for sharing that include dynamic access for PALs, the short license terms and very small license areas for PALs, and the range of technologies and heterogeneous business models that may operate in this environment. Accordingly, we do not include 3.5 GHz spectrum in the spectrum screen, and we will not evaluate secondary market acquisitions of this spectrum relative to existing holdings of other spectrum bands included in the screen.

<sup>12</sup> Section 309(j)(3) of the Communications Act provides that, in designing systems of competitive bidding, the Commission must "include safeguards to protect the public interest in the use of the spectrum," and must seek to promote various objectives, including "promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants," and promoting the "efficient and intensive use" of spectrum. 47 U.S.C. 309(j)(3).

robustly.<sup>13</sup> The framework adopted in this *Report and Order* is designed to facilitate spectrum sharing and innovation in an environment with many tiers of users, including commercial and private users with heterogeneous business models.

A spectrum aggregation limit of 40 megahertz will ensure availability of PAL spectrum to at least two users in those geographic areas where there is the greatest likelihood of high demand for such spectrum. We recognize that in geographic areas where PALs are issued, multiple users may wish to try out different business models or technologies in this unique and highly innovative marketplace. And while the census tracts used to license PALs are small by comparison to most commercial wireless license areas in other bands, multiple small cell users may want to pursue different business models in census tracts covering densely populated areas or areas with significant commercial activity. Allowing one licensee to acquire all seven PALs would limit choices to users interested in applications that would benefit from PAL access. Given the many potential scenarios and the nature of demand for PALs, as described, we believe the spectrum aggregation limit is appropriate, as it will likely foster competition and innovation in both PAL and GAA uses.

This spectrum aggregation limit provides a minimum degree of diversity among commercial and private users that likely will be operating in this band. Such diversity is important to encourage innovation in technologies and business models that include access to shared spectrum in a multi-user environment. The 3.5 GHz Band will provide a very significant opportunity for the development of innovative approaches to spectrum sharing. We believe that some of the resulting business models and technologies developed in the 3.5 GHz Band may well lead to positive spillovers in the development of other spectrum bands in the future.

We anticipate that the potential costs of such a spectrum aggregation limit will be low. We disagree with AT&T and Verizon Wireless that such a limitation will impede the development

of innovative services to consumers. On the contrary, as explained above, we believe this spectrum aggregation limit will promote competition and innovation by ensuring at least two parties have access to PALs in those areas where sophisticated approaches to sharing are most needed and most likely to develop. In addition, we note that, in Census tracts where seven PALs are issued, one entity would have access to up to 40 megahertz of PAL spectrum, as well as up to 80 megahertz of GAA spectrum—or 120 megahertz out of the total of 150 megahertz of spectrum available in the 3.5 GHz Band. Under these circumstances, we find it unlikely that this spectrum aggregation limit would curtail potential business models and use cases in the band. We also disagree with those commenters who suggest a smaller aggregation limit, such as 20 megahertz as opposed to 40 megahertz, due primarily to the nascent state of the marketplace and the need in these circumstances to balance the foregoing goals against the potential benefits of developing innovative services with larger contiguous blocks. For all the reasons discussed, the 40 megahertz limit strikes the appropriate balance between ensuring a diversity of users and allowing for applications that require larger blocks of spectrum.

#### 4. Competitive Bidding Procedures

Under the licensing scheme we adopt, PALs will be assigned by competitive bidding. The geographic area licensing approach we adopt for PALs will permit the filing and acceptance of mutually exclusive applications, which we are required to resolve through competitive bidding. Thus, as detailed below, we adopt rules to govern the use of a competitive bidding process for assigning PALs in the 3550–3650 MHz band.

We will conduct any auction of PALs in the 3550–3650 MHz band in conformity with the general competitive bidding rules set forth in part 1, subpart Q of the Commission's rules (47 CFR part 1, subpart Q), and substantially consistent with the competitive bidding procedures that have been employed in previous auctions, except as otherwise provided in this *Report and Order*. Below, we explain that PALs will be assigned through competitive bidding only where we receive multiple competing applications in a geographic area that seek PALs that exceed the available supply. If PAL applicants for a specific geographic area do not seek PALs that exceed the available supply, we will not assign any PALs in that license area. Instead, we will cancel the auction with respect to that license area

and the spectrum will remain available for GAA use under our license-by-rule framework until the next application filing window for PALs in the 3.5 GHz Band is opened either for unassigned PALs or otherwise in advance of the expiration of the prior three-year license term.

We also discuss in this Section our decision not to offer bidding credits to small businesses or Critical Infrastructure Industry (CII) entities due to the unique characteristics and nature of the Citizens Broadband Radio Service. In addition, we discuss our public notice process by which we will develop the auction design and procedures for an auction of PALs.

#### a. PAL Applications Subject to Competitive Bidding

*Background.* In the *NPRM*, the Commission proposed a license-by-rule framework for assigning licenses in the Citizens Broadband Radio Service, including the Priority Access tier. The Commission suggested that a license-by-rule licensing framework would allow rapid deployment of small cells by a wide range of users, including consumers, enterprises, and service providers, at low cost and with minimal barriers to entry. Commenters were divided on whether a license-by-rule regime was appropriate for PALs.

Under the Revised Framework outlined in the Commission's *Licensing PN*, and in response to many comments, we proposed to open eligibility for PALs for flexible use, beyond only "mission critical" uses. We sought comment on "approaches to spectrum assignment and auction that could be used to productively manage use of the Priority Access tier while allowing SAS authorized opportunistic use of the GAA tier as described in the *NPRM*." In proposing auctions to assign PALs "where there are mutually exclusive applications pending," the Commission sought comment on its proposed auction and licensing mechanisms, including their economic and technical viability, and in particular on whether its approach "[w]ould . . . properly incentivize targeted use of the Priority Access tier by a diverse group of users," as well as on alternative licensing and authorization mechanisms.

In the *FNPRM*, the Commission proposed to open an application window for PALs annually, with each PAL authorized at the census tract level. This approach would permit the filing and acceptance of mutually exclusive applications for PALs and would require the Commission "to resolve such applications through competitive bidding consistent with the mandate of

<sup>13</sup> This evaluation is based on several factors, including, but not limited to, the total amount of spectrum to be assigned, the extent to which competitors have opportunities to gain access to alternative bands that would serve the same purpose as the spectrum licenses at issue, the characteristics of the spectrum to be assigned, the timing of when the spectrum could be used, and the specific rights being granted to licensees of the spectrum. See *Mobile Spectrum Holdings Report and Order*.

Section 309(j) of the Communications Act.” The *FNPRM* proposed that “[c]onsistent with the Commission’s approach in other spectrum auctions, mutual exclusivity would be triggered when more applications are submitted than can be accommodated geographically, temporally, and spectrally.”

AT&T, PISC, Wireless Innovation Forum, and WISPA agree that if the Commission adopts its geographic area licenses for the Priority Access tier, it would have to resolve mutually exclusive applications through competitive bidding. Google argues that the Commission can avoid mutual exclusivity in the Citizens Broadband Radio Service band by limiting the number of PAL licenses available in the relevant geographic area, giving priority to spectrally efficient operators, and SAS-based interference avoidance could minimize mutually exclusive applications.

A number of utilities oppose the Commission’s proposal to adopt a licensing scheme that could result in mutually exclusive applications for PALs. Several utilities express concern that CII entities have not been successful at competing with commercial carriers for spectrum. UTC/EEI said that its members are concerned about the “cost and difficulty of competing with commercial carriers for Priority Access Licenses.” They also express concern about the uncertainty of PAL renewals year-to-year, potential interference to GAA operations, and interference with utilities’ incumbent systems. ENTELEC suggested that the Commission utilize a lottery-based system should “two or more applicants file applications on the same day and request the same PAL frequency block.”

*Discussion.* The Communications Act, as amended, requires the Commission to use competitive bidding to assign licenses when “mutually exclusive applications are accepted for any initial license,” subject to specified exemptions not applicable here (47 U.S.C. 309(j)(1)-(2), (j)(6)(e)). Section 309(j)(1) provides the Commission with the obligation to conduct competitive bidding when all applicants to participate in bidding on particular licenses cannot be granted the subject licenses because at the time of application submission, the applicants seek the same license or different licenses that would interfere with each other (*Benkelman Tel. Co. v. FCC*, 110 F.3d 601, 603 n.2 (D.C. Cir. 2000)), or when the requests for interchangeable channels exceed the available supply. The Commission has such authority irrespective of whether each of the

parties applying to bid for a license subsequently bids for the subject license (See *Benkelman Tel. Co.*, 220 F.3d at 605–606).

As an initial matter, we disagree with ENTELEC’s proposal to utilize a simple lottery-based system to resolve mutually exclusive applications. This would violate the Commission’s mandate under the Communications Act. Nor do we believe that the public interest will be served by avoiding mutual exclusivity in the manner advocated by Google.

In awarding initial PALs in the 3.5 GHz Band, when multiple applicants select to bid on more licenses than are available in a geographic area, we find that mutual exclusivity exists (See *Benkelman Tel. Co.*, 220 F.3d at 605–606). When the mutually exclusive applications are accepted the Commission will, consistent with its statutory authority, assign the licenses through competitive bidding. Consistent with previous spectrum auctions, mutual exclusivity will be determined based upon the Commission’s acceptance of competing applications. Also consistent with our previous spectrum auctions, applicants to participate in an auction of PALs in the 3.5 GHz Band, will have an opportunity to select across some or all of the available license areas the lesser of the maximum number of PALs that may be available in a license area or the maximum number of PALs they are permitted to hold in a license area under our spectrum aggregation limit. Once mutual exclusivity has been established by competing accepted applications seeking to acquire more PALs than are available in a particular geographic area, the PALs in that area will be assigned by competitive bidding, without regard to the number of applicants that ultimately decide to bid or the actual number of PALs for which they place bids.<sup>14</sup>

Under this approach, when there are two or more applicants for PALs in a given census tract for a specific auction, we will make available one less PAL than the total number of PALs in that tract for which all applicants have applied, up to a maximum of seven. Determining availability in this way is in the public interest because it

<sup>14</sup> See *DIRECTV*, 110 F.3d at 827–28. Although our determination that mutual exclusivity exists within a particular geographic area will not be based on the number of applicants for PALs in that area, because we adopt an aggregation limit that allows licensees to hold no more than four PALs (*i.e.*, 40 megahertz) in one census tract at one time, see *supra* Section III.C.2.a, this necessarily means that for mutual exclusivity to exist we will have accepted at least two applications for PALs in a given census tract.

promotes the underlying principle for this band that while GAA should be easy to access and sufficient for many applications in this service, PALs should be available for applications that require greater certainty as to interference protection because they would suffer in a congested use environment. We therefore conclude that we should make available one less PAL, up to a maximum of seven, than the total selected by two or more applicants to assure that our licensing scheme for PALs meets the needs of such potential users.

Because of the “generic” nature of PAL frequency assignments, when total PAL applications exceed the PAL bandwidth available in a license area, PAL applications are mutually exclusive because granting one application would create conflict with another application. This will assure that there is mutual exclusivity between any two applications in the same license area and enable us to assign PALs by competitive bidding. As we explain further below, we conclude that assigning PAL licenses in the 3.5 GHz Band on a non-auctioned basis would not result in as efficient an assignment of the spectrum as licensing the spectrum for shared GAA use. However, by reducing the available PAL inventory when there are competing demands for less than the maximum number of PALs, interested applicants may bid for PALs to ensure access to exclusive usage rights. In contrast, when there is only one applicant for one or more PALs in a given census tract, we will neither proceed to an auction nor assign any PAL for that license area.

This determination is consistent with Commission precedent. In establishing its competitive bidding rules in 1994, the Commission recognized that the Act does not permit the award of initial licenses through competitive bidding in the absence of mutually exclusive applications (See *Competitive Bidding Second Report and Order*, 59 FR 22980, May 4, 1994). Thus, if the Commission receives only one application acceptable for filing with respect to a particular license, “mutual exclusivity would be lacking and the Commission would be prohibited from using competitive bidding to award the license.” The Commission noted that to handle such situations it “[g]enerally” would intend to adopt procedures for conducting auctions that provided in such a situation for “cancelling [of] the auction for this license and establishing a date for the filing of a long-form application [by the lone applicant], the acceptance of which would trigger the relevant procedures permitting petitions to

deny.” However, it noted that the Commission “may decide in the future to alter some or all of the procedures” detailed therein, “or to tailor them to specific service rules, after we have had an opportunity to assess their effectiveness.”

Additionally, we conclude that, with respect to Priority Access licensing, where there is only a single applicant seeking PALs in a geographic area, and therefore no mutual exclusivity (and hence we have no auction authority), the best way to discharge our statutory mandate to “encourage the larger and more effective use of radio in the public interest (47 U.S.C. 303(g))” is to provide access to such spectrum via shared GAA use. If we do not accept competing applications seeking in total more PALs than the number of PALs available in a particular geographic area, we will not assign any PAL for that license area. Instead, we will cancel the auction with respect to that geographic area and allow the spectrum to remain accessible solely for shared GAA use under a license-by-rule framework until the next filing window for competitive bidding of PALs.

While we could issue PALs for these areas on a non-auctioned basis, we conclude that doing so in this band would not result in as efficient an assignment of the spectrum as licensing the spectrum for shared GAA use. Given the fact of more than 74,000 census tracts throughout the country, we believe there is a substantial likelihood that in many of these areas, at least initially, there would not be applicants for more than seven PALs—thereby precluding mutual exclusivity for these initial licenses. Because it does not appear that the incidence of areas without mutually exclusive applications under the approach we describe above for the 3.5 GHz Band will be isolated events, we predict that licensing at most a handful of PAL licenses would likely have the widespread effect of substantially restricting extensive deployment of a wide range of innovative GAA uses in the 70 megahertz reserved for PALs.

We do not believe that using a “first come, first served giveaway” (*See Kay v. FCC*, 393 F.3d 1339, 1344 (D.C. Cir. 2005)) as a licensing mechanism in this scenario would ensure the most efficient and intensive use of the spectrum, or be consistent with the goals served by more extensive GAA use as demonstrated by the record. The 3.5 GHz Band is designed to allow new, innovative operations access to flexible, fungible spectrum. The small cell deployment envisioned for the 3.5 GHz Band should enable tremendous spatial reuse and

coexistence among users. The small license size will allow for targeting of network deployments, with GAA users able to coordinate actual use of the spectrum through the SAS. In areas where genuine local scarcity exists, interested applicants may apply for PALs to ensure access to exclusive usage rights. This reliance on economic incentives, and not performance requirements, will prevent spectrum warehousing and ensure continued innovation. By ensuring widespread GAA use of any spectrum for which we have not received mutually exclusive PAL applications, we ensure that the spectrum will be put to a use for which we have identified a clear public interest need, including by those who have filed PAL applications as well as others.

At the same time, we note that the determination of mutual exclusivity of PAL applications is not a one-time event for this band. Because PALs are licensed for three-year, non-renewable terms, we will periodically open application windows for new PALs that take effect upon expiration of previously assigned PALs. Additionally, if sufficient interest is expressed by prospective PAL users, we will open interim filing windows to accept applications for unassigned PALs, *i.e.*, PALs that could be made available for auction, before the expiration of an ongoing three-year PAL term. In the pre-auction public notice process by which the Commission first seeks comment on and subsequently announces the procedures for the first auction of PALs in the 3.5 GHz Band, we will consider the process by which we will determine whether there is sufficient interest by prospective Priority Access Licensees in participating in an interim auction of PALs prior to expiration of an ongoing three-year PAL term. These procedures are designed to ensure that we continue to provide opportunities to satisfy any further demand for higher priority PAL use as the 3.5 GHz Band service matures.

In accordance with Section 309(j), we have established an auction process that promotes “efficient and intensive use” of this spectrum and the “development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas,” that “recover[s] for the public . . . a portion of the value of the public spectrum resource made available for commercial use, and achieves the other goals of the statute described above (47 U.S.C. 309(j)(3), 309(j)(4)). Providing for both GAA and PAL operations allows the Commission to create a band “well

sued to exploring the next generation of shared spectrum technologies, to drive greater productivity and efficiency in spectrum use.

Our licensing approach to address any absence of mutually exclusive applications is supported by the commenters urging greater reliance on shared use in the particular circumstances of this 3.5 GHz Band. We have employed shared use rather than exclusive licensing as a spectrum management approach in other services where appropriate, both licensed and unlicensed, even without any initial reliance on a competitive bidding mechanism for assignments from among mutually exclusive applicants. Accordingly, we exercise our established rulemaking authority to enable GAA uses of the entire 3.5 GHz Band in any census tract where we are unable to use our auction authority to issue PAL licenses from among mutually exclusive applicants.<sup>15</sup> Nothing in the auction provisions of the Communications Act was intended to affect this broad spectrum management authority (*See* 47 U.S.C. 309(j)(6)(A), (B), (C), (E)), particularly where we conclude our licensing approach will best serve the public interest. We conclude that our decision best accords with the Communications Act, as amended, while still affording the flexibility needed for the three-tiered spectrum sharing framework.

#### b. Application of Part 1 Competitive Bidding Rules

*Background.* For those mutually exclusive applications that will be subject to competitive bidding, the Commission proposed to employ its general competitive bidding rules to conduct an auction of PALs in the 3.5 GHz Band. Commenters generally support the Commission’s proposed use of its general competitive bidding rules. WISPA supports our proposal to adopt our general competitive bidding rules. AT&T cautions that the Commission’s traditional auction framework “may not be appropriate with respect to PALs.” AT&T warns that the Commission’s Section 1.2105(c) prohibited communications rule would be inappropriate due to the “high-volume of auction activity on a regular basis.” Other commenters express views on topics that are generally considered after

<sup>15</sup> *See* 47 U.S.C. 307; 47 CFR 1.945. The Commission is also not precluded “from establishing threshold standards to identify qualified applicants.” *Hispanic Information & Telecommunications Network, Inc. v. FCC*, 865 F.2d 1289, 1294 (D.C. Cir. 1989). *See also United States v. Storer Broadcasting Co.*, 351 U.S. 192, 202, 205 (1956).

the adoption of service rules, during the pre-auction process for establishing procedures for conducting a PAL auction. For example, some parties state their positions on auction design and the use of package bidding for any auction of PALs, with some in favor and some opposed. Likewise, other commenters recommend that the Commission make certain changes to its auction procedures concerning payment and default issues.

*Discussion.* Except as noted below, we adopt our proposal to conduct any auction of PALs in conformity with the general competitive bidding rules in part 1, subpart Q, including any modifications that the Commission may adopt for its Part 1 general competitive bidding rules in the future. We believe that the Commission's general competitive bidding rules are suitable to conduct auction of PALs. These rules have proven successful in previous spectrum auctions, and will enable the Commission to meet its goals for the Citizens Broadband Radio Service.

We proposed to apply any future modifications made to the part 1 general competitive bidding rules to an auction of PALs in the 3.5 GHz Band. We received no comment on this proposal. Specifically, we noted the Commission's proposal, in the Broadcast Incentive Auction proceeding, to revise the list of auction design options in Section 1.2103 of the competitive bidding rules. The Commission has since adopted its proposed revisions in the *Broadcast Incentive Auction Report & Order* (80 FR 19661, April 13, 2015), which provide for the establishment of specific auction procedures governing bid collection, assignment of winning bids, and the determination of payment amounts in spectrum license auctions, and these provisions will be generally applicable as we consider procedures for future spectrum auctions, including auctions of PALs in the 3.5 GHz Band. The Commission also adopted its proposed amendments to Section 1.2104, which permit the Commission to establish stopping rules in order to terminate multiple round auctions within a reasonable time and in accordance with the goals, statutory requirements, and rules for the incentive auction, including the reserve price or prices. In the absence of comments establishing a record, we do not adopt any additional revisions to Sections 1.2103 or 1.2104. Our decision to conduct competitive bidding for PALs subject to the Commission's most current Part 1 rules, including any modifications that the Commission may adopt in the future, will ensure that the rules applied to auctions of licenses in

the 3.5 GHz Band are up-to-date and will avoid uncertainty for prospective applicants if changes are made to the part 1 competitive bidding rules.

We nonetheless recognize that the Commission could greatly benefit from a more fully developed record regarding limited rule revisions that may be necessary to accommodate payment, application and default issues that are unique to the service rules we adopt for the Citizens Broadband Radio Service. These issues will therefore be considered in the context of the *Second Notice of Proposed Rulemaking* discussed fully below.

Finally, we decline to adopt AT&T's proposal to eliminate the Commission's Section 1.2105(c)'s prohibited communications rule in auctions for PALs in the Citizens Broadband Radio Service. We disagree with AT&T's contention that the prohibition would impair secondary markets and reduce participation in the 3.5 GHz Band. The plain text of the rule makes clear that business discussions and negotiations that are unrelated to bids or bidding strategies or to post-auction market structure are not prohibited by the rule (47 CFR 1.2105(c)). The rule's prohibition has always been aimed at the specific content of an applicant's communication to a competing applicant regardless of the context or situation in which such content is communicated, and applies only during a limited window.

#### c. Bidding Process Options

*Competitive Bidding Design Options.* We solicited comment on a number of issues regarding competitive bidding design options for PALs. Here too we received limited comment. WISPA proposes a two-step auction process. AT&T asked that the Commission clarify its PAL competitive bidding rules. Consistent with the Commission's practice in past spectrum license auctions, the rules we adopt allow subsequent determination of specific final auction procedures. The process will be initiated by the release of the *Auction Comment PN*, which will solicit public input on final auction procedures, and which will include specific proposals for auction components such as minimum opening bids. Thereafter, the *Auction Procedures PN* will specify final procedures, including dates, deadlines, and other final details of the applications and bidding processes. We believe the Commission's practice of finalizing auction procedures in the pre-auction process provides time for interested participants to both comment on the final procedures and to develop

business plans in advance of the auction (47 U.S.C. 309(j)(3)). Maintaining flexibility in the implementation of final procedures is a prudent approach to assuring that the PAL auction will fulfill the goals we have established by this *Report and Order*.

*Payment, Application and Default Rules.* We solicited comment on our general competitive bidding rules regarding payments, including upfront payments, down and final payments, default and disqualification. We received a limited number of comments on these payment issues. Federated Wireless proposes a two-step payment process. WISPA asks that the Commission "revise its payment rules to require payment for winning bids on an annual basis after the competitive bidding process is complete[.]" Open Technology Institute at the New America Foundation and Public Knowledge argue that payment should be "due annually prior to the license start date and a license would terminate automatically if the payment is not made." We believe that it is in the public interest to develop a more complete record on payment, application and default issues.

*Bidding Credits.* We solicited comment on the use of bidding credits in the 3.5 GHz Band. In the *FNPRM*, we explained that in authorizing the Commission to use competitive bidding, Congress mandated that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services (47 U.S.C. 309(j)(4)(D))." We further discussed that one of the principal means by which the Commission furthers these statutory goals is the award of bidding credits to small businesses.

For the 3.5 GHz Band, the Commission specifically asked whether the flexible and dynamic auction and licensing mechanisms, shorter license term, and size of the license area would limit the barriers to participate in PAL auctions. Six CII entities filed comments, requesting that the Commission provide bidding credits "for entities that would use the spectrum for 'mission critical' communications systems, such as utilities." API also suggests that the Commission could "provide bidding credits to current licensees who demonstrate they are using their licenses in the public interest." WISPA objects to CII-specific bidding credits, arguing that "[b]idding credits add a layer of complexity that would make



conducting competitive bidding for potentially thousands of census blocks much more difficult, especially considering that the Commission has proposed one-year license terms.”

Mobile Future opposes “restrictive spectrum set-asides and preferential rules including bidding credits.” We also solicited comment regarding bidding credits for serving a qualifying tribal land. We received no comment regarding tribal land bidding credits.

We conclude that given the unique characteristics of the service, bidding credits are not necessary to ensure the participation by small businesses in competitive bidding for PALs. We also conclude that the unique characteristics of the Citizens Broadband Radio Service are sufficient to promote greater use of the spectrum over tribal lands, making bidding credits unnecessary for tribal lands. As we noted in the *FNPRM*, “the Commission takes into account both the nature of the service and the nature of the parties most likely to be interested in using the spectrum.” The Citizens Broadband Radio Service licensing scheme is designed to encourage participation from a wide variety of users and a broad range of operations. The GAA tier already allows low cost access to the 3.5 GHz Band, both in the at least 80 megahertz of spectrum in which there is no PAL use, and in the remaining portion of the band on an opportunistic basis. While mutually exclusive applications for PALs in up to 70 megahertz of the band are subject to competitive bidding, the short term of the license and small geographic area should work to keep costs affordable to acquire PALs. Because the nature of the Citizens Broadband Radio Service already gives designated entities the opportunity to access 3.5 GHz spectrum, we will not offer small business nor tribal land bidding credits in auctions of PALs. For the same reason, we decline to adopt bidding credits for CII entities.

*Commission Notices.* In the *FNPRM*, we proposed to follow our established practice of issuing a public notice upon the conclusion of a PAL auction declaring the bidding closed and identifying the winning bidders. We received no comment on this proposal, and accordingly, we will follow this process for notifying auction participants and the public of the auction results.

As noted above, after adoption of all of the necessary service rules for the Citizens Broadband Radio Service, consistent with the Commission’s longstanding approach, the Commission will initiate a public notice process to solicit public input on certain details of auction design and the auction

procedures. This public notice will address auction-specific matters such as the competitive bidding design and mechanisms, minimum opening bids and/or reserve prices, and payment procedures. In advance of the auction, the Commission will issue another public notice to announce the auction procedures and provide detailed instructions for potential auction participants. Because we expect the first auction to raise new and novel considerations with respect to the auction procedures, we will vote the public notices for the initial auction at the Commission level.

As discussed above, procedures regarding minimum opening bids and upfront payments will be announced via the public notice process. In determining these amounts, we expect we will have to balance our twin objectives of satisfying applicant demand for PALs and the possibility of shared GAA use where no PALs are issued. We recognize that this balance may vary in different geographic areas. In addition, given the very high volume of licenses that will be available in an auction of PALs, it may be necessary to implement measures that will allow the auction to close within a reasonable time. Therefore, we will consider establishing other auction procedures that will encourage targeted bidding on specific PAL licenses. To further that objective, we may consider various procedures, including, among others, establishing an upfront payment process that requires qualified bidders to make upfront payments on a license-by-license basis, *i.e.* for a PAL in a specific license area, rather than for general bidding eligibility on any one of a set number of PALs. If bidding eligibility is nontransferable to other PALs, this would limit a bidder’s ability to change the geographic area of the PALs for which it bids during the auction. We may also consider whether such license-specific upfront payments should also serve as an applicant’s opening bid for that PAL, constituting a binding commitment to purchase the PAL at that price.

#### D. General Authorized Access

The GAA-tier is intended to provide a low-cost entry point into the Citizens Broadband Radio Service for a wide array of users. GAA users will have no expectation of interference protection from Incumbent Users and other Citizens Broadband Radio Service users. Further, GAA users must comply with the instructions of the SAS and avoid causing harmful interference to Priority Access Licensees and Incumbent Access tier users. We believe that GAA

availability will promote competition, encourage flexible network deployments, and facilitate the efficient use of available spectrum. The same technical rules will apply to devices operated in both the Priority Access and GAA tiers of service to maximize flexible and efficient use of the band. Therefore, as discussed below and consistent with the proposals set forth in the *NPRM* and *FNPRM*, we adopt a license-by-rule authorization framework under Section 307 of the Communications Act for GAA users (*See* 47 U.S.C. 307(e)(1)).

#### 1. Authorization Methodology

*Background.* We proposed to establish the Citizen’s Broadband Radio Service (including the GAA tier) by rule under Section 307(e) of the Communications Act (*See* 47 U.S.C. 307(e)). We reasoned that a license-by-rule licensing framework would allow for rapid deployment of small cells by a wide range of users, including consumers, enterprises, and service providers, at low cost and with minimal barriers to entry. As we explained, much wireless broadband use occurs indoors or in other enclosed facilities. Typically, the owners or users of such facilities already have access to the siting permissions, backhaul facilities, electrical power, and other key non-spectrum inputs for the provision of service. Moreover, small cell operation in the 3.5 GHz Band would generally tend to contain service within such facilities, allowing for a high degree of spectrum reuse. Therefore, authorizing these end users to have direct access to the 3.5 GHz Band in the physical locations that they otherwise are able to access would seem to facilitate expeditious and low-cost provision of service. Accordingly, we concluded that a license-by-rule framework was very compatible with and conducive toward these aims.

A number of commenters endorsed the license-by-rule approach. The Utility Groups, for example, agree that the Citizens Broadband Radio Service should be licensed by rule. The Utility Groups note that a license-by-rule model for this band is consistent with the Commission’s decision to license the Wireless Medical Telemetry Service by rule because both services facilitate the accelerated deployment of mission critical services. In addition, UTC notes that the license-by-rule model promotes economies of scale, minimizes administrative burdens, and provides a unified licensing model in the band. WISPA argues that a license-by-rule approach coupled with SAS requirements “represents an evolution



of *ad hoc* unlicensed systems where spectrum coordination often occurs after deployment, an inefficient and outdated approach for avoiding interference.” The WiMAX Forum states that a license-by-rule approach “would streamline deployment as compared to the ‘light licensing’ scenario of the current 3650–3700 MHz band.”

Other commenting parties express a preference for an unlicensed (Part 15) framework, rather than the *FNPRM*'s proposed license-by-rule framework. AT&T specifically opposes license-by-rule authorizations and asserts that the Commission's statutory authority under Section 307(e) is narrower than the Commission claims. AT&T argues that the Commission should authorize GAA users under Part 15 instead. Microsoft likewise argues that an unlicensed regime would facilitate the rapid deployment of new technologies in the band “because of the relatively low regulatory barriers to entry and because the technical rules governing Part 2 and 15 devices have proven effective in protecting incumbent users from interference.” TIA, by contrast, argues that license-by-rule and unlicensed approaches are too unpredictable to support the Commission's service expectations, as envisioned by the National Broadband Plan.

*Discussion.* After careful consideration of the record in this proceeding, we adopt a licensed-by-rule framework for the GAA tier of the new Citizens Broadband Radio Service, pursuant to Section 307(e) of the Communications Act, as amended, and subject to applicable technical rules. Section 307(e) states in part that, “[n]otwithstanding any license requirement established in this Act, if the Commission determines that such authorization serves the public interest, convenience, and necessity, the Commission may by rule authorize the operation of radio stations without individual licenses in the following radio services: (A) citizens band radio service; . . .” (47 U.S.C. 307(e)(1)). Section 307(e) further states that, “[f]or purposes of this subsection, the terms ‘citizens band radio service’ . . . shall have the meanings given them by the Commission by rule (47 U.S.C. 307(e)(3)).”

We conclude that a license-by-rule framework is the appropriate methodology for authorizing users in the 3.5 GHz Band consistent with the tiers of service proposed herein. This proposed framework will facilitate the rapid deployment of compliant small cell devices while minimizing administrative costs and burdens on the public, licensees, and the Commission.

We disagree with AT&T's assertion that the Commission does not have authority to license GAA users by rule under Section 307(e) of the Communications Act (See 47 U.S.C. 307(e)). As noted above, the Act expressly delegates to the Commission the discretion to define the scope of the term “citizens band radio service.” The Commission has repeatedly exercised that authority to license new services by rule under Section 307.<sup>16</sup> Indeed, the Commission has licensed an array of beneficial services by rule by defining the Citizens Band Radio Services to include the Family Radio Service, the Low Power Radio Service, the Medical Device Radiocommunication Service, the Wireless Medical Telemetry Service, and the Dedicated Short-Range Communications Service On-Board Units.<sup>17</sup> Accordingly, we establish a new Citizen's Broadband Radio Service under Part 96 of the Commission's Rules, and define the GAA tier as a Citizens Band Radio Service pursuant to the Commission's authority under Sections 307(e)(1) and (e)(3) of the Act (47 U.S.C. 307(e)(1) and (e)(3)). We find that the creation of a wireless Citizens Broadband Radio Service under the license-by-rule framework of Section 307 will serve the public interest, convenience, and necessity and is consistent with Commission precedents creating new services with flexible assignments for any number of users.

Under the license-by-rule framework we adopt today, GAA users may use only certified, Commission-approved CBSDs and must register with the SAS. Consistent with our new rules governing CBSDs, devices operating on a GAA basis must provide the SAS with all information required by the rules—including operator identification, device identification, and geo-location information—upon initial registration and as required by the SAS. GAA users must also comply with the instructions of the SAS and must avoid causing harmful interference to Priority Access

<sup>16</sup> See, e.g., Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules, WT Docket No. 10–4, *Notice of Proposed Rulemaking*, 76 FR 26983 (May 10, 2011); Amendment of Parts 1 and 95 of the Commission's Rules to Eliminate Individual Station Licenses in the Remote Control (R/C) Radio Service and the Citizens Band (CB) Radio Service, PR Docket No. 82–799, *Report and Order*, 48 FR 24884 ¶ 25 (1983).

<sup>17</sup> See 47 CFR 95.401(a)–(g). While the plain language of Section 309(e)(3) provides for such authority, we also note that GAA use of the Citizens Broadband Radio Service fits well within the category of licenses that are “granted to virtually any person who files an application,” that are non-exclusive, and for which the high cost of licensing so many eligible users is not justified in light of the public interest benefits. H.R. Conf. Rep. No. 97–765, at 36 (1982).

Licenses and Incumbent Access tier users. Similar to unlicensed operations, GAA users have no expectation of interference protection from Incumbent Users and other Citizens Broadband Radio Service users (See 47 CFR 15.5).

We decline to adopt an unlicensed regime for this band as suggested by certain commenters in the proceeding. Instead, we adopt a primary fixed and land mobile allocation across the entire band. A co-primary allocation for the entire 3.5 GHz Band will ensure that GAA operations are prioritized over existing secondary users in the band. Moreover, this authorization framework will serve the public interest, aiding enforcement and promoting a more stable and predictable spectral environment through affirmative authorization of CBSDs by the SAS. Further, authorizing GAA as a licensed radio service will facilitate its integration into the broader part 96 framework, including SAS-governed frequency assignment, and simplify administration and oversight of the Citizens Broadband Radio Service.

## 2. Contained Access Facilities

*Background.* In the *FNPRM*, we proposed to allow Contained Access Users, such as hospitals, public safety organizations, and local governments to request up to 20 megahertz of reserved frequencies from the GAA pool for indoor use within their facilities. These frequencies would be used only for private internal radio services and could not be made available to the general public. Other GAA users would not be permitted to utilize the reserved frequencies within designated CAFs. We also proposed that Contained Access Users must accept interference from GAA transmissions originating outside the CAF and undertake reasonable efforts to safeguard against harmful interference from those transmissions. Potential Contained Access Users would be required to receive approval from the Commission to be eligible to utilize reserved frequencies. We sought comment on these proposals.

Some commenters, including Verizon, Mobile Future, PISC, Wi-Fi Alliance, and others oppose the Commission's proposal to set aside frequencies for CAF use. Verizon contends that the Commission should not “ earmark” spectrum for a particular class of users. WiMAX Forum argues that the Commission's CAF proposal is incompatible with SmartGrid technology.

PISC opposes the Commission's CAF proposal and notes that it could have the effect of limiting or eliminating GAA availability in some areas. PISC argues

that, if the Commission wishes to provide exclusive access spectrum to critical access facilities, it should assign them finely tailored PALs. PISC also argues that, if the Commission does adopt its CAF proposal, eligible users should be narrowly tailored to include only “public safety agencies, hospitals, local governments and possibly public utilities for only indoor and internal, noncommercial communication in support of core public service functions.”

Other commenters, including Exelon and Interdigital, support the proposal. Still others support CAF use in principle with some key changes. Microsoft argues that prospective CAF users should be required to demonstrate a clear need for exclusive use of frequencies within their facilities and qualified applicants should be assigned frequencies from the Priority Access spectrum pool. WISPA argues that CAF frequencies should be taken from Priority Access channels and not GAA frequencies. Motorola Solutions contends that CAFs should be permitted for campuses that include outdoor areas and that CAF authorizations should be made available on a temporary basis at emergency incident scenes. The American Petroleum Institute, UTC, and other utility companies also argue that CAFs should include outdoor areas.

Federated Wireless supports the Commission’s CAF proposal but urges the Commission to expand access to the CAF designation and incorporate additional commercial uses into its rules. Specifically, Federated suggests that the class of eligible users should be expanded beyond the “critical users” that the Commission proposed. Federated argues that the CAF should be defined as any “any contiguous boundary that encompasses both indoor and outdoor locations” and should include additional conditions such as a minimum size requirement. Federated suggests 500 square meters. Federated believes that instead of being limited to 20 megahertz, a CAF rule should apply to all GAA frequencies. Several commenters also opined on the types of entities that should be eligible to be CAF users. For instance, the American Petroleum Institute, UTC, and others contend that the definition of CAF should be clearly defined to include critical infrastructure entities. WISPA argues that qualified users should be limited to hospitals, utilities, public safety organizations, and local governments.

*Discussion.* After review of the record, we decline to adopt the CAF proposal. The final rules only allow fixed CBSDs—as opposed to the fixed and

portable CBSDs proposed in the FNPRM. Thus, there will be limited opportunities for Citizens Broadband Radio Service users to deploy and utilize CBSDs in indoor areas without the permission of facility owners, even without CAFs available. In these circumstances, we conclude that the need for additional protection is outweighed by the additional costs and burdens of implementing this special priority within GAA use. We remain optimistic that the Citizens Broadband Radio Service can be used support a wide variety of indoor operations, including private networks. We will monitor the development of the band and we may take action if we believe that such vital use cases are not being supported.

#### E. Regulatory Status

*Background.* In the FNPRM, we proposed to allow Citizens Broadband Radio Service users to select whether to provide service on a common carrier or non-common carrier basis, regardless of whether they operate in the Priority Access tier, GAA tier, or both. Users that elect to offer services on a common carrier basis would be required to comply with all of the Commission’s rules applicable to common carriers. This is consistent with our approach in other licensed services. We sought comment on this proposal.

Verizon supports the Commission’s proposal. WISPA argues that Priority Access Licensees should be permitted to select whether to provide service on a common carrier or non-common carrier basis on their license applications. However, WISPA contends that GAA users should not be permitted to select common carrier status since GAA users are not required to file an application and the Commission does not have an established process to accept and track submissions by GAA users.

*Discussion.* After review of the record, we adopt our proposal to allow GAA users and Priority Access Licensees to select whether they will provide service on a common carrier or non-common carrier basis. We agree with Verizon that “[a]n entity’s decision to operate as either a Priority Licensee or as a GAA user should not affect how it is regulated or the services it can provide.” Moreover, this approach is consistent with Commission precedent in other bands.

We do not agree with WISPA’s contention that GAA users should not be permitted to provide common carrier services. We believe that it is in the public interest for Citizens Broadband Radio Service users to be able to utilize the same equipment interchangeably—

in both Priority Access and GAA tiers—to provide the same service. Not allowing GAA users to provide common carrier service would undercut this interchangeability. We believe that any administrative effort needed to establish an application process for GAA users wishing to provide common carrier services will be far outweighed by the public interest benefits of allowing licensees to offer these services.

#### F. Technical Rules

We effectuate technical rules for the 3.5 GHz Band that will allow for a wide range of usage scenarios, while also encouraging spectral efficiency and orderly co-existence with other users of the radio spectrum. Our technical rules are the same for devices operating on a Priority Access or GAA basis to allow Citizens Broadband Radio Service users to effectively access both tiers using the same equipment. We also observe that the public interest requires us to balance opportunities for greater engineering efficiency against other goals. For example, we understand that in many cases it may be most efficient to define interference protection with respect to aggregations of signals received by a protected receiver. At the same time, this type of approach raises questions of equity and complexity. While we have endeavored to accommodate as much technical flexibility and use-case diversity as possible in the initial rules (in some respects, more than other “flexible use” radio services), we necessarily have had to simplify in ways that we believe will accelerate use of the band. We recognize that innovation requires iteration. We expect that as the band develops, we will occasionally revisit the rules in ways that increase the technical flexibility—and therefore the economic productivity—of the Citizens Broadband Radio Service.

##### 1. General Radio Requirements

###### a. Digital Modulation

In the FNPRM we proposed that systems operating in the Citizens Broadband Radio Service use digital modulation techniques and sought comment on this proposed rule. There was no objection to this proposed rule. Digital modulation technology has become an embedded and essential component of today’s wireless broadband devices. Therefore, we adopt the requirement that CBSDs use digital modulation techniques.

###### b. Emissions and Interference Limits

*Background.* In the FNPRM, we sought comment on specific out-of-band emission (OOBE) power levels for CBSDs and End User Devices. We

proposed applying the long-standing OOB attenuation requirement of  $43 + 10 \log(P)$  dB (equivalent to  $-13$  dBm/MHz), to all emissions from CBSDs and End User Devices outside of any channel assigned by the SAS. We also proposed a 30 megahertz transition gap above 3650 MHz and below 3550 MHz with an OOB limit of no more than  $-40$  dBm/MHz for emissions above 3680 MHz and below 3520 MHz.

We sought comment on whether the proposed transition gap is in the range of existing filter technology and whether the gap could be smaller. We also noted in the FNPRM that there has been considerable technological advancement in transmitter and receiver technologies deployed in the mobile broadband industry over recent years, such that more stringent out-of-band emission limits may be practical without undue burden to manufacturers and operators.

In the FNPRM, we noted that a more stringent OOB limit would enable closer proximity of neighboring service operations while still protecting the operations of earth stations in the C-Band and DoD systems. We sought comment as to whether the OOB limit at greater offsets than 30 megahertz above or below the band edge should be more stringent, such as to a level below  $-50$  dBm/MHz, and whether the in-band emission limits outside of any channel assignment should be more stringent (*i.e.*, at a lower power spectral density) than  $-13$  dBm/MHz.

The record reflects divergent views regarding appropriate OOB limits. Some commenters support the proposed OOB attenuation requirement of  $43 + 10 \log(P)$  dB ( $-13$  dBm/MHz) adjacent to and outside the band, as well as a  $70 + 10 \log(P)$  dB ( $-40$  dBm/MHz) OOB level 30 megahertz outside of the Citizens Broadband Radio Service operating band. Motorola Mobility supports the overall proposed OOB limits and argues that 10 and 20 megahertz LTE channels should not encounter any problems in meeting such limits. Motorola Mobility urges the Commission to refrain from adopting any limit more stringent than proposed in the FNPRM (*e.g.*,  $-50$  dBm/MHz).

On the other hand, NSN and AT&T state that the Commission should harmonize its OOB rules with the existing 3GPP standard. NSN points out that the use of  $-40$  dBm/MHz at a frequency offset of 30 megahertz would not comply with 3GPP TS 36.101 Out-of-Band Emission limits of  $-25$  dBm/MHz for 10 megahertz channels beyond a 10 megahertz frequency offset for End User Devices. According to NSN, this would imply that Band 42 and Band 43 user equipment would not be able to

operate under the emission limits proposed by the Commission. Qualcomm states that while NSN's proposal to reuse 3GPP Band 42 and 43 plans is not unreasonable, the better path forward would be to define a new 3GPP band class for the 3.5 GHz Band because doing so would offer more flexibility for purposes of setting OOB limits. AT&T states that the Commission's proposed OOB rules differ considerably from those for other bands used for mobile broadband service. AT&T argues that the Commission's proposed OOB limits are too extreme because, unlike AWS-4, receivers and transmitters in the 3.5 GHz Band will not be in extremely close proximity to one another.

BLiNQ Networks filed a 3.5 GHz Band co-existence study with a proposal to allow higher conducted CBSD transmit power and limit adjacent channel leakage by defining a power ratio relative to the authorized carrier power. BLiNQ proposes to limit adjacent channel power to  $-30$  dBm/MHz beyond 2.5 times the channel bandwidth offset and proposes to limit out-of-band emissions outside the 3.5 GHz Band to  $-40$  dBm/MHz beyond 40 megahertz offset and to  $-50$  dBm/MHz beyond 60 megahertz offset. BLiNQ presents calculations, for base station radios (*i.e.*, CBSDs), of protection distances to C-band earth stations for various combinations of propagation path models and OOB levels, resulting in large variations in computed protection distances and poor spectrum utilization for worst case assumptions. Importantly, BLiNQ, and others, conclude that limiting OOB is more critical to protecting incumbent services, than minimum geographic distance separation to limit receiver (low noise block downconverter, or LNB) saturation.

Google argues that OOB rules should not adopt a one-size-fits-all limit to protect adjacent services from harmful interference. Instead, Google states that the rules should recognize that device performance may result in lower emissions than the  $-13$  dBm/MHz standard and enable SASs to take improved performance into account when determining which spectrum is available for a device in a given operating environment. NTIA lab measurements of emission spectra for several commercial devices that operate within the 3.5 GHz Band demonstrate emission performance and OOB power levels significantly below the levels proposed in the FNPRM, and with transition bandwidths narrower than 30 megahertz to achieve OOB levels below  $-40$  dBm/MHz

On the other hand, SIA advocates for significant separation distances and OOB limits to prevent harmful adjacent band interference. SIA observes that the Commission's "choice of 'band edges' and the frequency ranges in which it proposes to impose a stricter OOB limit (beyond 3550 MHz and 3650 MHz) do not make a great deal of sense if the goal is to protect adjacent band FSS earth station receivers operating at 3600 MHz and above." However, SIA agrees with the Commission's observation that "a more stringent limit would enable closer proximity of neighboring service operations." SIA presents an engineering study by RKF Engineering, including an analysis of the required line-of-sight separation distances between a CBSD and an FSS earth station as a function of OOB limit ( $-13$ ,  $-40$ , and  $-50$  dBm/MHz) and the earth station off-axis angle. The study shows separation distances of tens of kilometers required to control aggregate interference with an OOB limit of  $-13$  dBm/MHz, while the required separation distances with a tighter OOB limit of  $-50$  dBm/MHz are between 100 m and 1 km, depending on the off-axis angle to the FSS earth station.

*Discussion.* After review of the record, we adopt emissions and interference limits that will further the Commission's goals and promote effective coexistence of different users in the band. Specifically, we adopt the following:

- $-13$  dBm/MHz from 0 to 10 megahertz from the SAS assigned channel edge
- $-25$  dBm/MHz beyond 10 megahertz from the SAS assigned channel edge down to 3530 MHz and up to 3720 MHz
- $-40$  dBm/MHz below 3530 MHz and above 3720 MHz

We recognize that these emission limits are more stringent than what we proposed in the FNPRM. However, we also observe that these limits are a logical extension of multiple proposals in the record, which reflects more stringent requirements at greater offsets from the band, and are consistent with the capabilities of the equipment and services likely to be deployed in this band. Some commenters suggest that the Commission should harmonize with the existing 3GPP standards. Industry standards typically cover many radio options and variations (*e.g.*, many bandwidths, base station types, user equipment types, modulation types), resulting in many different OOB power level specifications. We believe that the

Commission's rules can simultaneously be supportive of such flexible and evolving standards, while also being technology neutral, and not overly prescriptive.

We agree with Google that the approach to interference limits and service protection should recognize that device performance may exceed industry standards and baseline regulations. However, the baseline standards and rules must be balanced and sufficiently stringent to ensure that spectrum sharing between diverse radio services and license types will work. They should also address a wide range of technologies, standards, and radio types (e.g., end user devices, access points, small cells, base stations, etc.) without being excessively complicated or stifling innovation. BLiNQ proposes an adjacent channel leakage ratio (ACLR) for first and second adjacent channels. However, BLiNQ's proposal appears to only address base station radios and not end-user devices. We recognize that end-user device radios may have different adjacent channel performance requirements as compared to base station requirements in industry standards (e.g., 30–33 dB ACLR for end user equipment versus 45 dB ACLR for base stations). However, because we are adopting conducted power limits for end-user devices that are similar to the rules for CBSD conducted power limits, we can adopt one set of OOB limits to cover both CBSDs and End User Devices thereby avoiding adding more complexity to the emission rules.

Additionally, we must consider the OOB limits in context of our decision to include the 3650–3700 MHz band as part of the 3.5 GHz Band. The existing part 90 rules for that band segment specify a  $-13$  dBm/MHz OOB limit above 3700 MHz, while the proposed OOB limits in the *FNPRM* above 3700 MHz were  $-40$  dBm/MHz.

As an initial matter, we note that adopting a  $-13$  dBm/MHz OOB limit for the first 10 megahertz beyond the SAS assigned channel edge is reasonably supported by industry standards and existing technologies, it is consistent with the limits for other Commission regulated services, and it is non-controversial among commenters. Similarly, based on the NTIA measurements, the 3GPP emission mask for user devices and base stations, and the WiMAX spectrum emission mask for 10 megahertz bandwidth equipment, we find that an emission limit of  $-25$  dBm/MHz at frequency offsets beyond 10 megahertz from the SAS assigned channel edge up to 3530 MHz and 3720 MHz is also reasonably supported by industry standards and existing

technologies. We acknowledge that this is more stringent than the proposed limit which did not have such an intermediate limit. However, based on our review of the record, existing standards, and the NTIA measurements, we believe that adopting this limit will allow for greater spectrum efficiency through shorter coupling distances and reduced interference potential while not having a significant impact on equipment cost.

We also address the size of the transition gap. While some commenters supported the proposed 30 megahertz transition gap from the upper edge of an authorized CBSD channel to an out-of-band emission limit of  $-40$  dBm/MHz, there would be a significant impact on the required separation distance between CBSDs operating just below 3700 MHz, and C-Band earth station receivers operating between 3700–3730 MHz, where the higher ( $-13$  dBm/MHz) OOB limit applied.

We disagree with AT&T that our proposed OOB limit is too stringent. NTIA measurements show that the OOB of commercial products can be lower than  $-40$  dBm/MHz at offsets higher than 20 megahertz. Based on these measurements, we adopt a 20 megahertz transition gap instead of our proposed 30 megahertz transition gap. This more stringent requirement appears to be practically realizable with existing state-of-the-art products at little or no added cost and will provide superior protection to FSS and DoD systems as compared to our original proposal. We therefore adopt  $-40$  dBm/MHz as the OOB limit for End User Devices and CBSDs, at frequencies above 3720 MHz and below 3530 MHz. Motorola Mobility argues that larger aggregated channels above 20 megahertz up to 40 megahertz in bandwidth may not be possible because a 30 megahertz transition gap would be too narrow to meet the  $-40$  dBm/MHz limit outside of the 3.5 GHz Band. We are not convinced that OOB limits should be raised or the transition gap should be wider, at the expense of less spectral efficiency and increased risk of interference to incumbent systems.

Finally, we encourage industry to establish improved emission standards and reception performance for both the protection of incumbent and future radio services. Improved performance in these areas, could allow for denser deployment of CBSDs closer to Incumbent Users, and more efficient use of the 3.5 GHz Band.

#### c. Received Signal Strength Limits

*Background.* In the *FNPRM*, we indicated that the SAS should have a

baseline threshold for the maximum permitted aggregate signal level from all CBSDs at the borders of PALs. We stated that Citizens Broadband Radio Service users should ensure that the aggregate signal level from their CBSDs as well as the aggregate transmissions from their associated End User Devices at the edge of their authorized service boundaries remain at levels that would not harm other CBSDs in the same or adjacent service areas. For small cell networks, industry standards and studies have shown, so long as interference rise over noise (IoT) remains at or below 20 dB and 55 dB for picocells and femtocells, respectively, performance is not impaired. Based on the industry studies, and taking into account reasonable distance between authorized user operations, we proposed a maximum aggregate signal level threshold of  $-80$  dBm with reference to a 0 dBi antenna in any 10 megahertz bandwidth, at a height of 1.5 meters above the ground level, anywhere along the boundary of a PAL license area. Furthermore, we proposed a minimum adjacent channel and in-band blocking interference threshold not to exceed  $-30$  dBm/10 megahertz with greater than 99% probability. We also proposed to allow neighboring PALs to coordinate and mutually agree on higher or lower signal level thresholds. We sought comment on these proposals.

Commenters offered a range of positions on what would constitute an acceptable signal level at the boundary of each service area. Notably, WISPA and Federated Wireless support the Commission's proposal to establish a signal strength limit along the borders of individual license areas. Motorola Solutions agrees and states that a  $-80$  dBm limit would be an acceptable initial starting level. Some commenters believe using 3GPP standards for Band 42 and 43 and a reference sensitivity limit of  $-96$  dBm over a 10 megahertz channel bandwidth would be appropriate. Commenters including AT&T, Motorola Solutions, and WISPA agree that, regardless of the maximum signal level set at the border, individual licensees should be allowed to agree on alternate signal levels appropriate to their network configurations.

Verizon argues that rather than using a one-size-fits-all specification, a multilevel interference framework with different regimes (areas, channel sets) for managing the allowed frequency reuse density to achieve different IoT targets would advance the Commission's objectives. Google contends that a fixed maximum signal level of  $-80$  dBm along license area boundaries does not reflect actual

network deployment parameters and could lead to inefficient use of the band. It argues that it would be more efficient for the SAS to assign a PAL's boundaries based on the actual characteristics of a licensee's proposed network equipment, CBSD locations, and the physical characteristics of the area where that network will operate. Similarly, Wireless Innovation Forum contends that the appropriate signal threshold should be network dependent and that a general received signal strength limit should be determined by PAL and GAA service providers. It contends that a multi-stakeholder working group is the proper forum for determining the appropriate maximum signal threshold along license area borders.

With regard to adjacent reception limits, Pierre de Vries, Senior Fellow and Co-Director of the Spectrum Policy Initiative at the Silicon Flatirons Center at the University of Colorado at Boulder, argues that such limits will facilitate productive coexistence among Priority Access Licensees, whereby dynamic frequency assignment requires an explicit statement of the interference rights and responsibilities of receivers. NSN states that systems likely to operate in this band should follow the technical specifications of standards bodies such as 3GPP, and the Commission should not specify minimum receiver standards. Motorola Mobility states that receiver limits should be set by standards organizations and the adoption of any guidance by the Commission should be voluntary. Motorola Mobility also argues that, if the Commission concludes that a mandated receiver requirement is necessary, it should not be more stringent than 3GPP in-band blocking specifications and the Commission should define separate requirements for in-band and out-of-band blocking. Pierre De Vries states that  $-30$  dBm per 10 megahertz is reasonable and conservative, and cites drive test field data that suggests that  $-30$  dBm per 10 megahertz, 99th percentile, could be lowered by 5 dB or more, leading to more operational flexibility for licensees. Furthermore, Motorola Solutions believes that  $-30$  dBm per 10 megahertz is too burdensome and implies more adjacent channel selectivity than is feasible in typical broadband system designs, and would limit CBSD system (weak signal) coverage in areas with strong adjacent channel signals. Motorola Solutions recommends an interference requirement no higher than  $-40$  dBm per 10 megahertz if a general fixed

interference power spectral density level is enforced by rule for adjacent and alternate channels.

*Discussion.* After a thorough review of the record, we believe that establishing a baseline maximum signal level along license area boundaries will help foster effective coexistence in the 3.5 GHz Band. We also find that licensees should be permitted to agree to lower or higher acceptable maximum signal levels appropriate to their particular network configurations. We believe that the aggregate  $-80$  dBm per 10 megahertz signal threshold at the service boundaries proposed in the *FNPRM* is wholly appropriate for the dense cell deployments and relatively small license areas that we expect in this band. Therefore, we adopt our proposal for aggregate received signal level at a PAL license boundary to be at or below an average (rms) power level of  $-80$  dBm when integrated over a 10 MHz reference bandwidth with the measurement antenna placed at a height of 1.5 meters above ground level. We also recognize that the PAL licensees may agree to an alternative limit besides  $-80$  dBm at their service boundaries and communicate it to an SAS. Moreover, these signal level requirements will not apply to adjacent license areas held by the same Priority Access Licensee. We recognize that ensuring compliance with this limit at the boundary is likely challenging on a real-time basis and there are legitimate questions relative to how to develop appropriate predictive models. We also recognize that the use of an aggregate metric could be challenging in a multi-user environment. We encourage any multi-stakeholder group formed to address technical issues raised by this proceeding to consider how this limit should be applied. As an initial matter, we will apply the limit through measurements at the license area boundary at times of peak activity.

Furthermore, we believe that efficient use of the band by both Priority Access Licensees and GAA users requires not only the specification of emission limits but also the protection limits that should be afforded to PAL receivers, without mandating receiver performance specifications. We agree with Pierre de Vries that a baseline reception limit lower than  $-30$  dBm per 10 megahertz is appropriate and will lead to more operational flexibility to licensees. We also agree with Motorola Solutions' recommendation of a threshold no higher than  $-40$  dBm per 10 megahertz. Therefore, we adopt the rule that Priority Access Licensees must accept adjacent channel and in-band blocking from other Priority Access or

GAA radios in the band, up to a power spectral density level not to exceed  $-40$  dBm per 10 megahertz with greater than 99% probability.

We also acknowledge that licensees may have a legitimate need for flexibility in their network deployments, which may not all fit into the dense small cell category and therefore may tolerate lower or higher levels of interference. It is our policy to encourage technical flexibility wherever possible and it is clear from the record that several commenters desire such flexibility here. By leveraging the capabilities of the SAS, licensees will hopefully be able to reach agreement on maximum signal thresholds that will maximize the utility of the band, promote spectral reuse, and facilitate efficient network planning. As such, we find that holders of geographically and spectrally adjacent licenses may mutually consent to different thresholds than the mandatory baseline. Such agreements must be communicated to an SAS Administrator. The SAS Administrator shall enforce these agreements to the extent that such agreements do not conflict with its other responsibilities under the rules or cause impermissible interference to other Citizens Broadband Radio Service users of the same or higher tier.

## 2. CBSD Requirements

### a. CBSD Categories and Power Requirements

*Background.* In the *FNPRM*, we defined CBSD categories based on multiple use cases. We proposed a baseline maximum conducted power of 24dBm per 10MHz (Power Spectral Density of 14dBm/MHz) and, maximum EIRP of 30dBm for CBSDs. We noted that this proposal was consistent with the values commonly assumed in various studies for small cell base stations. We also proposed higher power limits for rural CBSDs. Specifically, we proposed that rural CBSDs have flexibility to transmit a maximum conducted power of 30dBm per 10 megahertz (Power Spectral Density of 20dBm/MHz) and EIRP of 47dBm. For purposes of this rule part, we proposed that a rural area be defined as a county (or equivalent) with a population density of 100 persons per square mile or less, based upon the most recently available Census data. The *FNPRM* also proposed a third category of CBSD deployment for fixed point-to-point (PTP) CBSDs with maximum conducted power not to exceed 30dBm per 10 MHz (Power Spectral Density of 20dBm/MHz) and EIRP of 53dBm. We also indicated that the maximum operational

EIRP of individual base stations might be reduced by the SAS to prevent interference and promote efficient network operation.

Commenters diverged greatly with regard to the maximum allowable power for devices operating in the band, with many supporting variable power limits for different use cases. For instance, AT&T, Google, Motorola Solutions, and NSN support a 36dBm maximum EIRP for baseline CBSDs. CTIA also argues that the power levels proposed in the *FNPRM* are too low for effective small cell deployment. Verizon advocates up to 46dBm EIRP for baseline CBSDs. Alcatel-Lucent argues for 30dBm maximum power for indoor CBSDs and greater than 30dBm for outdoor CBSDs. Alcatel-Lucent also contends that for outdoor cells, allowing greater than the proposed 30dBm (1W) limit could foster rapid deployment in the 3.5 GHz Band.

Sony supports the Commission's proposed maximum power of 30dBm. Shure contends that 20dBm EIRP would be sufficient to characterize devices with low interference potential.

NTIA states that 30 dBm per 10 MHz channel maximum EIRP would be appropriate for CBSD deployment during the first phase of the proposed commercial-federal sharing proposal described in Section III (G) (1). In subsequent phases, NTIA indicates that higher power CBSDs could be permitted provided that relevant CBSD parameters required to protect radar operations at higher power levels are determined through the SAS and ESC approval and authorization process.

For rural CBSD deployments, Qualcomm and Motorola Solutions support maximum EIRP of 47dBm and believe the FCC should allow the band to be used at higher power levels for cellular deployments away from the coast. Along the same lines, Verizon asserts that 58dBm EIRP would be appropriate for non-baseline use cases.

WISPA supports higher power operations in rural areas and argues that the Commission should define "rural area" in the same manner that the Rural Utilities Service defines it for its Community Connect program. This definition deems an area "rural" if it is not located within: (i) A city, town, or incorporated area that has a population of greater than 20,000 inhabitants; or (ii) An urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants."

We also received transmit power recommendations from parties who would like to utilize the 3.5 GHz Band for point-to-point and point-to-multipoint services. BLiNQ provided a

range of EIRP limits and argued that by adopting intermediate power limits between the baseline 30dBm EIRP limit and the 53dBm EIRP point-to-point limit, the Commission can enable innovative use cases, including non-line-of-sight (NLOS) point-to-multipoint backhaul. For fixed PTP systems, AT&T and Motorola Solutions both advocate for a 53 dBm EIRP allowable power limit.

*Discussion.* We believe that it is vitally important to establish flexible, yet simple, rules that would allow for a wide variety of innovative services to be deployed in the 3.5 GHz Band and we are encouraged that many commenters share this view. Ensuring that the band is available for multiple use cases should encourage rapid network deployment, promote the development of a robust device ecosystem, and help to ensure the long-term viability of the band. It is also important that we provide interference protection to Incumbent Users and Priority Access Licensees. To advance these goals, we define two categories of CBSDs. Category A and Category B CBSDs will be defined mainly by their maximum conducted power and deployment conditions. Both CBSD categories will be available for GAA and Priority Access use (with certain caveats, described below). This commonality of technical rules throughout the Citizens Broadband Radio Service will ensure that equipment can switch between GAA and PA authorizations over time without changing network coverage footprint.

Category A represents a lower-power use (small cells being the paradigmatic example) that we expect will be widely prevalent in the 3.5 GHz Band. Category A CBSDs will be limited to a maximum conducted transmit power of 24 dBm and a maximum EIRP of 30 dBm in 10 megahertz, but will be required to operate in accordance with instructions from the SAS, which for interference prevention reasons, may authorize a lower power level (*see* Sections 96.41 and subpart F of the rules). These parameters are consistent with the baseline small cell use case proposed in the *FNPRM* and with NTIA's phased federal-commercial sharing plan. We believe that the lower power limit for Category A CBSDs will facilitate coordination with existing federal operations—particularly before an ESC is developed and made commercially available—while allowing Citizens Broadband Radio Service users to deploy a variety of small cell applications.

In addition, to facilitate coordination with neighboring Citizens Broadband

Radio Service users, and to avoid potential interference into the incumbent services, Category A CBSDs shall not be deployed or operated outdoors with antennas exceeding 6 meters Height above Average Terrain. We believe that the majority of Category A devices will likely be deployed indoors or at street level. As discussed in greater detail below, Category B devices may be used for outdoor uses in other configurations such as non-line-of-sight backhaul.

Category A CBSDs must also provide certain essential information about their configuration, location, and operation (*e.g.*, EIRP) when registering with an SAS. However, due to their relatively small footprint, information about antenna configuration (other than EIRP) need not be transmitted to the SAS. Assuming a relatively large number of Category A CBSDs, this will simplify frequency coordination in the band. Category A CBSDs do not have to be professionally installed. However, as described in Section III(F)(2)(b), geo-location data must be provided by a professional installer if this information cannot be automatically reported by the CBSD. Once registered with an approved SAS, Category A CBSDs may operate throughout the entire 3550–3700 MHz range, provided they respect protections for Incumbent Users.

Category B CBSDs will be authorized to operate at higher power than Category A, providing greater flexibility and ensuring ongoing compatibility with existing 3650–3700 MHz operations. In non-rural areas, the conducted power limit is the same as Category A (24 dBm), but the EIRP limit is 40 dBm. In rural areas, the conducted power limit is increased to 30dBm per 10 MHz and EIRP to 47 dBm EIRP per 10 MHz. As implied by the difference between low conducted and higher radiated power limits, Category B CBSDs can make use of more directional, higher-gain antennas to achieve increased range. Compared to an approach that merely specifies a higher EIRP, our rule should promote efficient use of the spectrum and facilitate greater coexistence with neighboring CBSDs. The higher rural power limits reflect challenges for deploying wireless coverage in rural areas as well as decreased contention for spectrum resources due to lower population density in those areas.

In order to realize these efficiencies, we require Category B CBSDs to provide the SAS with additional information about antenna configuration, including the antenna gain, beamwidth, azimuth, downtilt angle, and antenna height above ground level. Such information can help SASs more accurately estimate

the signal transmissions from such high power nodes and avoid harmful interference. In addition, as described in Section III(F)(2)(b), Category B CBSDs will be limited to outdoor deployments and—due to their higher maximum transmit power—they are required to be installed professionally. Crucially, as discussed below in Section III(G)(1), Category B operations in the 3550–3650 MHz band segment will only be permitted pursuant to authorization of an appropriately calibrated ESC, and consistent with system parameters required to protect federal incumbent operations.

We believe that this approach addresses many of the concerns raised by commenters that support higher power operations in the band. Commenters supporting higher power CBSDs typically express interest in

using such devices for outdoor backhaul, coverage, or capacity for managed networks. While we acknowledge that some commenters, including Alcatel-Lucent, AT&T, BLiNQ, CTIA, and Verizon requested higher maximum power levels for outdoor operations than we adopt in this *Report and Order*, we believe that the Category B criteria we adopt will allow a wide range of network deployments, including point-to-point and point-to-multipoint transmissions, while maximizing coexistence between and within different tiers of user. Thus, we are not adopting specific rules for point-to-point deployments as we proposed. Moreover, these criteria are consistent with permissible power levels and deployment characteristics in the 3650–3700 MHz band and should allow current 3650–3700 MHz licensees

to continue to provide service within their existing network footprints.

Finally, we agree with WISPA’s proposed definition of “rural area.” Accordingly, for purposes of the Citizens Broadband Radio Service, “rural area” will be defined as any census tract which is not located within, or overlapping: (i) A city, town, or incorporated area that has a population of greater than 20,000 inhabitants; or (ii) an urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants. We direct WTB to promulgate a machine-readable list of census tracts that meet the “rural area” definition.

The table below summarizes the main technical and operational characteristics of Category A and Category B CBSDs:

CBSD category	Maximum conducted power (dBm/10 MHz)	Maximum EIRP (dBm/10 MHz)	Maximum conducted PSD (dBm/MHz)	CBSD installations	Operations in 3550–3650 MHz	Operations in 3650–3700 MHz
Category A .....	24	30	14	—Indoor .....	Everywhere Outside DoD Protection Zone.	Everywhere Outside FSS and DoD Protection Zone.
Category B (Non-Rural).	24	40	14	—Outdoor max 6m HAAT. —Outdoor only .....	Outside DoD Protection Zone & requires ESC approval.	Everywhere Outside FSS Protection Zone and DoD Protection Zone.
Category B (Rural) ...	30	47	20	—Professional Installation. —Outdoor only .....	Outside DoD Protection Zone & requires ESC approval.	Everywhere Outside FSS Protection Zone and DoD Protection Zone.

We are cognizant that the determination of power limits must reflect consideration of several different public interest objectives with respect to the new Citizens Broadband Radio Service. On the one hand, higher limits may provide more technical flexibility for users of the band to increase coverage with sparser network topologies, potentially reducing deployment costs. On the other hand, lower power limits may lead to greater spatial reuse of the band, reduced coexistence challenges, and increased aggregate network capacity. In establishing the power limits herein, we strive to strike a practical balance of these different considerations based on the existing record. Nonetheless, we remain open to the possibility that we may allow higher power limits for Category B non-rural use at a future point in time, either through our usual waiver process or through modification of our initial rules. In making this consideration, we will place demonstrable advances in technology, such as advanced SAS coordination

capabilities or use of contention-based protocols in CBSDs (or both), would mitigate concerns about spectrum congestion in urban areas. For example, it might be possible that instead of the bright-line urban/rural distinction implemented in these initial rules, industry stakeholders (perhaps working through a multi-stakeholder forum) could agree on a “congestion metric” and associated methodology for SASs to reduce CBSD power levels in high-demand areas. We intend to continue an informal dialog with stakeholders on this topic and welcome the submission of additional technical analysis or reports of technological developments that can inform us going forward.

**b. Geo-location and Reporting Capability**

*Background.* In the *FNPRM*, we stated that for the SAS to accurately predict and evaluate potential interference and channel availability, it must receive and store accurate location information for all CBSDs. We proposed that all CBSDs must accurately report the location coordinates (referenced to the North

American Datum of 1983, NAD83) of each of their antennas to within ±50 meters (horizontal) and ±3 meters (vertical). The proposed horizontal geo-location requirement is consistent with a similar requirement in the TVWS rules (*See* 47 CFR 15.711(b)). Such geographic coordinates shall be reported to SAS at the time of first activation from a power-off condition. We also propose that CBSDs report their location to the SAS within 60 seconds of a change in location exceeding the accuracy requirement. This capability is used by a SAS to determine frequency availability and maximum power limits for CBSDs.

AT&T asserts that the geo-location requirements proposed in the *FNPRM* are not feasible. AT&T suggests that the Commission require that CBSDs report their location but defer on specific location accuracy requirements until the SAS is developed and agreed upon by a multi-stakeholder group. T-Mobile also requests that the Commission re-evaluate the proposals for ±50 meters horizontal, ±3 meters vertical location accuracy, and CBSDs to report their



location to the SAS within 60 seconds of a change in location particularly as they pertain to PALs.

In its comments, Google also questioned  $\pm 3$  meters vertical accuracy and stated that such accuracy is not technologically reasonable today and need to be revisited. Google also submitted an *ex parte* filing arguing that “consumer devices should be able to report their location to a SAS either through an automated capability or through the services of a trusted installer.” Google contends that this approach is consistent with Commission precedent in the TVWS proceeding.

Google agrees that the Commission’s rules should require communication with the SAS whenever a controlling access point device (CBSD) moves more than 50 meters. AT&T contends that the proposed 60-second reporting requirement may not provide sufficient time for a CBSD to obtain an accurate location fix, particularly indoors. On the other hand, SIA claims that a 60-second interval for geo-location reporting is too long and notes that a shorter interval may be necessary to enforce incumbent protection criteria.

*Discussion.* After thorough review of the record, we adopt the location accuracy requirements set forth in the *FNPRM*. We will allow location information to be captured and reported to SAS as part of a CBSD’s initial registration either via automated geolocation technologies or by a professional installer. This approach allows for deployment in the band to proceed as new automated new technologies evolve to achieve the capability to automatically and accurately meet our geolocation requirements in different environments.

Accurate CBSD location is essential for coordinating interactions between and among users in the band and for protecting Incumbent Users from harmful interference. Indeed, NTIA noted that CBSDs should transmit geo-location information to the SAS and SASs should use that information to determine permissible operational parameters. Without accurate location data, SASs will be unable to effectively determine where and at what power levels CBSDs should be authorized or effectively discontinue their operations to protect Incumbent Users. To this end, we also note that our rules require authentication of CBSDs with an SAS and require that SAS Administrators maintain the accuracy of stored data, including CBSD records. The latter requirement places a duty on SAS Administrators to take reasonable steps to validate newly entered data and to purge obsolete data. We believe that, in

some conditions (e.g., outdoors with clear line of site to GPS), automated reporting of geolocation to our location accuracy requirements is achievable. Other conditions, particularly indoors, may prove to be more challenging.

We will therefore permit professional installers to report accurate CBSD location information in lieu of automated reporting measures. Any subsequent CBSD movement must be reported by a professional installer as well. Since CBSDs will be fixed installations, the professional installation option should allow for network deployment in the near term while automatic geo-location technologies are tested and developed that meet our accuracy requirements.

Given the importance of accurate reporting by professional installers, we strongly encourage the SAS and user community, through multi-stakeholder fora or industry associations, to develop programs for accrediting professional installers who receive training in the relevant Part 96 rules and associated technical best practices. We note that industry-led professional accreditation processes have proven successful in other similar situations. In fact, Section 154(f)(4)(D) of the Communications Act authorizes the Commission to “to endorse certification of individuals to perform transmitter installation, operation, maintenance, and repair duties in the private land mobile services and fixed services (as defined by the Commission by rule) if such certification programs are conducted by organizations or committees which are representative of the users in those services and which consist of individuals who are not officers or employees of the Federal Government (47 U.S.C. 154(f)(4)(D)).” Following the amendment of the Act to include this Section, the Commission eliminated the licensing requirement and strongly encouraged organizations or committees representative of users in the Private Land Mobile Radio and Private Operational-Fixed Microwave Services to establish a national industry certification program or programs for technicians but left the development of and details concerning such a program to the private sector.

#### c. Band-wide Operability

*Background.* In the *FNPRM*, we proposed to require that CBSDs have the ability to operate across all frequencies from 3550–3700MHz. We noted that this proposal would ensure that all CBSDs and End User Devices certified to operate in the band would be capable of utilizing any frequencies assigned by

the SAS. We sought comment on this proposal.

Many commenters also support band-wide device operability because it would open a wider range spectrum for commercial use and give flexibility to the SAS to tune within the band to select the best available frequency. Some commenters, including existing 3650–3700 MHz band licensees, express concerns about extending the Citizens Broadband Radio Service framework into the 3650–3700 MHz band. As described in detail in Section III(J), these commenters claim that compelling existing licensees to change or replace existing equipment to comply with the part 96 licensing framework would undermine the substantial investments that licensees have made in the band. Specifically, UTC contends that compliance with band-wide operability requirements will necessitate equipment upgrades and changes which will impose significant additional costs on existing licensees.

Commenters also express mixed opinions as to whether CBSDs and End User Devices should be required to be capable of operating in the 3.5 GHz Band on a two-way, stand-alone basis. CTIA, T-Mobile, and Verizon support rules that would allow Citizens Broadband Radio Service users to utilize either one-way or two-way technology in the 3.5 GHz Band. These commenters contend that the Commission should adopt technologically agnostic rules that would not require or restrict particular technologies in the 3.5 GHz Band. CTIA contends that the Commission should adopt rules that are independent of the type of air interface technology deployed in the band. Specifically, CTIA argues that there is no reason for the Commission to prohibit technologies, such as LTE-Unlicensed (LTE-U), that rely on bonded channels in licensed bands. Verizon states that it intends to deploy equipment and devices that are capable of bi-directional operation in the 3.5 GHz Band but urges the Commission to avoid any mandate that would restrict how the spectrum is used.

A number of commenters, including Federated Wireless, Google, NCTA, Open Technology Institute, and Public Knowledge have expressed concern that the use of LTE-U/Licensed Assisted Access (LAA) technology in the 3.5 GHz Band could negatively affect competition and innovation in the band. NCTA contends that LAA’s reliance on licensed spectrum would raise barriers to access for new entrants and give carriers with existing licensed spectrum an advantage in the band. As such, NCTA argues that the Commission



should prohibit tying access to GAA frequencies to the use of a control channel in a licensed band. Google and Federated wireless argue that devices should be capable of operating across the entirety of the 3.5 GHz Band in a stand-alone manner, without relying on any other band. Public Knowledge and the Open Technology Institute agree and contend that all equipment operated in the 3.5 GHz Band should be capable of operating on a standalone basis and that no standard incorporating 3.5 GHz frequencies should require access to exclusively licensed frequencies to function. They also urge the Commission to require any technology standard adopted for use in the 3.5 GHz Band to be licensed on fair and reasonable (FRAND) terms identical to those adopted by the IEEE and that the Commission adopt a spectrum etiquette rule, similar to the requirement for a contention-based protocols in the 3650–3700 MHz band.

*Discussion.* After review of the record, we conclude that all CBSDs must be capable of two-way transmissions on any frequency from 3550–3700 MHz as instructed by the SAS. Ensuring that all devices in the band are able to operate on any assigned frequency will promote innovation and flexibility in the band. Indeed, this rule is necessary to make full use of the frequency assignment capabilities of the SAS described in Section III(H)(2)(c). Band-wide operability will also help to establish a consistent certification process for the entire band. We also clarify that this rule requires all CBSDs and End User Devices in the band to be capable of two-way operations across the entire band. It does not require adherence to, or interoperability with, a particular transmission technology or air interface.

We agree with commenters that argue that devices in the 3.5 GHz Band should be *capable* of two-way operation. We believe that this rule is crucial to promote competitive access to the band, encourage innovation, foster the development of a diverse equipment ecosystem, and ensure that the band is made available for a wide variety of innovative uses by an array of potential users, including standalone private networks that do not have recourse to mobile networks in other bands for signaling and control. However, we also conclude that CBSDs and End User Devices using the 3.5 GHz Band should not be required to *operate* in a two-way mode. We believe that adopting this flexible rule, which allows licensees to elect whether to make use of a device's two-way functionality, will provide public interest benefits for the 3.5 GHz Band. This rule is consistent with the

Commission's longstanding policies promoting technological neutrality and competition in emerging bands. We believe that the 3.5 GHz Band could potentially engender a wide diversity of network deployments, including by some non-traditional entrants that do not operate mobile networks in other spectrum. To this end, we will observe the development of technology standards for this band, with an eye toward ensuring they include, rather than preclude, a wide variety of uses and users.

In addition, as described in greater detail in Section III(J), we exempt existing Part 90 equipment used by Grandfathered Wireless Broadband Licensees from the band-wide operability requirement and provide such licensees with a reasonable transition period during which their existing operations will be protected. After the transition period, such equipment will continue to be exempt from the band-wide operability requirement but must otherwise comply with the rules applicable to CBSDs, including SAS registration. These rules address some of the concerns raised by 3650–3700 MHz band licensees and their representatives regarding the threat to existing investment posed by a band-wide operability requirement. This rule will facilitate the development of a robust device ecosystem and promote new investment in the band, and protect investments made by existing 3650–3700 MHz band licensees.

#### d. Registration Requirements

*Background.* In the *FNPRM*, we proposed that a CBSD must register and receive authorization from an approved SAS prior to its initial service transmission. We also proposed to define a CBSD as “Fixed or Portable Base stations, or networks of such base stations. . .” We therefore intended that registration could occur directly between a CBSD and an SAS or between a network of CBSDs (In the latter instance, an intermediary network management element/proxy would be required). Specifically, we proposed that a CBSD must provide the SAS its geographic location, antenna height above ground level, requested authorization status whether it is Priority Access or General Authorized Access, unique FCC identification number, user contact information, and unique serial number. We also proposed that the CBSDs update the SAS if any of the original registration parameters changes. CBSDs would be permitted to operate only if authorized by the SAS and if they follow frequency assignments and power limitations set

by an SAS. We sought comment on these proposals.

Many commenters generally agree with the concept of CBSDs registering with the SAS. Microsoft suggests that there should be limits on the information the SAS collects and the time it maintains records for CBSDs. Sony also recommends that to better manage coexistence among PAL licensees and GAA users, each SAS should store the actual operational information of CBSDs and End User Devices registered with it. Some commenters expressed concern about the SAS having information on detailed operational parameters of mobile networks as well maintaining the confidentiality of sensitive information. Motorola Solutions also asserts that, similar to the TVWS rules, if a CBSD cannot successfully query an SAS within a designated period of time it should cease its operation in the band.

*Discussion.* The Citizens Broadband Radio Service framework depends on SAS authorization of commercial use and protection of incumbents. In order to perform this function, it is essential for the CBSD to provide the SAS with necessary information about its operations prior to transmission. We therefore require that as part of registration, the CBSD should provide the SAS with a number of operational parameters, including geographic location, antenna height above ground level (meters), CBSD operational category (Category A/Category B), requested authorization status, unique FCC identification number, user contact information, air interface technology, unique serial number, and additional information on its deployment profile (*e.g.*, indoor/outdoor operation). All information provided by the CBSD to the SAS must be true, complete, correct, and made in good faith, and failure to provide such information will void the user's authority to operate the CBSD.

We adopt additional registration requirements for Category B CBSDs. Pursuant to Section 96.45, Category B CBSDs must register all information required under Section 96.39 as well as antenna gain, antenna beamwidth, antenna azimuth for sector site, and antenna height above ground level. These additional requirements could provide the SAS with information necessary to perform effective propagation and interference mitigation analyses on these higher power devices. This will help ensure the effective coexistence of all tiers of user operating in the band. If any of the required registration information changes, the CBSD shall update the SAS within 60 seconds of such change.

We encourage multi-stakeholder groups to consider the issues raised by the registration rules described in this Section, including acceptable contact intervals between CBSDs and SASs, and to suggest appropriate operational parameters. We also acknowledge concerns raised by commenters about the security of information that will be retained by the SAS and the desire to keep certain sensitive information confidential. These issues are addressed in detail in Section III(H)(2)(a).

#### e. Interference Reporting

*Background.* It was suggested in the *FNPRM* that, to help an SAS tune or update its predictive propagation models and detect realistic interference issues once CBSDs are deployed, the CBSDs should be able to provide signal strength and interference level measurements. This capability is already widely used to facilitate interference and radio resource management within cellular networks. It could be used in the 3.5 GHz Band to help promote coexistence between different users.

The record generally supports the proposal to incorporate interference reporting into CBSDs. However, some commenters contend that the details of such measurement/reporting should be specified by industry forums.

*Discussion.* We require that CBSDs be able to measure and report on their local interference levels and issues as set forth in the proposed rules. We encourage industry to develop detailed metrics regarding issues like received signal strength, packet error rate, and technology specific parameters of signal and interference metrics. These metrics could be developed by an industry multi-stakeholder group. Such guidance could be incorporated in the SAS Approval process described in Section III(H)(3)(b) or incorporated independently by authorized SAS Administrators, subject to Commission review. This requirement is separate from sensing requirements associated with ESC, discussed in Section III(I).

#### f. Security

*Background.* The *FNPRM* emphasized the importance of data security and end-to-end security for communications among CBSDs, End User Devices, and the SAS. To that end, we proposed a security requirement for all communications between authorized SASs and CBSDs. We also proposed to adopt comprehensive procedures to test and certify CBSDs and associated End User Devices for operation in this band and to require the SAS to disconnect any device whose proper operation has

been compromised. As described in Section III(H)(2)(d), we also proposed to require that the SAS employ protocols and procedures to ensure that all communications and interactions between the SAS and CBSDs are accurate and secure and that unauthorized parties cannot access or alter the SAS or the list of frequencies sent to a CBSD.

The record strongly supports the inclusion of robust security protocols for CBSDs and for communications between CBSDs and SASs. The record regarding secure communications between CBSDs and SASs is described in detail in Section III(H)(2)(d).

*Discussion.* Data security is fundamental to the successful implementation of the Citizens Broadband Radio Service. To this end, as described in Section III(H)(2)(d), we codify the requirement for secure communications between authorized SASs and CBSDs. We also adopt comprehensive procedures to test and certify CBSDs and associated End User Devices for operation in this band. Notably, all CBSDs and End User Devices must contain security features sufficient to protect against modification of software and firmware by any unauthorized parties. Applications for certification of CBSDs and End User Devices must include an operational description of the technologies and measures that are incorporated in the device to comply with the security requirements indicated in Section 96.39. In addition, CBSDs and End User Devices should be able to protect the communication data that are exchanged between these elements. SAS Administrators and CBSD operators who, in good faith, implement duly approved/certified SAS or CBSD security capabilities will be presumed, for enforcement purposes, to be compliant with the rules pertaining to those capabilities. Any subsequently identified security vulnerabilities will need to be resolved on a going-forward basis. We are mindful, however, of the limitations inherent in mandating any particular security technology or protocol through regulation. We encourage the industry to develop best practices for end-to-end security that can be validated in the equipment and SAS certification processes.

#### 3. End User Device Requirements

*Background.* In the *FNPRM*, we proposed that End User Devices must be authorized and controlled by an SAS-authorized CBSD. These devices may not be used as intermediate service access links or to provide service to other End User Devices. We also

proposed that the End User Device transmit at an EIRP not to exceed 23dBm per 10MHz. End User Devices would operate only if they could positively receive and decode an authorization signal transmitted by a CBSD, including the frequency channels and power limits for their operation. This requirement would effectively prevent End User Devices from unauthorized operation in the 3.5 GHz Band and ensure that such devices operate only according to the instructions transmitted from the SAS to the CBSD. As discussed above, we proposed that all CBSDs along with all End User Devices must contain security features sufficient to protect against modification of software by unauthorized parties.

Some commenters support the idea of user devices transmitting power levels based on the latest 3GPP standards and believe that making this adjustment will promote global harmonization. NSN and Motorola Mobility recommend user device transmit power to be at maximum 25dBm (23dBm +2/-3). On the other hand, WISPA argues that the user device power level should agree with the three different power levels for CBSDs defined in the *FNPRM*. WISPA's view is that, the Commission should set the maximum conducted power to be 30dBm/10 MHz with maximum EIRP of 47dBm/10 MHz for end user devices in rural areas. In WISPA's view a lower EIRP limit would neutralize any benefits intended by the higher maximum power level proposed for CBSDs in rural area.

*Discussion.* Based on industry standard power levels for end user devices and comments received we maintain the proposed maximum EIRP of 23dBm per 10 megahertz for end user equipment. We also conclude that End User Devices must only operate if they can receive and decode an authorization signal sent by a CBSD, including the frequencies and power limits for their operation. We agree with WISPA and BLiNQ that End User Devices should operate under power control of an associated CBSD. This requirement is necessary to ensure that interference levels can be effectively managed in the band to protect Incumbent Access and Priority Access Licensees from harmful interference.

We do not agree with WISPA's assertion that End User Devices should be permitted to operate at power levels equal to CBSDs. Adopting such a rule would effectively authorize the deployment of innumerable higher power fixed and mobile devices in the band not subject to direct SAS authorization. As stated previously, SAS-enabled coordination is essential to

the success of the Citizens Broadband Radio Service and is necessary to ensure a stable and secure spectral environment for Incumbent Access users. As such, we find that devices that need to operate at a higher EIRP than 23dBm will be considered to be CBSDs and subject to all CBSD requirements, including SAS registration.

As described above, all End User Devices and CBSDs must also include necessary security features to protect against modification of software and firmware by any unauthorized parties. Applications for certification of CBSDs and End User Devices must include an operational description of the technologies and methods that are incorporated in the device to comply with the security requirements of this proceeding.

#### 4. Other Technical Issues

In the *FNPRM*, we proposed to apply our Part 1 RF Safety and Part 2 Equipment Authorization rules to CBSDs. The record did not raise objections, so we adopt these proposals. We also emphasize that our equipment authorization process is essential to ensuring that CBSDs and End User Devices implement the various technical requirements in Part 96 that are essential to the overall integrity of the Citizens Broadband Radio Service framework.

#### G. Incumbent Protections

##### 1. Federal Incumbent Protection

##### a. Multi-Phase Approach

*Background.* As we detailed in Section II(B), the 3.5 GHz Band is currently used by a number of federal agencies for radiolocation operations. Federal operations in the band include high-powered DoD radar systems using ground-based and shipboard platforms. In its Fast Track Report, NTIA concluded that geographic separation and frequency offsets could be used to minimize interference between commercial networks and radar systems operating in the 3.5 GHz Band. However, NTIA's analysis at the time indicated that it would be necessary to put in place exclusion zones around the coast to prevent incumbent operations and broadband wireless systems from causing interference to one another. NTIA concluded that effective exclusion zone distances around ground-based radar systems would extend approximately one to 60 kilometers, coupled with frequency offsets of 40 or 50 megahertz. Exclusion zones around certain high-power shipborne Naval radars would require over-land

separation distances of several hundred kilometers.

In the *FNPRM*, we proposed to adopt the geographic Exclusion Zones described in the Fast Track Report as a starting point for further updates and analysis. In the *FNPRM*, we noted that preliminary studies had been performed on the potential effects of small cells on radar operations, with additional studies planned, that could lead to a reduction in Exclusion Zones in the near future. We also noted that the rules proposed in the *FNPRM* contemplate additional uses other than small cells, with varying maximum transmit power levels and antenna gains, which must factor into the consideration of Exclusion Zones. We unambiguously stated that we would continue our dialogue with NTIA and other federal agencies regarding reduction of the Exclusion Zones and noted that various in-progress technical studies could yield information that would allow us to provide greater access to commercial users in the band. We asked commenters to submit data and studies that could help with the analysis.

We also stated that we would explore the topic of dynamic coordinated access within the Exclusion Zones in future phases of this proceeding. We sought comment on allowing Citizens Broadband Radio Service operations within Exclusion Zones and encouraged commenters to submit technical analyses to support their positions.

Commenters overwhelmingly support reducing or eliminating the Exclusion Zones presented in the Fast Track Report and proposed as a starting point in the *FNPRM*. Qualcomm claims that Exclusion Zones based on actual small cell use cases could be less than 10 kilometers along the coastlines. Other commenters contend that, regardless of their size, exclusion zones should be reclassified as "coordination zones" to allow licensees to establish coordination agreements with incumbent users.

Some commenters propose that the Commission permit CBSDs to operate closer to the coastline when no federal radar systems are in use in the area. Google and Federated Wireless contend that the Commission should adopt an engineering-based protection standard rather than relying on static exclusion zones. In addition, several commenters contend that sensing technologies could play a role in enabling dynamic access to the 3.5 GHz Band. Notably, Google, Federated Wireless, and Virginia Tech submitted a joint filing that argues that a network of "dedicated listening devices" could eliminate the need for permanent fixed exclusion zones entirely.

On January 12, 2015, CTIA and several of its member companies filed an *ex parte* presentation advocating an approach to the protection of federal incumbents that would incorporate sensing technologies to promote dynamic access to spectrum in the 3.5 GHz Band. In CTIA's proposed approach, federal incumbents would be able to choose between an "informing" (*i.e.*, incumbent notification driven) or non-informing (*i.e.*, sensor-based) solution—to be developed and managed by private industry—for protection of their radar systems. CTIA also proposes technical solutions based on LTE network deployments.

The NTIA Letter recommends, among other things: (1) Changes to the regulatory framework of the spectrum sharing model described in the *3.5 GHz FNPRM*; (2) a phased implementation and approval process for the SAS and ESC; and (3) protection of commercial operations in the 3.5 GHz Band from federal radar systems. NTIA also supplements the technical information presented in the Fast Track Report and provides an explanation of its recent technical work on these issues.

The phased approach described by NTIA relies on an SAS and ESC approved by the Commission to protect federal incumbent operations. NTIA asserts that these approval processes could take place simultaneously or separately.

In the first phase, as recommended by NTIA, geographic exclusion zones would be established along the coastlines and around designated ground-based radar locations. CBSDs with an EIRP up to 30 dBm as measured in a 10 megahertz bandwidth would be authorized to operate outside of the Exclusion Zones during this phase but higher power operations would not be permitted. Approved SASs would manage Citizens Broadband Radio Service users outside of the Exclusion Zones during this phase. Phase two would begin after an ESC that meets all of the requirements set forth by the Commission is approved and synchronized with at least one approved SAS. With the SAS and ESC in place, the Exclusion Zones for the coastal areas and the ground-based radars would be converted to Protection Zones. ESC deployment near the borders of protection zones (*i.e.*, not nationwide) would protect radars from interference. NTIA indicates that the rules may authorize CBSDs at higher EIRP levels than 30 dBm provided that the relevant system parameters required to protect DoD operations at these higher levels are determined through the ESC approval process. NTIA also indicates

that the phased approach could be used to protect the three protected federal radiolocation facilities in the 3650–3700 MHz band.

In addition to the coastal exclusion zones, NTIA identifies a need to protect short-duration, non-emergency use of shipborne radars during scheduled visits to ports along inland waterways. NTIA suggests that, given the advance notice associated with these types of events, shipborne radars could be protected by temporarily extending the Exclusion (or Protection) Zones to include these port areas. NTIA offers to work with the FCC and DoD to develop the necessary procedures to adequately protect these types of temporary shipborne radar operations.

NTIA also states that a limited number of facilities used by DoD and its contractors for the development and testing of shipborne radars in the 3.5 GHz Band must be protected from harmful interference. NTIA suggests that Exclusion Zones be established around these sites using the same methodology used to establish the coastal Exclusion Zones but notes that site-specific characteristics may be employed to reduce the impact of these Zones on the Citizens Broadband Radio Service. NTIA indicates that additional time will be needed to calculate these zones and offers to work with DoD and the Commission to develop appropriate protection criteria.

*Discussion.* Federal use of the radio spectrum is generally governed by NTIA while non-federal use is governed by the Commission (*See* 47 U.S.C. 305(a), 902(b)(2)(A)). As such, we adopt the phased approach to federal Incumbent User protection generally described in NTIA's letter. We believe this approach properly balances the need to protect current and future federal operations in the band with the need to make the band available for commercial use in the near future. During phase one, a large portion of the country will be available for Citizens Broadband Radio Service use as soon as a commercial SAS is approved and made commercially available. During phase two, much of the rest of the country—including major coastal cities—will be made available for commercial use when no federal incumbent use is detected in a given area by the ESC. This approach addresses the concerns of commenters and federal users in an equitable manner and provides a clear path toward dynamic sharing of spectrum in the band.

We will establish Exclusion Zones along the coast and around designated ground-based radar facilities, consistent with NTIA's recommendations. These

Exclusion Zones are the product of further analysis by NTIA engineers to reevaluate the Exclusion Zone distances with technical assistance from Commission staff and DoD experts. The zones are 77 percent smaller than the Exclusion Zones described in the Fast Track Report and more accurately reflect the types of devices and network deployments that are likely to be used in the 3.5 GHz Band. In addition, Exclusion Zones around ground-based radar sites have been reduced to a 3 km contour around the borders of protected locations from the 50–60 km Exclusion Zones recommended by the Fast Track Report.

During the first phase, no Citizens Broadband Radio Service operations will be permitted in the 3550–3650 MHz band within the Exclusion Zones. Outside of the Exclusion Zones, Citizens Broadband Radio Service Licensees will be permitted to deploy and utilize Category A CBSDs in the 3550–3650 MHz band, consistent with the Commission's rules. Phase one deployments may begin once an SAS is approved and made available for commercial use as set forth in Section III(H)(3)(b).

Phase two will begin when an ESC is developed, approved, and deployed as described in Section III(I). The ESC will consist of a network of sensors—infrastructure-based, device-based, or a combination of both—that will detect federal radars operating in and around the 3.5 GHz Band and relay information regarding those transmissions to the SAS in order to protect incumbent federal users. Sensors must be deployed in or near Exclusion Zones and near federal ground-radar facilities to detect federal spectrum use. Approved SASs will process the information communicated by the ESC and instruct associated CBSDs to cease operations or move to unencumbered frequencies in geographic areas where federal use has been detected. The ESC will be managed and operated by one or more commercial entities and will not require day-to-day input or oversight from DoD or NTIA.

As a consequence of ESC deployment in phase two, the Exclusion Zones will be converted to Protection Zones. Citizens Broadband Radio Service operations in the 3550–3650 MHz band will be permitted within Protection Zones, including major coastal cities, except when the ESC reports federal use in the area. Availability of an ESC will also allow use of Category B CBSDs in the 3550–3650 MHz band portion, provided that the relevant system parameters required to protect federal Incumbent User operations at these

higher levels are determined and implemented through the ESC approval process. DoD may also add additional radar sites in the future through the usual NTIA spectrum assignment processes, and the Commission will provide appropriate notice of any such additions and make the necessary ministerial amendments to its Table of Allocations (47 CFR 2.106, note US433). Once assigned, these new sites will be accorded the same protections as other radar sites in the band.

This two-phase approach will also apply to the protection of the existing federal sites operating in the 3650–3700 MHz band and listed in 47 CFR 90.1331. During phase one, these sites will be protected from commercial operations in the 3650–3700 MHz band consistent with the static protection contours set forth in 47 CFR 2.106, US 109. During phase 2, these sites will be protected by the ESC in the same manner as federal sites in the 3550–3650 MHz band.

After the ESC and SAS are approved, spectrum availability will be determined and conveyed automatically, promoting efficient use of the band and ensuring that federal Incumbent Users are protected. We believe that this approach is superior to the “coordination zone” approach proposed by Verizon, Ericsson, and T-Mobile since it relies on technology to automatically provide information on federal frequency use to an SAS for the benefit of all of its associated CBSDs. This approach will be more efficient and will advance our goals for the band more effectively than requiring individual licensees and federal Incumbent Users to attempt to reach *ad hoc* coordination agreements and implement the terms of such agreements. It will avoid burdening military operators with significant new spectrum coordination obligations and will protect operational security.

It should also be noted that operators may skip phase one entirely if they develop an ESC simultaneously with the SAS. However, while the approval processes for these systems will be similar, they may be developed separately. If an SAS is approved and made commercially available before an ESC is available, the rules governing phase one deployments will apply until an ESC is approved and connected to an approved SAS.

We acknowledge that there are several inland radar testing facilities that will require protection. We will work with NTIA and DoD to determine appropriate phase one protection criteria for these sites based on the engineering methodology used to determine the revised coastal Exclusion Zones and

taking into account any site-specific factors that may serve to minimize the impact of these Zones on Citizens Broadband Radio Service users. During phase two, these sites will be protected by the ESC consistent with the procedures described in this Section and Sections 96.15 and 96.67 of the rules. We will release a Public Notice detailing these protection criteria.

We will implement a coordination procedure to protect temporary federal naval radars—including visits to non-homeports—from interference. Under this procedure, federal Incumbent Users will provide the Commission with notice of the location and scope of temporary operations before such operations commence. This requirement will ensure that federal Incumbent Users may receive protection when they (infrequently) visit locations not covered by the coastal Exclusion Zones. We will work with NTIA and DoD to develop appropriate coordination procedures.

We also require SAS Administrators to implement protocols to respond to directions from the President of the United States or another designated federal entity to manually discontinue operations of its associated CBSDs in a given area pursuant to 47 U.S.C. 606. SAS Administrators must also implement protocols to manually discontinue operations of their associated CBSDs in response to enforcement actions taken by the Commission. These requirements are consistent with the Commission's enforcement responsibilities and its statutory obligation to comply with Presidential orders to suspend or amend the rules and regulations governing designated transmitters during times of war or national emergency (47 U.S.C. 606(c)).

#### b. Protection of CBSDs from Radar Interference

*Background.* In the *Fast Track Report*, NTIA considered interference to and from commercial systems in establishing the exclusion zones. The distances used to establish the Exclusion Zones were based on the protection of commercial systems from federal radar systems and were considerably larger than the distances deemed necessary to protect federal radars from commercial systems. The analysis performed by NTIA in the *Fast Track Report* considered small-signal interference (e.g., degradation of receiver noise floor, reduction of data throughput rates, increases in block error rates) and high-power interference effects to commercial receivers. These effects include permanent electrical

damage that may occur to receiver components (often referred to as receiver “burnout”), as well as temporary performance degradation such as receiver overload and receiver saturation.

In the *FNPRM*, we stated that Citizens Broadband Radio Service users should take reasonable measures to protect their CBSDs from high-power radar interference effects. We also sought comment on whether and to what degree CBSDs should be protected—geographically or otherwise—from radar interference.

Commenters overwhelmingly assert that the Commission should only consider protection of federal radar systems from commercial devices in devising protection criteria for incumbent systems. Notably, the Wireless Innovation Forum contends that modern small cell devices can successfully operate in the presence of interference that is several orders of magnitude stronger than the  $-6$  dB I/N considered in the NTIA *Fast Track Report*. In addition, some commenters claim that commercial devices, particularly LTE devices, can provide viable service in close proximity to radar transmitters. One set of lab tests showed that LTE and Wi-Fi devices could operate as close as 0.6 km from incumbent radars under favorable conditions and as close as 20.7 km under worst-case scenarios.

NTIA states that Citizens Broadband Radio Service users should be required to accept harmful interference from federal radar operations and take all practical measures to design their systems to overcome or avoid the interference in the event that it occurs. NTIA recommends that all Citizens Broadband Radio Service licensees be required to accept harmful interference from the federal radar operations in and near the 3.5 GHz Band and design their systems to overcome such interference effects. NTIA also agrees with the FCC that Citizens Broadband Radio Service users should take reasonable measures to protect themselves from high-power radar interference since such interference can cause damage to CBSD receivers under certain conditions. NTIA offers to work with the FCC and the DoD to analyze where high-power interference effects to CBSD receivers could potentially occur based on current and future radar operations.

*Discussion.* After review of the record, we agree with commenters that argue that Exclusion and Protection Zones should only account for the protection of federal radar systems from harmful interference and not protection of CBSDs from federal radar transmissions.

Analyses submitted on the record indicate that CBSDs can operate in close proximity to active radar sites, even on a co-channel basis, without interrupting commercial transmissions. We note that NTIA's latest analysis effort, performed in conjunction with Commission and DoD, to reduce the Exclusion Zones did not consider the potential interference impact to CBSDs from federal radar systems. We encourage device manufacturers to design equipment that overcomes or avoids harmful interference from federal radar systems.

Consistent with NTIA's recommendation, Citizens Broadband Radio Service users will be required to accept interference—including potentially harmful interference—from federal radar systems as a condition of their authorization. We require Citizens Broadband Radio Service users to acknowledge that they understand and accept the risk of interference from federal radar systems. This requirement is consistent with the approach we adopted in the recent AWS-3 proceeding and will apply to all Citizens Broadband Radio Service users regardless of their area of operation or their status as a Priority Access Licensee or GAA user (See 79 FR 47106, August 12, 2014). Such acknowledgements may be made through the SAS upon registering a CBSD. SAS Administrators must develop policies and procedures to ensure that such acknowledgements are properly recorded and maintained.

We will also continue to work with NTIA and DoD to study the effects of federal radars on CBSDs, including the effects of high-powered radar interference. As new devices are developed and made available for use in the 3.5 GHz Band, we hope to gain a better understanding of the effects of radar signals on device performance. We hope that this work can proceed collaboratively with SAS Administrators and Citizens Broadband Radio Service users going forward.

#### 2. Protection of Incumbent FSS Earth Stations

##### a. FSS Earth Stations in the 3.5 GHz Band

*Background.* As noted in this proceeding, the Commission has licensed primary FSS earth stations to receive on frequencies in the 3600–3650 MHz band (Extended C-Band). Currently, FSS earth station facilities in 35 cities are authorized to receive in the 3625–3650 MHz sub-band, and Airbus DS SatCom Government, Inc. operates two gateway earth stations (located northeast of Los Angeles and New York City) that provide feeder links for

Inmarsat's L-band mobile-satellite service system.

The *NPRM* and *FNPRM* sought comment on appropriate interference protection and mitigation strategies for incumbent FSS earth stations. We asked about the use of advanced analytic approaches to modeling interference from Citizens Broadband Radio Service devices into FSS earth stations. We also asked whether the SAS could effectively implement such a model, ensuring FSS earth stations are protected while maximizing the areas available for Citizens Broadband Radio Service operations. We sought comment on what SAS functionalities would need to be required by rule and what functionalities could be specified through other means (e.g., industry standards). For example, we asked whether field strength, power-flux density, or some other technical metric, measured in relation to the earth station's technical configuration (look angle, antenna characteristics, etc.), could provide FSS earth stations with adequate protections while maximizing the available geographic area and bandwidth for Citizens Broadband Radio Service users. We also asked about mitigation techniques, such as the use of filters to reduce or eliminate harmful interference.

Commenters offered a variety of perspectives on these questions in the record. A number of technical reports and analyses have been provided using different assumptions about geographic protection zones that may be required to protect earth stations, both in-band and in the adjacent C-Band. Filings in response to the *NPRM* included submissions from media companies, Comsearch and Alion Science, SIA, Google, and others.

We received a number of responses concerning the need for protection zones around FSS earth stations. SIA states that protection zones must be established to prevent both in-band and adjacent-band interference to FSS earth stations. SIA claims that these zones must be based on ITU interference criteria and take into account the aggregate effect of multiple Citizens Broadband Radio Service devices. According to SIA, the size of the zones will depend on the technical parameters of Citizens Broadband Radio Service operations—in particular, power density levels and OOB limits—and these parameters are still in dispute. NPR contends that preventing adjacent-band interference requires a combination of appropriate emission mask limits from devices in the band and geographic separation based on a conservative estimate of path-loss between such

devices and an FSS earth station. WISPA argues that the Commission should avoid the arbitrary circular zones that currently overprotect FSS earth stations in the 3650–3700 MHz band. According to WISPA, the SAS should also be informed on an annual basis that the earth stations are in actual use. CTIA references earlier Qualcomm comments that argued that exclusion zones could be reduced to less than 10 miles. The Wireless Innovation Forum disagrees with the use of fixed geographic exclusion zones for FSS spectrum. Rather, the Forum argues that a roadmap for better receivers is appropriate for FSS earth stations. The Wireless Innovation Forum also contends that the roadmap proposal should be addressed by a multi-stakeholder group.

Several parties argue that the geographic protection zones around FSS earth stations may be adjusted through coordination. Both NSN and Motorola Solutions assert that Priority Access Licensees should be permitted to negotiate with individual FSS earth station licensees for smaller protection zones. SIA disagrees, stating “[I]t is not clear how or even whether such an option would work as a practical matter when it comes to large numbers of mobile Citizens Broadband Radio Service devices, or how such agreements would be incorporated into an SAS.” Other commenters argue that coordination zones would increase the utility of the spectrum. For example, T-Mobile asserts that coordination zones maximize the potential use of spectrum. ICONECTIV states that coordination zones could allow more efficient sharing of this spectrum with commercial users. WISPA agrees that operation inside FSS protection zones should be permitted upon agreement between CBSD licensees and FSS licensees. SIA asserts that significant work remains to be done to develop and validate SAS-based coordination functionality and that existing technology would not be capable of making such determinations. Google presented an *ex parte* demonstration of a system it claims is capable of performing the SAS functions of Priority Access and GAA authorization, protecting Priority Access, FSS users, and federal radar operation from PA and GAA users.

Several parties opine on appropriate methods for FSS earth station protection. SIA provides an engineering analysis using non-rural and point-to-point transmit power. SIA also supports the use of I/N criteria listed in ITU Recommendations for the protection of FSS earth stations. From these I/N criteria, SIA claims that a received

power limit at the FSS earth station can be calculated, taking into account the FSS earth station and Citizens Broadband Radio Service system characteristics and deployment scenarios. SIA asserts that whether this received power limit is exceeded should be determined using an aggregate Equivalent Power Flux Density (EPFD) calculation. SIA uses I/N criteria set forth in Recommendations ITU-R S.1432 and ITU-R SF.1006 for interference from non-primary (including adjacent band) sources and interference from co-primary sources into FSS earth stations for its analysis. SIA recommends the following aggregate interference criteria for in-band FSS earth stations:

- Long Term I/N = –13 dB, not to be exceeded for more than 20% of the time
- Short Term I/N = –1.3 dB, not to be exceeded for more than 0.001667% of the time

SIA also contends that the aggregate power emitted by CBSDs at an FSS earth station receiver will be a function of multiple factors: (i) The EIRP density of each CBSD transmitter in the direction of the FSS earth station receiver (which in turn depends on the CBSD's maximum EIRP density and its antenna pattern and orientation); (ii) the FSS earth station's receive gain in the direction of each CBSD transmitter (which depends on the FSS receiver's antenna pattern and orientation); (iii) the distance between the FSS earth station receiver and each CBSD transmitter; and (iv) the intervening terrain between each CBSD transmitter and the FSS earth station receiver. SIA notes that, since the FSS earth stations do not transmit, the Commission cannot rely on sensing by CBSDs to help the SAS protect these stations from harmful interference.

Google claims that, by allowing devices with better OOB performance to take advantage of smaller protection zones around FSS earth stations, the Commission would create a market incentive for innovation that would be self-adjusting to actual band usage and conditions. Google asserts that the methodology for determining interference to C-Band downlinks from in-band operation described in the *3.65 GHz Report and Order* can be used to compute both adjacent channel interference and out-of-band emissions to FSS operations above 3.7 GHz.

Google also claims that SIA's analysis fails to account for the effects of actual antenna gain, directionality, and elevation angles that are specific to each site. According to Google, in most

locations in the United States, elevation angles are high enough that the antenna gain will be no more than the front-to-back ratio of the antenna. Therefore, Google argues that relying on these front-to-back ratios reduces the power received by the FSS earth station by more than 30 dB as compared to SIA's analysis. As a result, Google claims that, even in locations with low elevation angles, the resulting geographic restrictions are minimal because the excluded area is likely to be long but very narrow in shape as a result of the directionality.

Google also asserts that numerous filter vendors have developed "radar elimination filters" that are designed to protect FSS earth stations from existing high-powered military radar systems in the 3500–3700 MHz band. According to Google, this equipment, which is widely available for less than \$500, can be used to filter out interference from small cell operations. Google opines that the Commission should take account of available filter performance when creating final rules to protect FSS operations that might reduce the value of the Citizens Broadband Radio Service band.

Sony provides a study on the protection of FSS earth stations using the proposed maximum output power levels of CBSDs, taking aggregate interference into account. Sony calculates protection distances at various CBSD frequency offsets to C-Band earth stations, with and without RF filters, considering different earth station elevation angles, different I/N threshold and different CBSD installation heights. SIA claims that Sony's parameter choices tend to unrealistically downplay the interference susceptibility of FSS earth stations.

The Wireless Innovation Forum argues that the Commission should focus on comprehensive interference analysis rather than static component elements of a system such as antenna angle, terrain, etc. The Forum contends that the issue of FSS user protection should be addressed by a multi-stakeholder group. Such a group should consider how and when to apply SAS control behavior associated with FSS earth stations.

*Discussion.* The record broadly recognizes the need to protect incumbent FSS earth stations from harmful interference. There is also significant agreement about many of the technical factors that contribute to the interference equation, such as: (1) The actual EIRP density of CBSD and End User Device transmitters; (2) the location, antenna pattern, and

orientation of those transmitters; (3) the FSS earth station receiver characteristics (including location, antenna gain, elevation and azimuth of the main antenna beam); and (4) the relative distance, mutual orientation, surrounding terrain and the propagation channel(s) between an FSS earth station and potential interfering transmitters. However, the record contains large variations in computed protection parameters and differing opinions among commenters about the efficacy of SAS-based interference mitigation techniques.

We believe it is possible to balance the protection of incumbent FSS sites and greater Citizens Broadband Radio Service spectrum utilization instead of relying on a one-size-fits-all approach to protecting incumbent FSS sites using worst-case interference assumptions. The existing rules for the 3650–3700 MHz Wireless Broadband Service define a 150 km default separation distance with a circular contour around any grandfathered satellite earth stations, separating them for protection from base and fixed stations (*See* 47 CFR 90.1331). In a number of cases, coordination with incumbent FSS licensees resulted in deployment of sites within the default protection area. In the context of the Citizens Broadband Radio Service, we find these protections to be excessively large, overly simplistic, and inefficient given the capabilities of SASs to predict realistic path loss in the 3.5 GHz Band. In general, we expect that realistic and predictable path loss between CBSDs and FSS earth stations will be substantially higher than (near) line-of-sight free space path loss, resulting in smaller protection distances than 150 km and a protection contour similar to the butterfly-like pattern shown in the *3.65 GHz Order*. We conclude that an analytic framework similar to what the Commission offered in Part 90, Subpart Z for Wireless Broadband Service in the 3650–3700 MHz Band, for determining interference to C-Band downlink earth stations from in-band operations, is applicable in the 3.5 GHz Band. We therefore establish reasonable protection criteria for in-band FSS earth stations.

As discussed in greater detail in Section III(K), we agree with Federated Wireless, Google, Motorola Solutions, SIA, the Wireless Innovation Forum, and others, that a multi-stakeholder process could provide insight into the technical factors and interference limits between coexisting services in the 3.5 GHz Band. While there are many technical implementation details to be worked out prior to equipment certification and deployment, we agree that an SAS-based system of frequency

coordination and CBSD authorization can be effective in protecting in-band FSS earth stations, using characteristic parameters of incumbent systems and potential interfering systems. We therefore adopt rules that require CBSDs to protect specific incumbent in-band FSS earth stations from interference using power levels authorized and enforced by SAS. We seek comment on specific protection methodologies in Section IV(C).

We adopt rules to protect FSS earth stations in the 3.5 GHz Band, by allowing the FSS earth stations to register with the Commission annually, or upon making changes to any of the parameters listed in Section 96.17(d). This registration information will be made available to all approved SASs and may be used to determine appropriate protection criteria for such earth stations. Annual registration for each earth station shall include, at a minimum, the earth station's geographic location, antenna gain, horizontal and vertical antenna gain pattern, antenna azimuth relative to true north, and antenna elevation angle. This information must be made available to SAS Administrators and maintained consistent with Section 96.55 of the rules.

We also adopt a rule that CBSDs may operate within areas that are predicted to potentially cause interference to FSS earth stations provided that the licensee of the FSS earth station, the authorized user of the CBSD, and an SAS Administrator mutually agree to such operation at specified CBSD location(s) and the terms of any such agreement are provided to, and can be enforced by, an SAS. The terms of any such agreement shall be communicated promptly to all SAS Administrators.

#### b. Out-of-Band FSS Protection

*Background.* The Commission also licenses FSS earth stations in the C-Band. In contrast to the Extended C-Band, the C-Band is highly utilized for FSS. As discussed above, the C-Band is used for a number of different applications, including distribution of multi-channel video content. FSS providers value the C-Band because its propagation characteristics allow for greater service reliability compared to other bands, especially in adverse weather conditions. The C-Band is one of the oldest and most mature FSS bands in-use. Preventing harmful interference into the C-Band from Citizens Broadband Radio Service has been one of our goals throughout this proceeding.

C-Band FSS currently operates adjacent to two sources of signals



emitting from below the 3700 MHz band edge: high-powered military radars and the current Wireless Broadband Service operating in the 3650–3700 MHz band. With respect to the former, FSS operators benefit from over 50 megahertz of frequency separation, but otherwise receive no regulatory out-of-band protections. Indeed, it is with the purpose of mitigating interference from military radars that the “radar elimination filters” described by Google were developed. For the latter, the “standard” emissions limit of  $43 + 10 \log(P)$  dB, equivalent to  $-13$  dBm/MHz, regulates emissions from the 3650–3700 MHz band into the C-Band. We are not aware of any formal complaints by C-Band FSS operators of harmful interference from over 45,000 wireless broadband site locations.

We sought comment in the *FNPRM* about establishing out-of-band emissions limits to protect C-Band earth stations from Citizens Broadband Radio Service operations below 3700 MHz. Specifically, we proposed a stringent limit of  $-40$  dBm/MHz for emissions into the C-Band. However, this proposal did not assume adoption of the “supplemental proposal” to include 3650–3700 MHz in the Citizens Broadband Radio Service.

*Discussion.* The Commission has taken action in this *R&O* that we believe will significantly reduce the potential for interference into FSS earth stations in the adjacent C-Band. We also believe that with modern high-performance and low-cost digital and RF transmit filters, Citizens Broadband Radio Service devices will be able to make extensive use of the spectrum close to the band edge, especially at lower power levels.

### 3. Operations Near International Borders

*Background.* In the *FNPRM*, we proposed that Citizens Broadband Radio Service operations along the Canadian and Mexican borders would be subject to international agreements with Mexico and Canada. The SAS would be required to implement these requirements. We sought comment on these proposals.

In its comments, SIA agrees with the importance of ensuring that FSS earth stations in Canada and Mexico are protected from Citizens Broadband Radio Service users in the United States. However, SIA contends that there is no indication of how the SAS will protect cross-border sites that are not included in the Commission’s licensing databases.

*Discussion.* We adopt the rule proposed in the *FNPRM* and commit to working with Canadian and Mexican authorities to determine how best to

coordinate in-band and adjacent band frequency use in the 3.5 GHz Band near international borders. This approach is consistent with our usual practice for new services. SAS Administrators will be required to demonstrate that their systems can and will enforce agreements between the U.S., Canadian, and Mexican governments regarding commercial operations in the 3.5 GHz Band. The specific methods of enforcement will be determined and implemented by SAS administrators, with appropriate Commission oversight, after the agreements are in place.

In addition, Industry Canada recently completed a consultation on the 3475–3650 MHz band which will allow the introduction of mobile services in the band. We will work with Canadian officials to ensure effective cross-border coordination of new devices or services introduced in the band.

#### H. Spectrum Access System

As we stated in the *NPRM*, *FNPRM*, and *Licensing PN*, the effectiveness of the Citizens Broadband Radio Service depends largely on the development and implementation of one or more robust SASs to coordinate use of the 3.5 GHz Band. In this Section, we reaffirm our commitment to the expeditious development of a fully functional SAS, capable of protecting Incumbent Users from interference and facilitating coexistence among and between Priority Access Licensees and GAA users in the band. We also adopt high-level requirements to govern the authorization and operation of SASs in the band. In addition, we expect that industry participants will take it upon themselves to develop technical implementations of these requirements during the course of the SAS approval process and, where applicable, to develop industry-wide standards. This Section addresses: (1) The general scope of an SAS’s responsibilities; (2) high-level SAS requirements; (3) specific responsibilities relating to frequency assignment, security, and information retention; and (4) the SAS approval processes.

##### 1. General SAS Functions

*Background.* Throughout this proceeding, we have acknowledged that the SAS is essential to commercial use of the 3.5 GHz Band. We sought comment on the appropriate scope and functions of the SAS in the *Licensing PN*, *NPRM*, and *FNPRM*. In addition, OET and WTB held a workshop to discuss the operational and functional parameters of the SAS. The workshop and associated technical papers were organized according to the following

focus areas: (1) General Responsibilities and Composition of the SAS; (2) SAS Functional Requirements; (3) SAS Monitoring and Management of Spectrum Use; and (4) Issues related to the Initial Launch and Evolution of the SAS and Band Plan.

While commenters and workshop presenters submitted a diverse set of positions regarding the necessary features of the SAS, most agreed that an effective SAS would need to be more dynamic and responsive than the current TVWS database. Moreover, many commenters agreed that the FCC should set only baseline parameters and guidelines for the SAS and should allow industry stakeholders to develop detailed policies and standards to facilitate operation consistent with the Commission’s rules.

After thorough review of the record received in response to the *Licensing PN*, *SAS Workshop*, and *NPRM*, we proposed rules that would encourage the rapid development of a robust SAS, capable of managing the proposed three-tier authorization framework. We sought comment on these proposed rules and on the overall scope and functions of the SAS.

Some commenters express concern about the complexity of the SAS and argue that the Commission should adopt rules to facilitate Priority Access licensing without the development of a fully functional SAS. These concerns are frequently linked to commenters’ proposals for transitional band plans or LSA licensing frameworks discussed in Section III(B) above. Advocates of LSA tend to support SASs capable of managing their preferred two-tier framework. Other commenters support transitional plans and contend that the SAS is not yet fully developed and could be deployed to support two-tier sharing immediately with a portion of the band reserved for experimenting with three-tier sharing. These commenters contend that development of a fully functional SAS should not delay the assignment of Priority Access Licenses in the band or the deployment of robust Priority Access networks. Under the proposed transitional frameworks, the SAS could move from relatively basic functionality to more robust capabilities over time.

AT&T argues that there are significant issues to be resolved in the development and implementation of an SAS capable of managing three-tiers of authorized users. These issues include: (1) Implementation of appropriate security protocols; (2) interference coordination; (3) protocols to prevent the operation of rogue GAA devices; and (4) other, unforeseen complications. According to



AT&T, the Commission should adopt a phased approach to licensing and SAS development to bring PALs to market quickly while working towards the future implementation of three-tiered sharing across the entire band.

Verizon argues that the Commission should only prescribe the minimum functions that an SAS would have to follow. According to Verizon, these core functions must include: (1) Access to a database with information about Incumbent Users' locations; and (2) frequency uses and access to the results of PAL auctions and subsequent PAL frequency assignments. CTIA agrees with this basic premise, arguing that the SAS should focus on core, high level functions.

Some commenters also caution against allowing the SAS to manage the operations of wireless networks directly. Specifically, WISPA, T-Mobile, NSN, and CTIA argue that the SAS should not directly manipulate the EIRP and other functions of attached CBSDs. T-Mobile asserts that SAS management of PALs is inconsistent with a licensee's obligation to manage its own network and that the SAS should be limited to managing GAA devices.

Dynamic Spectrum Alliance, Federated Wireless, Google, Microsoft, PISC, Spectrum Bridge, WISPA and other commenters support the Commission's proposal to expeditiously authorize and approve a robust SAS, capable of managing three-tiers of service across the entire 3.5 GHz Band. Notably, Google argues that the Commission should authorize fully functional SASs quickly to ensure that the band is put to productive use in the near future. According to Google, from the outset, the SAS should be capable of: (1) Managing three tiers of authorized users; (2) accepting and applying detailed information from CBSDs; and (3) setting and modifying maximum power levels and permissible operational frequencies for CBSDs. SASs could also provide valuable additional services, including recognizing coexistence agreements between PAL licensees, at their option.

Federated Wireless also supports implementation of a fully functional SAS, capable of managing the proposed three-tier framework. According to Federated Wireless, moving away from the three-tiered authorization model—even temporarily—would reduce spectral and economic efficiency and introduce uncertainty into the band, reducing network deployments. Federated Wireless also contends that SAS-based sharing between GAA and Priority Access users is conceptually no different than sharing between Priority

Access and Incumbent Users. Therefore, according to Federated Wireless, perceived risks of GAA interference should not pose an impediment to the rapid development and deployment of a fully functional SAS. However, Federated Wireless did suggest that the Commission should clarify that the role of the SAS with regard to device management is to determine the maximum permissible operational parameters for CBSDs to protect the spectrum rights of Citizens Broadband Radio Service Users and not to exercise the level of operational control over networks that some commenters fear.

*Discussion.* After thorough review of the record, we continue to believe that developing a fully functional SAS capable from the outset of managing three tiers of authorized users would benefit the public interest, spur innovation, and encourage investment in the 3.5 GHz Band. As we stated in Section III(B), we believe that immediately implementing the three-tier sharing framework originally set forth in the PCAST Report and proposed in the NPRM and FNPRM, will promote the development of a robust device ecosystem and facilitate rapid network deployment in the band. Thus, the SAS must be capable of coordinating operations among and between Priority Access, GAA, and Incumbent Access Users in the band as a condition of authorization.

While we acknowledge the concerns expressed by some commenters regarding complexity, we believe that the immediate use of the SAS to coordinate three tiers of service in the 3.5 GHz Band will best serve the public interest. As the Dynamic Spectrum Alliance noted, "There is no need to phase in three-tier spectrum management as under the transitional plan proposed by some commenters; database technology can implement a three-tier system, and the approaches required to protect first-tier incumbents can be applied equally effectively to secondary user protection." Indeed, we believe that delaying the development of an SAS capable of managing three tiers of users in the band could cause spectrum to lie fallow and discourage deployment in the band. In addition, as noted above, simultaneous availability of PAL and GAA use is critical to the design of our auction framework, which is intended to provide potential auction bidders for PALs to have the choice of bidding for PAL priority rights where truly needed to implement their networks or relying on free, shared GAA use of the same frequencies in other situations, thus promoting more efficient use of the spectrum. Moreover,

providing Priority Access Licensees with exclusive access to the band, even on a temporary basis, could provide an advantage to certain uses while hampering the development of other innovative uses for the band.

Given the dynamic nature of the SAS that was proposed in the FNPRM, it is understandable that some commenters are concerned about the degree to which the SAS would manage the power levels, frequencies, and other operational features of CBSDs in the 3.5 GHz Band. We agree that the SAS should not micromanage the moment-to-moment operations of CBSDs in the band and we note that the FNPRM did not propose to allow the SAS this level of control. We also agree with T-Mobile that operators are in the best position to manage their own networks, and coordinate their own internal operations. However, we disagree with T-Mobile's assertion that the SAS should have no role in managing Priority Access users. As Google noted, the SAS must be able to direct Priority Access users to change their frequencies of operation to protect Incumbent User operations. We conclude that, to effectively coordinate Priority Access and GAA users in the band, the SAS must be responsible for authenticating and authorizing CBSDs in both tiers of service and ensuring that those CBSDs operate within permissible technical parameters. In essence, we see the SAS's role as akin to frequency coordination, a familiar concept in spectrum management, but with a high degree of automation.

Under the rules we adopt herein, the SAS will be responsible for setting the maximum permissible power levels for CBSDs—within the maximum permissible power limits established in the rules—and authorizing them to operate over available frequencies in authorized locations, and other responsibilities consistent with the rules set forth in Part 96. As Google accurately notes, these capabilities will not affect operators' abilities to manage their networks so long as their preferences do not run counter to the requirements of the Citizens Broadband Radio Service. We continue to believe that the SAS should be responsible for setting and enforcing these high level parameters and for maintaining a stable spectral environment in the 3.5 GHz Band. We agree with Federated Wireless that, "the ability of the SAS to set maximum power levels and assign frequencies is critical to Citizens Broadband Radio Service band interference management."

In place of the manual processes that have characterized some other

frequency coordination regimes, the SAS would respond quickly to ensure effective coexistence between and among the three tiers of users in the band. As shown in Figure 3, the SAS would obtain information about registered or licensed commercial users in the band from the Commission and information about federal incumbent users of the band from ESC. The SAS could also interact directly or indirectly through a proxy—such as a network manager—with CBSDs operating in the band to ensure that Citizens Broadband Radio Service users operate in a manner consistent with their authorizations and promote efficient use of the spectrum resource. SAS-to-SAS synchronization will ensure coordination occurs even between CBSDs that use different SAS providers.

## 2. High Level SAS Requirements

*Background.* After thorough review of the record generated in response to the *NPRM, Licensing PN, and SAS Workshop*, we proposed that the SAS should perform a variety of high level functions to facilitate the implementation of the Citizens Broadband Radio Service. Specifically, we proposed that authorized SASs would perform the following core functions:

- Determine the available frequencies at a given geographic location and assign them to CBSDs;
- Determine the maximum permissible radiated transmission power level for CBSDs at a given location and communicate that information to the CBSDs;
- Register and authenticate the identification information and location of CBSDs;
- Enforce Exclusion Zones to ensure compatibility between Citizens Broadband Radio Service users and incumbent federal operations;
- Protect Priority Access Licensees from harmful interference from General Authorized Access Users;
- Reserve the use of GAA channels for use in a CAF;
- Ensure secure transmission of information between the SAS and CBSDs.

In addition, we proposed that multiple SASs could be authorized by the Commission and that each SAS would provide nationwide service. The proposed rules outlined the essential requirements for a successful SAS and would promote innovation and productive use of the 3.5 GHz Band. We sought comment on these proposals and requested input regarding alternative or additional SAS guidelines.

Numerous commenters submitted their views on the scope and functionality of the SAS, offering widely divergent opinions on the scope and necessary requirements for the system. Commenters generally support the authorization of multiple SASs on a nationwide basis. Some commenters also contend that the Commission should adopt a “light touch” regulatory approach towards the SAS and allow SAS Administrators, individual licensees, and the rest of the industry to work together to implement procedures to meet the Commission’s regulations.

Some commenters request that SASs be required or permitted to perform functions beyond those enumerated in the proposed rules. For example, Google proposes that SASs be permitted to honor coexistence agreements between Priority Access Licensees to operate CBSDs at higher power levels than the rules allow. Others, including Wireless Innovation Forum, Federated Wireless, and Google argue that the SAS should accept information from sensor networks to further develop advanced spectrum management practices.

*Discussion.* We continue to believe that a “light touch” regulatory approach is appropriate for this band and that the rules should include only the high-level requirements necessary to ensure the effective development and operation of fully functional SASs. We agree with commenters that support collaborative, industry-wide efforts to create standards and best practices governing SAS operations. The Commission will assist these efforts through the SAS Administrator approval process, as set forth in III(H)(3)(b). We also believe that an active multi-stakeholder group could help develop industry consensus around the best methods of meeting the SAS requirements.

After review of the record, we conclude that the SAS should perform the high level functions generally set forth in the *FNPRM* as well as certain additional functions needed to address changes to the rules governing CBSDs and Incumbent Users. We also agree with the commenters who contend that the SAS should provide nationwide service. The core functions that an SAS must perform are as follows:

- Determine the available frequencies at a given geographic location and assign them to CBSDs;
- Determine the maximum permissible transmission power level for CBSDs at a given location and communicate that information to the CBSDs;
- Register and authenticate the identification information and location of CBSDs;

- Enforce Exclusion and Protection Zones, including any future changes to such Zones, to ensure compatibility between Citizens Broadband Radio Service users and incumbent federal operations;

- Communicate with the ESC and ensure that CBSDs operate in a manner that does not interfere with federal users;

- Ensure that CBSDs protect non-federal incumbent users consistent with the rules;

- Protect Priority Access Licensees from impermissible interference from other Citizens Broadband Radio Service users;

- Facilitate coordination between GAA users to promote a stable spectral environment;

- Ensure secure and reliable transmission of information between the SAS, ESC, and CBSDs;

- Provide an approved ESC with any sensing information reported by CBSDs if available;

- Protect Grandfathered Wireless Broadband Licensees until the end of the grandfather period; and

- Facilitate coordination and information exchange between SASs. This revised list of functions is necessary to enforce the rules governing protection of Incumbent Users and of Grandfathered Wireless Broadband Licensees. We address public interest rationales for these rules in Sections III(G) and III(J). Authorization of multiple SASs and SAS Administrators is addressed in Section III(H)(3).

We also adopt a policy to ensure that the SAS facilitates coordination among GAA users to promote a stable spectral environment in the band. This requirement includes any coordination agreements entered into by users of Category B CBSDs pursuant to Section 96.35(e). It also entails a general responsibility for SASs to promote spectral efficiency and non-discriminatory coexistence among GAA users. This policy is consistent with our adoption of a three-tier access model and is essential to the development of a robust GAA device ecosystem and will foster innovation and investment in the band. It is also consistent with the recommendations of commenters that SASs be capable of integrating information from sensor networks or CBSDs regarding the interference environment and local spectrum usage to promote efficient use of the band. We further note that the specific policies and protocols needed to enforce this general requirement may be developed as part of the SAS approval process and may be informed by the work of an

industry-led multi-stakeholder group. While the SASs assign GAA users with a goal of minimizing harmful interference among those users, we recognize that enabling flexibility to deploy whatever technologies meet the standards in the rules can pose difficulties to completely manage interference. The SAS will help to minimize interference such as by avoiding assignment of the same frequency to multiple GAA users at the same location to the extent possible. However, our rules provide no assurance of interference protection between GAA users. To minimize interference, we encourage, but do not require, manufacturers to incorporate spectrum sharing features, much like those commonly employed in unlicensed uses. Contrary to Google's suggestion that SASs be permitted to honor coexistence agreements between Priority Access Licensees to operate CBSDs at higher power levels than the rules allow, our rules supersede any private agreements, unless otherwise specified.

a. Information Gathering and Retention

*Background.* In the *FNPRM* we proposed high-level information gathering and retention requirements consistent with the responsibilities of the SAS, the security concerns of Citizens Broadband Radio Service users and Incumbent users, and the Commission's oversight and enforcement responsibilities. To protect Incumbent Users and effectively coordinate Citizens Broadband Radio Service users, we proposed that the SAS retain information on all operations within the 3.5 GHz Band. For CBSDs, such information would include all data that they are required to transmit to the SAS. For incumbent FSS operators, the SAS would maintain a record of the location of protected earth stations as well as the direction and look angle of all earth station receivers and any other information needed to perform its functions. For incumbent federal users, the SAS would include only the geographic coordinates of the Exclusion Zones. We sought comment on these proposed rules and alternative approaches.

Some parties express concern about the type of information that the SAS would gather and maintain from Citizens Broadband Radio Service users and whether that information would be secure and confidential. Notably, AT&T argues that the Commission should clarify that information gathered by the SAS is for registration purposes only and that licensees need not submit information about network performance.

AT&T also contends that, since spectrum assignment is an FCC function and the SAS will be acting as the FCC's agent, all data collected by the SAS should be confidential.

The Public Interest Spectrum Coalition supports the Commission's proposal and argues that it is critical that the informational inputs and outputs of the SAS, including exclusion zone coordinates and notifications of "actual use" by Priority Access Licensees, be available to the public. According to PISC, transparency is essential for the credibility and accountability of the SAS.

NTIA contends that SASs should not retain information on federal operations, radar usage, or fleet movements. NTIA asserts that such restrictions are necessary to protect the operational security of military operations and installations in the United States.

*Discussion.* After review of the record, we conclude that an SAS must be capable of gathering and retaining information submitted by registered CBSDs necessary to perform its essential tasks under Part 96. Information not pertaining to federal incumbent operations must be retained for a minimum of 60 months.<sup>18</sup> SASs must also obtain essential licensing information from Commission databases, maintain accurate records of the parameters of Protection Zones, and enforce additional federal Incumbent User protections based on information received from the ESC. Absent access to and retention of such essential information, SASs will be unable to effectively manage coexistence between and among the different tiers of users in the band.

We acknowledge the concerns raised by commenters about disclosure of confidential business information to the public. To some extent, the tension in the comments reflects different traditions of spectrum management, which are intertwined in the Citizens Broadband Radio Service rules we adopt today. Site-based radio services, for instance, typically require all site-based licensing information to be disclosed and available in various FCC databases. The flexible-use and unlicensed rules,

however, do not require users to disclose information about specific sites. We agree with PISC that transparency is a key element of the authorization framework and that certain information must be made available to the public—and other SAS Administrators—consistent with usual Commission practices. We also understand that network owners may not desire release of information related to network deployments and configurations to the public in a manner that could compromise personal privacy or affect competitive interests. Regardless, some of this information may need to be shared, confidentially, with other SAS Administrators to effectively coordinate frequency assignments and avoid interference between CBSDs.

Therefore, we find make two findings with respect to SAS Administrator disclosure of CBSD information. First, SAS Administrators must make all information necessary to effectively coordinate operations between and among CBSDs available to other SAS Administrators. Second, SAS Administrators must make CBSD registration information available to the general public, but they must obfuscate the identities of the licensees providing the information for any public disclosures.

We also note that, contrary to PISC's assertions, the Commission is not "effectively delegating its enforcement authority to privately-operated SASs to enforce exclusions from the public airwaves." Based on the record before us, we have concluded that approved SAS will be capable of effectively coordinating operations between and among a wide variety of Citizens Broadband Radio Service Users and preventing disputes before they arise. However, as described in Section III(H)(2)(e), the Commission will retain ultimate responsibility for enforcing its rules, overseeing and approving SASs and SAS Administrators, resolving disputes between licensees, and addressing consumer complaints.

With regard to information on federal Incumbent Users communicated from the ESC to the SAS and retention of that information, we adopt several safeguards. We require that the SAS and the ESC must not have any connectivity to any military or other sensitive federal database or system. Nor shall they store, retain, transmit, or disclose operational information on the movement or position of any federal systems. The Commission will work with NTIA and DoD to establish the information the ESC would need to transmit to the SAS as necessary to manage connected

<sup>18</sup> The 60 month information retention requirement mirrors the limitations period imposed on the Department of Justice to bring suit for collection of a forfeiture assessed by the Commission for violation of its rules. See 28 U.S.C. 2462. The 60 month information retention requirement ensures the preservation of information that may be relevant in future collection actions brought by the Department of Justice on the Commission's behalf. See 47 U.S.C. 504(a) (requiring any collection action to enforce a Commission forfeiture be brought by the Department of Justice in a civil suit).

CBSDs. For example, this data could be limited to the ESC's detection of protected radar signals, their approximate locations, and the protection zone coordinates as required for the SAS to instruct CBSDs to move off of a channel. We will restrict the storage and retention of this data and any other operational information to ensure only the effective operation of the SAS and ESC, and for no other purposes. The SAS shall only retain records of information or instructions received from the ESC in accordance with information retention policies established as part of the ESC approval process. These policies will include appropriate safeguards for classified and other sensitive data and will be developed by the Commission in coordination with NTIA and DoD. These rules implement the recommendations set forth in the NTIA Letter.

#### b. Registration, Authentication, and Authorization of CBSDs

*Background.* We proposed that the SAS would confirm and verify the identity of any CBSD seeking to use the 3.5 GHz Band prior to authorizing its operation. The SAS would also prevent CBSDs from operating within any Exclusion Zones. We also proposed that registration information from multiple CBSDs could be communicated by a central network controller device. We sought comment on these proposed rules.

As detailed in Section III(F)(2)(d), many commenters generally agree with the registration requirements for CBSDs. AT&T expresses concern about the security of data collected by the SAS and argues that the Commission should clearly state that such information is collected for registration purposes only and that licensees are not required to submit information about network performance. Microsoft suggests that there should be limits on the information the SAS collects and the time it maintains records for CBSDs.

*Discussion.* We find that registering, authenticating, and authorizing CBSDs is an essential component of the SAS's responsibilities. As described in Section III(F)(2)(b), CBSDs must report information on their technical specifications, location, and the identity of their authorized operators or licensees to the SAS. The SAS must, in turn, verify this information to ensure that CBSDs are used only by authorized users in accordance with the Commission's rules. The SAS must also verify that the FCC ID of any CBSD seeking to provide Citizens Broadband Radio Services is valid prior to authorizing it to begin providing

service. We reiterate that individual CBSDs are not required to interface with the SAS so long as the required information is communicated by an aggregation point or network control device. We also note that these requirements do not apply to End User Devices. SASs must not collect, track, or store information on End User Devices or their users without user consent. The precise methods used to register, authenticate, and authorize CBSDs may be determined during the SAS approval process described in Section III(H)(3)(b).

#### c. Frequency Assignment

*Background.* In the *FNPRM*, we proposed to dynamically assign PAL channels and GAA frequencies in the 3.5 GHz Band. Under that proposal, the SAS would be responsible for determining the available and appropriate frequencies at a given location using the location information supplied by CBSDs, Exclusion Zone parameters, the authorization status and operating parameters of CBSDs in the surrounding area, and such other information necessary to ensure the lawful operation of CBSDs. The SAS would also take into consideration any channel or frequency requests submitted by CBSDs as well as geographic and spectral efficiency considerations. We also proposed that the SAS be able to provide a list of available frequencies in a given area and confirm that any CBSDs causing harmful interference to an Incumbent User have been deactivated or reassigned upon request. We sought comment on these proposals.

As set forth in detail in Section III(B), the record was divided over whether the SAS should be permitted to assign frequencies and channels to Citizens Broadband Radio Service users in the proposed manner. Commenters including Dynamic Spectrum Alliance, Federated Wireless, Google, Interdigital, PISC, Shared Spectrum Company, Spectrum Bridge, the WhiteSpace Alliance, and the Wireless Innovation Forum support the Commission's proposal to allow the SAS to assign frequencies in the band for both Priority Access Licensees and GAA Users. Other commenters, including AT&T, CTIA, NSN, 4G Americas, Ericsson, HKT Limited, and UK Broadband oppose the Commission's proposal and argued that Priority Access Licensees should be given static frequency assignments.

In addition, Verizon stresses the importance of strong security protocols—dubbed “channel use surety”—to ensure that GAA devices operate only on frequencies assigned by the SAS. According to Verizon, these protocols must be designed to prevent

modifications of GAA devices or their firmware that would allow them to operate on unauthorized frequencies. Verizon stresses that such protocols are necessary to protect Priority Access Licensees and promote a stable spectral ecosystem.

*Discussion.* As we detailed in Section III(B)(2)(c), it is in the public interest to establish a SAS-automated frequency assignment model for the 3.5 GHz Band. This method of frequency assignment is consistent with the Revised Framework and the proposals set forth in the *FNPRM*. The record clearly reflects that automated coordination by a robust SAS is essential to effective spectrum sharing between the three tiers of authorized users in the band.

We also acknowledge the concerns raised by various commenters regarding frequency predictability and stability in an SAS-assigned frequency management regime. As detailed in Section III(C)(2)(a), we adopt appropriate provisions to ensure that PAL assignments remain as stable and consistent as possible across different channels and geographic boundaries. The SAS must respect and enforce these provisions to create a stable spectral environment for all Citizens Broadband Radio Service users.

In assigning frequencies for Priority Access and GAA use, the SAS must take appropriate steps to ensure that CBSDs operate only on authorized frequencies at all times. As Verizon noted, ensuring that devices operate only on assigned frequencies is essential to maintaining stability in the band and protecting network investments. However, while Verizon focuses on GAA users, we find that the SAS should take appropriate steps to ensure that all Citizens Broadband Radio Service users operate only on their assigned frequencies. As one element of this process, we require that, when an SAS deauthorizes a CBSD or changes its permissible operational frequencies, it may require that CBSD to confirm that it has complied with the SAS's instructions. As described below, we impose end-to-end security requirements that will prevent tampering with devices to circumvent SAS control or otherwise defeating the purposes of our rules.

As detailed in Section III(H)(2)(e) the Commission will address any issues concerning unauthorized frequency use or unauthorized equipment that arise in the band. We believe that applying these requirements to all users will help prevent interference, assist in network planning, and promote network investment in the 3.5 GHz Band.

We acknowledge that our new framework for the 3.5 GHz Band raises

technological challenges that will likely require novel and collaborative solutions. Detailed implementation strategies for the frequency management rules we adopt herein will be addressed during the SAS Administrator approval process described in Section III(H)(3)(b). These discussions may also be informed by the outputs of any industry multi-stakeholder groups that are formed to address issues in the 3.5 GHz Band. Through these processes, we hope to gather insight from potential SAS administrators, future licensees, and other industry stakeholders regarding the most effective techniques for implementing these rules.

#### d. Security

*Background.* In the *FNPRM*, we proposed that the SAS employ protocols and procedures to ensure that all communications and interactions between the SAS and CBSDs are accurate and secure and that unauthorized parties cannot access or alter the SAS or the list of frequencies sent to a CBSD. These protocols and procedures would be reviewed and approved by the Commission before the SAS Administrator could be certified. We sought comment on these proposed rules and on any additional safeguards needed to protect sensitive federal information.

The record strongly supports the inclusion of robust security protocols for communications between CBSDs and SASs. For instance, Ericsson supports a system wherein communications between CBSDs are protected using standard Internet security procedures. Federated Wireless agrees that secure Internet-based communications should be the minimum requirement for CBSD-to-SAS interactions but contends that SAS Administrators should be permitted to offer additional interfaces beyond the minimum requirements to meet the unique needs of various users. Google contends that the Commission should not require manufacturers and operators to adopt specific security measures but should instead require that devices and services in the 3.5 GHz Band reflect “contemporary industry best practices for security.”

AT&T argues that, to ensure security of information in the SAS, the Commission should contract with a vendor approved by DoD, NTIA, and the General Services Administration to create the SAS software as a “work for hire” and ensure that the Commission retains control over the system. They argue that this would give licensees a greater degree of certainty that their

information will be secure and confidential.

*Discussion.* After review of the record, we adopt our proposal to require secure and reliable communications among and between CBSDs and SASs. We will also require SASs to protect themselves from unauthorized data input or alteration of stored data. Secure and reliable communication pathways between SASs and CBSDs and between different SASs are essential for the success of the Citizens Broadband Radio Service. Due to the nature of the Citizens Broadband Radio Service, sensitive information relating to network configuration and operations will be routinely sent between CBSDs and SASs. This information must be protected from interception or modification—during transmission and while stored in an SAS—to ensure that the proprietary and confidential information provided by licensees is not compromised.

However, while communications security in the band is paramount, we do not believe that mandating specific security protocols would serve the public interest at this time. Instead, we require potential SAS Administrators to develop and demonstrate that their systems include robust communications and information security features during the SAS Approval process. CBSDs shall demonstrate compliant security features during the equipment authorization process. These security protocols will be subject to the Commission’s review and approval, with input from NTIA and DoD. We anticipate that given the immense value of industry-wide interoperability, groups—such as the types of multi-stakeholder groups discussed in Section III(K)—will develop security models that SAS Administrators may consider, subject to Commission review. We also expect that security mechanisms will be updated on an ongoing basis to reflect state-of-the-art protection against ever-evolving security threats.

We do not agree with AT&T’s argument that the SAS software should be created for the Commission as a “work for hire.” We believe that allowing applicants to develop multiple SASs within the parameters set by the Commission’s rules will foster innovation, competition, and lead to a higher quality of service for all Citizens Broadband Radio Service users. Indeed, this development path could lead to even more effective security features than could be created under the more restrictive approach suggested by AT&T. Moreover, as Federated Wireless notes, federal ownership of the software could lock the Commission into an expensive

support system and hinder competition-driven innovation in the band.

In addition, federal Incumbent Users have unique security concerns related to information that will be transmitted from the ESC to the SAS. SAS Administrators and potential ESC Operators are required to develop security protocols that meet the standards set by the Commission in collaboration with NTIA. Issues related to the ESC, including security policies, are addressed in greater detail Section III(I).

#### e. Enforcement

*Background.* In the *FNPRM* we noted that many of our proposals could raise novel enforcement issues for the Commission. Many of the proposals in the *FNPRM*, including the SAS specifications, CBSD technical requirements, and security protocols were designed to address these issues and facilitate secure and consistent access to the 3.5 GHz Band for all authorized users. We sought comment on additional techniques and protocols that could be implemented, inside or outside the SAS, to address the unique enforcement concerns raised by the proposals in the *FNPRM*.

Commenters that addressed enforcement issues mostly raised concerns about the perceived complexity and unproven nature of the SAS. For instance, commenters including CTIA, SIA, and Verizon express concerns about the ability of the SAS to manage three tiers of authorized users and effectively protect Incumbent and Priority Access tier operations. SIA questions the SAS’s ability to prevent interference from CBSDs into existing FSS earth stations, especially given the complexity of the management functions under consideration. CTIA argues that an SAS capable of managing three tiers of operations has not been tested and that, until such a system is vetted, Incumbent and Priority Access tier users would run a serious risk of interference from GAA users.

*Discussion.* We note that many of the issues raised by commenters regarding enforcement mechanisms are addressed in Sections III(H)(1) and III(H)(3). In addition to the rules proposed in the *FNPRM*, after review of the record, we also adopt additional requirements for the SAS to help manage access to the band and assist the Commission in performing its enforcement responsibilities. Specifically, to assist with the Commission’s oversight responsibilities, we have added a requirement that SAS Administrators adopt procedures to immediately respond to requests from Commission

personnel for information stored or maintained by the SAS and to discontinue CBSD operations as directed by the Commission. We also require SAS Administrators to establish and follow protocols to comply with enforcement instructions from the Commission, including discontinuance of CBSD operations in designated geographic areas. These requirements are necessary to ensure that the Commission is able to ascertain the accuracy of information stored in the SAS, obtain the information necessary to enforce the Commission's rules, and ensure that CBSDs that do not comply with the Commission's rules are shut down in a timely manner.

We expect that the SAS will be a valuable tool for spectrum management and enforcement and that SAS Administrators, in cooperation with individual licensees, will be able to resolve many of the issues that will arise in the band. We address concerns raised about the SAS's ability to manage and protect multiple tiers of authorized users elsewhere in this *Report and Order*. We expect many of the detailed enforcement mechanisms and procedures employed by SASs to be developed during the SAS Administrator approval process described in Section III(H)(3)(b). However, we reiterate that, regardless of the scope of the SAS, the Commission retains the ultimate responsibility for and authority over licensees in the band. In the event that the SAS is unable to resolve disputes between licensees or identify and address the sources of harmful interference in the band, we will address these issues, as well as any issues concerning unauthorized frequency use or unauthorized equipment.

### 3. SAS Administrators

In the *FNPRM*, we proposed that only designated SAS Administrators that have been approved by the Commission could operate an SAS. We proposed to authorize multiple SAS Administrators, though each Administrator would be responsible for a single SAS. SAS Administrators would have to demonstrate, in detail, how their SASs will comply with the Commission's rules and establish detailed protocols to enforce the responsibilities set forth in part 96. We hereby adopt many of the proposals described in the *FNPRM*, set forth general guidelines for SAS Administrators, and provide details regarding the SAS Approval process.

We intend to foster a diverse, competitive marketplace of SAS providers. We believe that the rules we adopt will promote technological

innovation and encourage the development of market based solutions to the challenges involved with effective spectrum management in the 3.5 GHz Band. We believe that competition among multiple SAS providers is essential to the success of the 3.5 GHz Band. Indeed, we believe our rules will provide much leeway for competitive SAS Administrators to provide differentiated, value-added services in the course of fulfilling the core regulatory obligations. We hope that such competition will create a "race to the top" that yields advances in technology, at reasonable cost, as SAS Administrators vie to serve different parts of the market. We have seen this dynamic begin to emerge in TV White Spaces, with the approval of multiple database providers to-date, as well as in more conventional frequency-coordinated radio services.

At the same time we understand that network effects and technological "lock-in" can also sometimes present dynamics that hinder, rather than help, competition. Were this to occur in the 3.5 GHz Band, an SAS Administrator might use its position not only to facilitate a particular use of the band, but also to control access to the band. Let us be clear: we do not intend to create a back-door "license", which vests exclusionary power in one or a few SAS Administrators (separate from any licenses assigned pursuant to our Part 96 rules). We will carefully review SAS Administrator applications—and will revise the rules, if necessary—to ensure that the SASs develop in a way that achieves the positive goals set forth in this *Report and Order*.

#### a. SAS Administrator Requirements

1. Background. In the *FNPRM* we proposed that SASs be operated only by approved SAS Administrators. Those SAS Administrators would be authorized for a five-year term, renewable at the Commission's discretion. We proposed that the SAS Administrators establish protocols and procedures to manage Citizens Broadband Radio Service Users in the band, protect Incumbent Users from harmful interference, and perform the other proposed SAS functions set forth in the Proposed Rules. We also proposed that SAS Administrators be required to:

- Maintain a regularly updated database that contains the information described in the proposed rules;
- establish a process for acquiring and storing in the database necessary and appropriate information from the Commission's databases;

- respond in a timely manner to verify, correct or remove, as appropriate, data in the event that the Commission or a party brings claim of inaccuracies in the SAS to its attention;

- securely transfer the information in the SAS to another designated entity in the event it does not continue as an SAS Administrator at the end of its term;
- cooperate with other SAS Administrators to develop a standardized process for coordinating and exchanging required information;
- provide a means to make public information available to the public in an accessible manner.

The record shows general support for authorizing multiple SAS Administrators in the band. Commenters emphasize that authorizing multiple SAS Administrators will promote competition and innovation in the band. Google also cautions against overly proscriptive rules, noting that SAS Administrators should be able to differentiate themselves based on the technologies and services they offer.

The record was split on the issue of whether SAS Administrators should be permitted to act as Priority Access Licensees. Some commenters, including Verizon and Google, support allowing SAS Administrators to also hold Priority Access Licenses. Google argues that preventing SAS Administrators from holding PALs would discourage parties from investing in SAS development, reducing overall competition in the band. Microsoft disagrees, and argues that SAS Administrators should not be permitted to hold PALs to prevent conflicts of interest.

*Discussion.* The primary function of any SAS Administrator will be to develop protocols, procedures, and systems to enforce the Commission's rules governing SAS operations. We will require each SAS Administrator to provide services for a five-year term, which, at the Commission's discretion, may be renewed. In the event that an SAS Administrator does not wish to continue at the end of its term, or if its term is not renewed, it will be required to transfer its database along with the information necessary to access the database to another designated SAS. The SAS administrator would be permitted to charge a reasonable fee for conveyance of that resource.

If the Commission approves multiple SAS Administrators, we must ensure that each SAS contains consistent, accurate information. Because a CBSD will only be required to contact a single SAS, there is a need for SASs to share accurate registration information so that each SAS has the same, current view of the radio environment. Therefore, we

will require SAS Administrators to cooperate with one another to develop a standardized process for coordinating their operations, avoiding any conflicting assignments, maximizing shared use of available frequencies, ensuring continuity of service to all registered CBSDs, and sharing the data collected from registered CBSDs. We will also require SAS Administrators to coordinate with each other to facilitate non-interfering use by CBSDs connected to other SASs, maximize available GAA frequencies by assigning PALs to similar channels in the same geographic regions, and perform such other functions necessary to ensure that available spectrum is used efficiently. SAS Administrators must share information on the CBSDs and licensees managed by their SAS to the extent necessary to facilitate the effective coordination of all approved SASs.

In addition, an SAS will obtain much of the information on licensed use of the 3.5 GHz Band from Commission databases. This information will include information on Priority Access Licensees and licensed in-band FSS users. This information may be stored in the Commission's Universal Licensing System database or another system. Each SAS will be required to synchronize itself with Commission databases at least once a day so that the information in the SAS remains current.

SAS Administrators must also establish protocols and procedures to protect Incumbent operations consistent with information received from an approved ESC. SAS Administrators will be responsible for ensuring that all information transmitted by the ESC is acted upon and protected consistent with any additional requirements imposed during the SAS and ESC approval processes. SAS Administrators may themselves provide an ESC (if approved) or work with another approved ESC provider.

We will expect SAS Administrators to respond quickly to verify and correct or remove data in the event that a party or the Commission brings claims of inaccuracies in the SAS to its attention. This obligation to remedy inaccuracies applies to information entered into or omitted from the SAS, whether willfully or through operator error. Further, SAS Administrators must ensure that the SAS is able, at all times, to promptly respond to requests from Commission personnel for any information stored in the SAS. SAS Administrators must ensure that there is a capability in place to respond to emergency instances that require CBSDs to cease operation in a geographic area or during a specified time period.

Finally, we permit SAS Administrators to hold PALs and act as GAA users. We disagree with Microsoft's contention that allowing SAS Administrators to hold or lease PALs would necessarily lead to discriminatory conduct based on potential conflicts of interest. So long as an approved SAS Administrator complies with all of our rules, coordinates fairly with other SAS Administrators, and is one of several options available to end users in a competitive market for SAS services, we believe that the public interest should be well served by the SAS community. However, we include in our rules a requirement that SAS Administrators discharge their frequency assignment functions, whether involving their own users or those served by a different SAS Administrator, in a non-discriminatory manner, consistent with the priority accorded to PAL users vis-à-vis GAA users under our rules.

In addition, in determining whether to approve applicants to serve as SAS Administrators, we will require a demonstration of their intent and ability to comply with all of our rules, including this nondiscrimination requirement as well as the requirement that they cooperate with other SAS Administrators in coordinating and exchanging required information. Moreover, the Commission will monitor the behavior of SAS Administrators and will take enforcement action if necessary to ensure that SAS Administrators comply with all applicable rules. The Commission will also monitor the competitive balance in the 3.5 GHz Band and may take action to rectify any anti-competitive behavior that could be attributed to SAS Administrators holding or leasing PALs or GAA licenses or operating CBSDs (under PAL or GAA authorization) in the band.

In the past, we have recognized the need to avoid conflicts of interest in connection with frequency coordination. We believe the foregoing protections are sufficient to guard against such conflicts in the discharge of SAS duties. First, as noted above, we contemplate approval of a number of SAS Administrators, to ensure that 3.5 GHz Band licensees have sufficient choices and thereby promote competition as to fees and service quality. We believe that establishment of a competitive market for these services will help ensure against discriminatory conduct based on potential conflicts of interest. Second, we have designed the SAS function to be a highly automated one that minimizes the potential for such

discriminatory conduct, and will review applications during the approval process in the light of that goal. In these circumstances, we believe the foregoing protections should be adequate.

#### b. SAS and SAS Administrator Approval Process

*Background.* In the *FNPRM*, we proposed to authorize multiple SASs for five-year terms. We also proposed that the Bureau review applications for SAS certification and establish procedures for reviewing the qualifications of prospective SAS Administrators. We sought comment on this approach and on the appropriate process for selecting, reviewing, and approving SAS Administrators.

Several commenters, including AT&T, Ericsson, Google, and PISC supported the Commission's proposal to require prospective SAS administrators to complete a thorough review and approval process. AT&T notes that the approval process, coupled with the SAS Administrator requirements, strikes a balance between Commission oversight of the SAS and the need to avoid adopting overly prescriptive rules about the SAS. While Google supports rigorous requirements to ensure that SAS Administrators have the technical expertise and financial security to operate an SAS, it urges the Commission not to mandate specific technology that SAS Administrators must use. Instead, Google asks that we "establish basic functional requirements that will protect both incumbent users and the rights of PAL holders."

*Discussion.* We will designate one or more private sector administrators to create and operate an SAS, following a thorough approval and review process. We believe that a comprehensive process for SASs and SAS Administrators will foster competition, promote the development of innovative technologies, and further the public interest. An approval process that builds upon the TVWS experience should facilitate the testing and development of multiple SASs to oversee the Citizens Broadband Radio Service. We adopt the proposed delegation of authority to WTB and OET and instruct them to take such actions as authorized by Sections 0.241(j) and 0.331(f).

As stated previously, the rules governing SASs and SAS Administrators are high-level guidelines that describe the minimum requirements for any authorized SAS. We expect that applicants will develop specific policies, procedures, and technologies to show compliance with, implement and enforce the rules during the approval process. We agree with



Google that our rules should “provide a framework to enable efficient spectrum use” without mandating “the specific technical means by which SAS administrators achieve them.” All stages of the process, including review of applications and system compliance testing, will be overseen by WTB and OET, in close consultation with NTIA and DoD.

After the release of this *Report and Order*, WTB and OET will issue a Public Notice requesting proposals from entities desiring to administer an SAS. Applicants will be required to, at a minimum, demonstrate how they plan to meet the Commission’s rules governing SAS operations, demonstrate their technical qualifications to operate an SAS, and provide any additional information requested by WTB and OET. Based on these applications, WTB and OET will determine whether to conditionally approve any of the applicants. If an application is not accepted, the applicant may file an Application for Review with the Commission.

Any applicants that receive conditional approval must demonstrate, to the satisfaction of WTB and OET, that their SASs meet all of the requirements set forth in the Commission’s rules and any other conditions that these offices deem necessary. WTB and OET will provide detailed instructions to applicants throughout the process. At a minimum, applicants will be required to allow their systems to be tested and analyzed by FCC staff prior to making their systems available for a period of public testing prior to release. Applicants may also be required to attend workshops and meetings as directed by the offices. NTIA will provide input and guidance as needed to ensure that the concerns of federal incumbents are properly addressed during the approval process.

We expect that this process will facilitate the rapid development and deployment of multiple fully functional SASs. We also expect that, through the approval process, applicants and other stakeholders will work collaboratively to develop standards, procedures, and industry best practices in several key areas, including SAS coordination and information exchange, communications between CBSDs and SASs, and information security. We believe that these collaborative efforts will yield flexible, innovative solutions to these, and other, technical issues. However, if satisfactory solutions are not reached through industry consensus, the Commission may address these issues in the future.

#### c. SAS Administrator Fees

*Background.* In the FNPRM, we proposed that SAS Administrators be permitted to collect reasonable fees from Priority Access Licensees and General Authorized Access users for use of the SAS and associated services. We based this proposal on a similar rule adopted for TVWS database administrators (*See* 47 CFR 47.1514). We sought comment on this proposal and on whether SAS Administrators should be permitted to collect fees from all Citizens Broadband Radio Service users.

Many commenters, including Federated Wireless, Ericsson, Verizon, and PISC support our proposal to allow SAS Administrators to collect reasonable fees from both Priority Access Licensees and GAA users. T-Mobile contends that SAS administrators should not be permitted to collect fees from Priority Access Licensees since the Commission proposes to assign PALs via competitive bidding. However, T-Mobile maintains that if fees are necessary to recover SAS costs, they should only be collected from GAA users.

*Discussion.* We find that permitting SAS Administrators to charge reasonable fees to Priority Access Licensees and GAA users is in the public interest. Our review of the record shows that there is widespread support for allowing SAS Administrators to collect reasonable fees from both Priority Access Licensees and GAA users. As Ericsson notes, allowing SAS Administrators to collect fees from PAL and GAA users in a manner similar to users of the TVWS databases is “reasonable and appropriate.” Ericsson explains that the collection of fees will give SAS Administrators the flexibility to develop individual business models. We agree; allowing SAS Administrators the option of whether and which users to charge for use of an SAS will give Administrators the greatest possible flexibility and facilitate the development of various competitive business models. Accordingly, SAS Administrators may charge any Citizens Broadband Radio Service user a reasonable fee for provision of its services.

We do not agree with T-Mobile’s assertion that SAS Administrators should not be permitted to charge fees to Priority Access Licensees since those licensees will have already paid for spectrum access at auction. We believe that allowing SAS Administrators the freedom to determine whether to charge users for their valuable services—and which users to charge—will promote competition in the band. The choice to

acquire spectrum access and bear the costs associated with managing access to the spectrum, including whether to pay an SAS Administrator, is a business decision to be made by the potential licensee. This approach is wholly consistent with Commission precedent in other services, including Land Mobile Services authorized under part 90 of the Commission’s rules, wherein licensees pay the Commission to obtain a license and a third party for coordination services.

Our determination is based on the expectation that a competitive market for SAS services will emerge. We intend to allow the market to determine the appropriate rates to be charged to Citizens Broadband Radio Service users. However, if SAS Administrators engage in anti-competitive or collusive practices resulting in excessive fees, or if a competitive market for SAS services otherwise fails to materialize, the Commission may take steps to address such issues.

#### I. Environmental Sensing Capability

*Background.* In the FNPRM, we proposed that the SAS retain information on all operations within the 3.5 GHz Band, including, for incumbent federal users, the geographic coordinates of the Exclusion Zones. We also noted that some commenters have argued that the SAS should be required to incorporate spectrum sensing information from CBSDs or other remote beaconing and sensing sites to accurately detect incumbent usage models and respond to the interference environment. In addition, we stated that we would explore the possibility of allowing dynamic coordinated access to spectrum within Exclusion Zones. We sought comment on allowing Citizens Broadband Radio Service operations within Exclusion Zones as well as the use of sensors for frequency management and incumbent protection.

Several commenters support allowing Citizens Broadband Radio Service users to dynamically access areas within the Exclusion Zones proposed in the FNPRM. In addition, as set forth in Section III(G), many commenters supported using spectrum sensing technology to protect federal users from harmful interference and facilitate more widespread commercial use of the 3.5 GHz Band. Some commenters also contend that the Commission should authorize the use of a federal SAS to securely maintain information on federal incumbent operations and accelerate the process for reducing exclusion zones.

In its March 24, 2015 letter, NTIA suggested that sensors could be used to



protect federal operations using an ESC. NTIA suggests that the ESC could consist of one or more commercially operated networks of device-based or infrastructure-based sensors that would be used to detect signals from federal radar systems. According to NTIA, based on ESC inputs, the SAS could instruct commercial users to vacate a channel when proximity to federal operations (in frequency, location, or time) presents a risk of harmful interference to federal radar systems. The information communicated by the ESC could then be used by the SAS to direct Citizens Broadband Radio Service users to another channel or, if necessary, to cease transmissions to avoid potential interference to federal radar systems. NTIA also asserts that ESC sensors would only be required in the vicinity of the Exclusion Zones established to protect federal radar systems.

*Discussion.* We agree with NTIA's suggestion to allow the use of one or more ESCs to detect federal frequency use in and adjacent to the 3.5 GHz Band. As NTIA, Google, Federated Wireless, and others have noted, spectrum sensing technologies—in conjunction with management of CBSDs by an approved SAS—would allow Citizens Broadband Radio Service users to operate near the coastline on a channel or frequency not being used by federal radar systems. This would allow for more efficient and widespread commercial use of the spectrum while ensuring that federal use of the band is protected. Moreover, sensing technology would allow federal users to deploy next generation radar systems without fear of interference from commercial operators.

We also agree with NTIA that the ESC should be developed, managed, and maintained by a non-governmental entity and should not require oversight or day-to-day input from NTIA or DoD. We note that the rules governing the ESC are technologically neutral and, as such, ESC developers may utilize different sensing techniques that yield the desired result. The sensors comprising an authorized ESC may be infrastructure-based, device-based, or a combination of the two, as long as the ESC complies with the rules and guidelines set forth by the Commission. These sensors shall be deployed in the vicinity of the Exclusion Zones described in Section III(G) to ensure that all federal radar use in and adjacent to the 3.5 GHz Band is accurately detected and reported to an SAS.

In addition and as noted above, our rules protect the security and confidentiality of federal operations by

ensuring that the ESC does not store, retain, transmit, or disclose any information on the locations or movements of any federal systems. The ESC will not provide any insights into the operations, locations, parameters, or features of federal radar and other systems that could potentially affect their security posture. This is consistent with NTIA's recommended approach to providing information on federal systems that is necessary for the effective implementation of the ESC.

While some commenters support establishing a federal SAS to retain and manage federal spectrum use data, given the sensitivity of the information in question, we do not think it would be in the public interest to retain this data. Moreover, given the large number of commenters who opined on the positive benefits and technological feasibility of using sensing technology in the band, we believe that retaining information on federal operations will not be necessary to share the band effectively.

Prospective ESC operators must have their systems reviewed, certified, and approved through the approval process used to approve SASs and SAS Administrators described in Section III(H)(3)(b). While the processes are the same, ESCs and SASs shall be evaluated, tested, and approved separately. However, these processes may be concurrent and the ability to communicate with an SAS will be a key component of ESC approval. The approval process will be overseen by the Commission in close consultation with NTIA and DoD. To be approved, an ESC must meet the following requirements:

- Be managed and maintained by a non-governmental entity;
- accurately detect federal frequency use in the 3550–3700 MHz band and adjacent frequencies;
- communicate information about detected frequency use to an approved SAS;
- maintain security of detected and communicated signal information;
- comply with all Commission rules and guidelines governing the construction, operation, and approval of ESCs;
- be available at all times to immediately respond to requests from authorized Commission personnel for any information collected or communicated by the ESC;
- ensure that the ESC operates without any connectivity to any military or other sensitive federal database or system;
- ensure that the ESC does not store, retain, transmit, or disclose operational information on the movement or position of any federal system or any

information that reveals other operational information of any federal system that is not required to effectively operate the ESC by part 96.

Following ESC approval, approved SAS Administrators making use of an approved ESC may dynamically authorize CBSDs nationwide, consistent with Section III(G). We also direct WTBS and OET to submit a report to the Commission on the status of the development, review, and approval of SASs and ESCs at nine month intervals. The first such report will be due on January 17, 2016. Overall, we believe that the development of an ESC—in conjunction with an approved SAS—will maximize efficient commercial use of the 3.5 GHz Band while protecting important federal incumbent operations.

#### *J. 3650–3700 MHz Band*

*Background.* In the *NPRM*, the Commission sought comment on a supplemental proposal to include the adjacent 3650–3700 MHz band in the proposed Citizens Broadband Radio Service regulatory regime. As we noted in the *NPRM*, incorporating this additional 50 megahertz would create a 150 megahertz contiguous block of spectrum that could be used by existing licensees in the 3650–3700 MHz band—as well as new licensees—to expand the services that they are already providing. Subsequently, in the *Licensing PN* the Commission specifically sought comment on extending the Revised Framework to the 3650–3700 MHz band, and asked what provisions would need to be made for existing operators and how much transition time would be required.

In the *FNPRM*, we reaffirmed our supplemental proposal to extend our proposed rules for the 3.5 GHz Band to the 3650–3700 MHz band. The Commission stated that, if it decided to include the latter band segment in the Citizens Broadband Radio Service, the existing 3650–3700 MHz operations would be grandfathered for a period of five years after the effective date of the proposed rules. During the transition period, existing licensees would be permitted to operate stations in accordance with the technical rules in part 90, subpart Z of this chapter, if any had been authorized. During this period, Grandfathered Wireless Broadband Providers would be required to avoid causing harmful interference to the federal sites listed in 47 CFR 90.1331 and grandfathered FSS earth stations, in accordance with existing part 90 rules (47 CFR 90.1331). At the end of the transition period, Grandfathered Wireless Broadband Providers would

have the option, available to all eligible 3.5 GHz Band users, to apply for PALs in the 3550–3650 MHz band or to operate on a GAA basis consistent with part 96 rules. The Commission sought comment on the current equipment upgrade cycles for equipment in the band, and the incremental cost to part 90 incumbents of complying with Part 96 requirements weighed against the benefits of obtaining access to an additional 100 megahertz of spectrum on a PAL or GAA basis.

Many commenters support the proposal to create a 150 megahertz contiguous block of spectrum for the 3.5 GHz Band. T-Mobile, for example, observes that by extending the Citizens Broadband Radio Service licensing framework to the 3650–3700 MHz band, we will “increase the utility of the band, benefitting existing operators, attracting new providers, and fostering a large, innovative equipment market.” Similarly, Motorola Mobility asserts that including 3650–3700 MHz will meet the Commission’s policy goals of making additional spectrum available for mobile broadband service to the public, while promoting interference mitigation techniques and spectral efficiency. Google similarly supports extension of the Citizens Broadband Radio Service framework to the 3650–3700 MHz band, but notes that current users should only be grandfathered to use the band for a period of time based on their actual current use.

Some commenters oppose changing the existing framework for the 3650–3700 MHz band. These commenters assert that given existing investment in the band, 3650–3700 MHz should not be integrated with the Citizens Broadband Radio Service framework. WISPA notes that Wireless Internet Service Providers (WISPs) currently use the 3650–3700 MHz band to provide fixed wireless broadband services. Cloud Alliance in Vermont and Neptuno Networks in Puerto Rico, for example, use their 3650 MHz licenses to provide WiMAX service. Exelon and Ameren Services Inc. state that they use 3650 MHz licenses as part of their communications networks for the management of utility grids. UTC similarly notes that utilities have used their licenses to deploy and support smart grid applications including supervisory control and data acquisition (SCADA) and advanced metering infrastructure (AMI) systems. UTC maintains that extending the proposed Part 96 rules to the 3650–3700 MHz band would increase congestion in the band and impose undue costs on incumbents.

Alternatively, some commenters suggest that if we decide to apply the

proposed Part 96 rules to the 3650–3700 MHz band, we must do so by adopting sufficient protections to safeguard existing investment in the band and to mitigate any impact on incumbent operations. Neptuno argues for a grandfathering period of five years or the remainder of the licensee’s ten-year term, whichever is longer, with the ability to continue using current equipment. UTC, pointing to CenterPoint’s investment to support a smart grid system, proposes that incumbent operators be (1) grandfathered permanently; (2) protected from PAL and GAA operations in the band; and (3) have the first option to access PALs in their area. WISPA asks that incumbent operators be given priority access protection and be permitted to permanently retain and operate their existing equipment.

*Discussion.* We conclude that it is in the public interest to adopt our supplemental proposal and include the 3650–3700 MHz band in the Citizens Broadband Radio Service framework, creating a 150 megahertz contiguous band for flexible, shared uses. We have tailored the 3.5 GHz Band rules in response to commenter concerns that incumbent 3650–3700 MHz licensees should be able to continue operations after transition to the broader Citizens Broadband Radio Service framework. We also provide for a transition period—longer, for many licensees, than was proposed in the *FNPRM*—in which incumbent 3650–3700 MHz licensees will enjoy interference protections that ease the transition to the new rules.

Including the 3650–3700 MHz band will serve the public interest by promoting spectrum availability, efficiency, and usability for all 3.5 GHz Band users, including prior 3650–3700 MHz licensees. There is substantial support in the record for extending the Citizens Broadband Radio Service rules to the 3650–3700 MHz band. As Google notes, “[m]ore contiguous spectrum can support more uses, attract more services, and encourage expansion of the equipment market—all of which will increase the intensity and diversity of 3.5 GHz operations.” PISC adds that common technical rules for PAL and GAA devices for the entire 3550–3700 MHz Band will promote “a mass market ecosystem of devices that can operate on either licensed (PAL) or unlicensed (GAA) spectrum.” The Wi-Fi Alliance maintains that extension of the rules will “promote the availability and efficient use of the spectrum band” and “provide economies of scale for equipment across the full 150-megahertz contiguous block of spectrum, thereby facilitating the realization of a robust

small-cell market.” The Shared Spectrum Company contends that the expanded bandwidth available for GAA use will result in the deployment of innovative technologies such as sensing systems, which might not be financially attractive under “the traditional capital and planning restrictions imposed on auction licensing paradigms.” Our band-wide operability requirement for CBSDs will ensure that the benefits of equipment scale and spectrum access described above inure to all users. This scale should be far greater scale than available under the current part 90 regime, due in large part to the relatively small size of the incumbents’ band (only 50 megahertz of spectrum).

We have also endeavored with the Citizens Broadband Radio Service to create a regulatory environment that will preserve, encourage, or even accelerate network deployments, including those providing smart grid and WISP services, which have taken root under the existing rules governing the 3650–3700 MHz band (*See* 47 CFR 90.1301, *et seq.*). In making our supplemental proposal to include the 3650–3700 MHz band, we recognized that there were currently over 2,000 part 90 incumbent licensees in this band with more than 25,000 registered sites. As noted above, many of these Part 90 incumbents have made substantial investments in equipment deploying various services in the band. These investments were made under a non-exclusive licensing regime and subject to their statutory waiver against any claim to use of the spectrum “as against the regulatory power of the United States.”<sup>19</sup> Still, we strive to minimize the adverse effects of rule changes on incumbents to the extent possible without compromising the public interest benefits that we believe such rules changes will produce.

We have therefore modified our proposal in four important ways to

<sup>19</sup>47 U.S.C. 304. It is also “undisputed that the Commission always retain[s] the power to alter the term of existing licenses by rulemaking.” *Celtronix Telemetry, Inc. v. FCC*, 272 F.3d 585, 589 (D.C. Cir. 2001). *Accord, Celco Partnership v. FCC*, 700 F.3d 534, 543 (D.C. Cir. 2012). *See also Committee for Effective Cellular Rules v. FCC*, 53 F.3d 1309, 1318–20 (D.C. Cir. 1995); *WBEN, Inc. v. United States*, 396 F.2d 601, 617–18 (2d Cir. 1968) (upholding rules resulting in increased interference during term of fulltime AM stations’ licenses resulting from operations of daytime licensees); *California Citizens Band Ass’n v. United States*, 375 F.2d 43, 50–52 (9th Cir. 1967). While such modifications may not extend to making “fundamental changes” to the terms of existing licenses. *Celco*, 700 F.3d at 534, here as noted below we have taken steps to ensure that part 90 incumbents may continue to provide those same services [using the same technologies], over the same as well as substantially additional spectrum. *See Community Television, Inc. v. FCC*, 216 F.3d 1133, 1140–41 (D.C. Cir. 2000).

preserve existing 3650–3700 MHz investment. First, our decision not to allow Priority Access use in the 3650–3700 MHz band segment means that this portion of the band will continue to be licensed on a non-exclusive basis, and thus will continue to be available on a non-exclusive basis to former part 90 incumbents.<sup>20</sup>

Second, our technical rules for Category B CBSDs will accommodate existing 3650–3700 MHz network deployments and, in fact, will increase technical flexibility in rural areas. In urban areas, the power level authorized for Category B CBSDs is the same as allowed under the existing Part 90 rules. In rural areas, the levels are even higher. These rules therefore address a principal concern of part 90 incumbents about the potential for substantial decreases in coverage areas due to lower power levels.

Third, while we believe our band-wide operability rule will ultimately benefit prior existing users of the 3650–3700 MHz band by expanding equipment availability and spectrum access, we exempt equipment deployed under these preexisting rules from the operability requirement. We believe that this exemption will allow 3650–3700 MHz users to continue operating under the new 3.5 GHz Band rules, without need to retrofit or abandon their existing equipment.

Fourth, defining a CBSD in a flexible way to encompass a *network* of base stations should allow legacy network equipment to interact with the SAS at relatively low cost, through the addition of a proxy controller device. The vast majority of equipment deployed in the 3650–3700 MHz band uses the WiMAX technology standard. We note that this standard, like most carrier-grade managed network technologies, defines network management interfaces that allow for operator control of network operating parameters. These interfaces provide software “hooks” that can enable deployment of a network proxy controller that intermediates between the legacy network and the SAS, effectively translating between the SAS and network management layer to

ensure compatibility with our part 96 rules.

In short, we believe that we have made necessary and appropriate rule accommodations to allow prior existing 3650–3700 MHz licensees to continue operations in the band under a framework that provides access to greater spectrum that may better meet their needs in the long run. To the extent that we may have overlooked any technical obstacles to achieving this goal, we note that part 90 incumbents may avail themselves of our waiver process on a case-by-case basis.

Nevertheless, recognizing the potential challenges that may come with any regulatory transition, and in light of the significant investment many incumbent 3650–3700 MHz licensees have made in the band, we provide *additional* protections for these incumbent operations during a reasonable transition period. In place of the strict five-year term proposed in our *FNPRM*, we will protect incumbent 3650–3700 MHz nationwide licensees (Grandfathered Wireless Broadband Providers) for five years after the *R&O* Adoption Date or for the remainder of the license term, whichever is longer, with one exception. We do not believe it would be appropriate to extend a transition period of more than five years to those Part 90 incumbents licensed after the January 8, 2013 **Federal Register** publication date of the *NPRM*. Such licensees were on notice of our supplemental proposal to integrate the 3650–3700 MHz band into the Citizens Broadband Radio Service regulatory regime before obtaining their licenses, and we believe according them more than a five-year priority over GAA users of the band would unnecessarily curtail the spectral efficiencies contemplated by our rules.

The grandfathering period “allows incumbent licensees to benefit from the original term of the license they possess while giving them sufficient time to decide whether to seek a new license under a modified regime or look for other alternatives” that may be available at that time. We are mindful of some commenters’ concerns that existing licensees in the 3650–3700 MHz band entered the band with the expectation of a ten-year license term under the prior existing rules. As noted above, we believe our technical and licensing rules will allow for continued operation in the band for the indefinite future. The transition period will provide incumbent licensees with the benefit of operating under the existing Part 90 framework for the remainder of their full licensed term, or in some cases substantially longer. At the end of the

transition period, these licensees may continue to operate their networks under the GAA rules, but without the priority accorded them during the transition.

During the transition period, grandfathered licensees will receive interference protection from other 3.5 GHz Band users operating in the 3650–3700 MHz band segment (*i.e.*, GAA users) for network operations and frequencies that are in use at registered sites as of April 17, 2016. We agree with Google’s comment that “[c]onsistent with the logic of grandfathering, protection should be provided only for the channels and locations where operations currently are deployed, rather than categorically granting incumbents exclusive rights to a full 50 MHz of spectrum they may not be using (and may not be authorized to use).” In defining the Grandfathered Wireless Protection Zone, we intend to distinguish between “real” networks that have received substantial investment and provide socially productive service from “paper networks” whose only effect is to restrict spectrum accessible by the Citizens Broadband Radio Service.

The Grandfathered Wireless Protection Zone therefore represents the exclusions, in geographic area and frequency range, needed to reasonably protect *registered* networks that are *constructed*, *in service*, and in *compliance* with the prior existing rules for the 3650–3700 MHz band. We elaborate on these concepts as follows:

- *Registered* means that any fixed or base stations defining the extent of the network have been properly registered with ULS.
- *Constructed* means that all of the requisite infrastructure elements are in-place and operational. These include siting, FCC-certified radio equipment, backhaul, power, etc.
- *In service* means that the network provides ongoing service to unaffiliated, paying subscribers (*e.g.*, broadband service from a WISP) or for *bona fide* private uses (*e.g.*, utility networks, network backhaul).
- *Compliance* means that to receive protection, licensees must be in compliance with all other applicable FCC rules (or operating pursuant to a waiver of those rules).

We will determine a Grandfathered Wireless Protection Zone, after issuing a Public Notice seeking comment on the appropriate methodology and relevant technical parameters. In conducting our technical analysis, we will use realistic modeling assumptions, reflecting the equipment, technical configuration, and propagation environment of real-world

<sup>20</sup> We emphasize that the existing part 90 rules provide for non-exclusive spectrum access only. See 47 CFR 90.1307. See also *Wireless Operations in the 3650–3700 MHz Band, Memorandum Opinion and Order*, 72 FR 40767 (July 25, 2007): “In contrast to an exclusive licensing model in which a licensee may exclude others from a particular license area, the non-exclusive licensing model adopted in the 3650 MHz Order requires a potential entrant to consider that the presence of other licensees will require cooperative use and may, at times, restrict the amount of spectrum and/or time that spectrum is available to any particular licensee.”

deployments authorized by the Part 90 rules. Alternatively, a simplified metric (e.g., distance from a base station) that sufficiently approximates such a technical analysis may be appropriate instead. We also emphasize that the Grandfathered Wireless Protection Zone shall only protect frequencies in use by a Grandfathered Wireless Broadband Provider at a given site.

The Grandfathered Wireless Protection Zone will be defined based on fixed or base stations registered by applications filed in ULS on or before April 17, 2015, the adoption date of this *Report and Order*.<sup>21</sup> The use of the adoption date is necessary to prevent a speculative “land rush” in site registrations during the period between the adoption date and the effective date of the new and revised rules. This approach will also help prevent the protection of “paper” networks and ensure that the 3650–3700 MHz band is put to its most productive use. Additionally, we note that for any assignments or transfers of control of Grandfathered Wireless Broadband licenses or registered sites that occur following the effective date of this *Report and Order*, the applicable transition period will run with the original license date, on a site-by-site basis.

Under current procedures, we will generally consider a fixed or base station to be ‘unused’ if it has not operated for one year or more. We believe this establishes an expectation that any sites registered in ULS will be constructed within one year of registration. Therefore, we will establish the Grandfathered Wireless Protection Zone around only those base and fixed stations that are registered by applications filed in ULS on or before

April 17, 2015 and are *constructed, in service*, and in *full compliance* with the rules by April 17, 2016. Additionally, the Grandfathered Wireless Protection Zone will be reduced should any portions of the protected network fail to meet the above criteria after April 17, 2016. Any registrations filed after April 17, 2015 will only be afforded protection from harmful interference under our rules within the licensee’s Grandfathered Wireless Protection Zone, *i.e.*, a Grandfathered Wireless Broadband Provider may not expand its protected contour using sites registered after April 17, 2015. Modifications to ULS site registrations after the April 17, 2015 will not have the effect of increasing the Grandfathered Wireless Protection Zone.

In order to be afforded Grandfathered Wireless Broadband Provider protections, we require incumbent operators to register their frequency usage with approved SAS Administrators. Existing licensees must register their fixed and base stations as well as their service contours with the SAS. In addition, existing licensees must indicate the specific frequencies and channel bandwidth in use at each site. Subsequently, any Grandfathered Wireless Broadband Provider protections will only apply in the frequency range registered by the incumbent. Registration with the SAS will promote spectrum efficiency by identifying precisely which spectrum is reserved for Grandfathered Wireless Broadband Providers and which spectrum may be available for GAA use under rules governing the Citizens Broadband Radio Service.

Grandfathered Wireless Broadband Licensees will be deemed incumbent users within their registered service contours for the duration of the transition period. During this transition period, Grandfathered Wireless Broadband Providers must avoid causing harmful interference to authorized federal users and grandfathered FSS earth stations, in accordance with our rules (*See* 47 CFR 90.1331). Thus, existing FSS sites will be protected under part 90, subpart Z of this chapter until the last Grandfathered Wireless Broadband Licensee within a given protected area is transitioned to the new part 96 regime. After the transition period, such facilities shall be protected from harmful interference consistent with the protections afforded similarly situated facilities as set forth in Sections 96.15 and 96.17. Consistent with current practice, during the transition period, Grandfathered Wireless Broadband Providers with overlapping service contours must

coordinate with one another as currently required by part 90, subpart Z of this chapter.

Grandfathered Wireless Broadband Licensees may register sites outside of their Grandfathered Wireless Protection Zones, but these sites will not be entitled to any interference protection from Citizens Broadband Radio Service users. We strongly encourage Grandfathered Wireless Broadband Licensees to procure equipment with an eye toward complying with the part 96 technical rules once the transition period is completed. We expect all Grandfathered Wireless Broadband Licensees to comply with the Part 96 rules once their transitions are complete. At that point, use of legacy equipment that does not operate across the entire 150 megahertz band could hinder a former part 90 licensee’s flexibility with respect to other GAA operations in the band. On the other hand, the use of technology that is capable of, or can be upgraded to, operation throughout the band will provide for the possibility of much greater spectrum access. Grandfathered Wireless Broadband Licensees, and their vendors, should plan accordingly.

As described in Section III(B)(1), we conclude that it is in the public interest to limit 3650–3700 MHz use to GAA operations. GAA operation closely aligns with the current licensing regime in the band where licenses are awarded on a non-exclusive basis and licensees must share spectrum and coordinate operations. Similarly, GAA operators will have shared use of the entire 3.5 GHz Band and access will be coordinated by the SAS. We believe that limiting the 3650–3700 MHz band to GAA use post-transition, rather than adopting our original proposal to allow both PALs and GAA use, will minimize disruption to incumbent operators. By eliminating the availability of PALs in the 3650–3700 MHz portion of the band, incumbent operators will continue to have access to the entire 50 MHz, post-transition. Grandfathered Wireless Broadband Providers thus will have the option, available to all eligible 3.5 GHz Band users, to operate on a GAA basis consistent with Part 96 rules throughout the 3650–3700 MHz band.

We disagree with commenters who maintain that the existing licensing regime should be retained for the 3650–3700 MHz band specifically because the spectrum is used for critical infrastructure applications such as Smart Grid. While we acknowledge the federal policy of supporting such modifications of the electrical transmission and distribution system (*See* 47 U.S.C. 17381, *et seq.*), our new

<sup>21</sup> Under the current part 90 rules, stations that operate above the power limits specified in 47 CFR 90.1333 are required to be registered. We note that many subscriber units/customer premise equipment/remote terminals operate above the mobile/portable power limits. However, we believe that it is appropriate to define the Grandfathered Wireless Protection Zones based on the contour of base and fixed access points that define the network. As such, in this context, “fixed or base station” does not include subscriber units, customer premise equipment, or remote terminals that communicate with base stations or access points. We will rely on information provided in the equipment certification to distinguish base stations and fixed access points from customer premise equipment. Grandfathered Wireless Protection Zones will not be specifically defined for subscriber units operated by Grandfathered Wireless Broadband Licensees, regardless of whether they have been registered in ULS. We expect, however, that the methodology for defining the Grandfathered Wireless Protection Zone around base and fixed access points will provide appropriate protections for the subscriber units, customer premise equipment, and remote terminals associated with registered base and fixed stations.

framework does not preclude such continued use of the band. Instead, the new framework promotes flexible, shared use of the band for any suitable purpose, including critical infrastructure use. Further, by extending the band from 3550–3700 MHz, we increase the contiguous, interoperable spectrum available for critical infrastructure use. Critical infrastructure users will now have access to up to 80 MHz of GAA spectrum in each census tract with the ability to use an additional 70 MHz of PAL spectrum on an opportunistic basis. The framework we adopt today increases, rather than limits, the spectrum available for critical infrastructure use. Moreover, we note that existing licenses in the 3650–3700 MHz band are nationwide, *non-exclusive* licenses. Thus, licensees in this band were never afforded exclusive use of the spectrum for any period of time. By limiting Citizens Broadband Radio Service use in the band to GAA uses at the end of the transition period, we retain the non-exclusive, shared characteristic of this spectrum.

We decline to adopt additional protections for Grandfathered Wireless Broadband Providers beyond those that we adopt today. The additional protections suggested by commenters will only serve to delay the ultimate integration of 3650–3700 MHz into the Citizens Broadband Radio Service. In addition, we note that incumbent licensees had no expectation of exclusive access to the spectrum in the 3650–3700 MHz band as all licenses issued in the band were non-exclusive. We conclude that the modified protections for incumbent licensees that we adopt today will maximize the benefits to all potential licensees, while minimizing the costs to incumbent licensees. Based on careful consideration of the record in this proceeding, we adopt modified rules for transitioning the 3650–3700 MHz band into the Citizens Broadband Radio Service as provided in Appendix A.

#### K. Multi-Stakeholder Group

*Background.* In the *FNPRM*, we noted that the TAC recommends that the Commission consider forming one or more multi-stakeholder groups to study receiver standards and interference limits policy at service boundaries in the 3.5 GHz Band. In addition, the Wireless Innovation Forum recommends that the FCC encourage the formation of industry led multi-stakeholder groups, proposes key characteristics of such a process, and commits to establishing such a multi-stakeholder process to develop recommendations for the 3.5 GHz Band

and other band opportunities. Consistent with the recommendations of the TAC, we encouraged action to charter a technical group of stakeholders to develop industry coordination agreements and protocols, including technical options and methods for managing spectrum access that would improve access to and make efficient use of the 3.5 GHz Band. We sought comment on the appropriate scope and structure of such a group.

The record generally supports the formation of an industry led multi-stakeholder group to study technical issues in the 3.5 GHz Band. The Wireless Innovation Forum asserts that a technically focused multi-stakeholder group should address a variety of outstanding SAS issues, including inter-SAS communications, communications security, protections of higher tier users, and CBSD-to-SAS communications. The Wireless Innovation Forum argues that the Commission should establish certification procedures to ensure that SASs and CBSDs conform to the procedures and methods developed by this multi-stakeholder group. They also propose a detailed organizational framework for the working group, including a process for the group to provide proposals to the Federal Government and for government agencies to act on such proposals within a limited period of time. Indeed, on February 12, 2014, the Wireless Innovation Forum announced the approval of a charter for a new Spectrum Sharing Committee focused on developing industry standards for the 3.5 GHz Band.

The Wi-Fi Alliance states that, while industry groups may play an important role in guiding coexistence matters in the 3.5 GHz Band, the Commission should take an active role in developing spectrum management tools for the band.

*Discussion.* As we stated in the *FNPRM*, we believe that a multi-stakeholder group focused on the complex technical issues raised by this proceeding could provide us with a wealth of valuable insights and useful information. A broad-based group incorporating wireless carriers, network equipment manufacturers, potential SAS Administrators, satellite operators, existing 3650–3700 MHz band licensees, and other parties with an interest in the 3.5 GHz Band could be instrumental in developing answers to some of the novel technical questions raised by the Citizens Broadband Radio Service rules. We hope that any such group would work collaboratively towards innovative solutions that would encourage the rapid development of the Citizens

Broadband Radio Service, protect valuable incumbent operations, and benefit all potential stakeholders in the band. We do not, however, take a position on the exact scope, makeup, or organizational structure of any such working group.

At this time, we also decline to adopt a specific process for reviewing and responding to recommendations made by such a forum. We encourage working group participants to share their findings with the Commission and to incorporate their work, to the extent feasible, into the development of CBSDs, SASs, and ESC components. We also believe that the insights provided by any such working group could be informative during the SAS Administrator approval process.

#### IV. Procedural Matters

##### A. *Ex Parte* Presentations

This proceeding shall continue to be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with Section 1.1206(b). In proceedings governed by Section 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system

available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

We note that our *ex parte* rules provide for a conditional exception for all *ex parte* presentations made by NTIA or Department of Defense representatives. This proceeding raises significant technical issues implicating federal and non-federal spectrum allocations and users. Staff from NTIA, DoD, and the FCC have engaged in technical discussions in the development of this *Report and Order*, and we anticipate these discussions will continue after this *Report and Order* is released. These discussions will benefit from an open exchange of information between agencies, and may involve sensitive information regarding the strategic federal use of the 3.5 GHz Band. Recognizing the value of federal agency collaboration on the technical issues raised in this *Report and Order*, NTIA's shared jurisdiction over the 3.5 GHz Band, the importance of protecting federal users in the 3.5 GHz Band from interference, and the goal of enabling spectrum sharing to help address the ongoing spectrum capacity crunch, we find that this exemption serves the public interest.

#### B. Comment Filing Procedures

Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.

- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the

Commission's Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington DC 20554.

**People with Disabilities:** To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

#### C. Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) and an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules adopted and proposed in this document, respectively. The FRFA is set forth in Appendix B. The IRFA is set forth in Appendix C. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this *Report and Order* as set forth on the first page of this document, and have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the *Report and Order* and FRFA (or summaries thereof) will be published in the **Federal Register**.

#### D. Paperwork Reduction Act

The *Report and Order* contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to

comment on the new information collection requirements contained in this proceeding.

#### E. Congressional Review Act

The Commission will send a copy of this *Report and Order* in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA), see 5 U.S.C. 801(a)(1)(A).

#### V. Ordering Clauses

Accordingly, *it is ordered*, pursuant to Sections 1, 2, 4(i), 4(j), 5(c), 302a, 303, 304, 307(e), and 316 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 154(j), 155(c), 302a, 303, 304, 307(e), and 316, that this *Report and Order* in GN Docket No. 12-354 *is adopted* and shall become effective thirty (30) days after publication of the text or summary thereof in the **Federal Register**, except for those rules and requirements that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act, which shall become effective after the Commission publishes a notice in the **Federal Register** announcing such approval and the relevant effective date.

*It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, shall send a copy of this *Report and Order*, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

*It is further ordered*, that the freeze on acceptance of applications with respect to new earth stations in the fixed-satellite service imposed in the 3.5 GHz NPRM is lifted, effective thirty (30) days after publication of the text or summary of this *Report and Order*, in the **Federal Register**.

#### Final Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities by the policies and rules adopted in this *Report and Order* (R&O). The Commission will send a copy of this R&O, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the R&O and FRFA (or summaries thereof) will be published in the **Federal Register**.

As required by the RFA (See 5 U.S.C. 603), the Commission incorporated an



Initial Regulatory Flexibility Analysis (IRFA) in the *Notice of Proposed Rulemaking and Order (NPRM)* and *Further Notice of Proposed Rulemaking (FNPRM)*. The Commission sought written public comment on the proposals in the *NPRM* and *FNPRM*, including comment on the IRFA. No comments were filed addressing the IRFA. This present FRFA conforms to the RFA (See 5 U.S.C. 604.)

#### A. Need for, and Objectives of, the Rules

In the *R&O*, the Commission adopted rules for commercial use of 150 megahertz in the 3550–3700 MHz band (3.5 GHz Band). The 3.5 GHz Band is currently used for Department of Defense Radar services and commercial fixed Satellite Service (FSS) earth stations (space-to-earth). The creation of a new Citizens Broadband Radio Service in this band will add much-needed capacity to meet the ever-increasing demands of wireless innovation. As such, it represents a major contribution toward the Commission's goal of making 500 megahertz newly available for broadband use and will help to unleash broadband opportunities for consumers throughout the country, particularly in areas with overburdened spectrum resources.

The *R&O* also adopts a new approach to spectrum management, which makes use of advances in computing technology to facilitate more intensive spectrum sharing: Between commercial and federal users and among multiple tiers of commercial users. This three-tiered sharing framework is enabled by a Spectrum Access System (SAS). The SAS incorporates a dynamic spectrum database and interference mitigation techniques to manage all three tiers of authorized users (Incumbent Access, Priority Access, and General Authorized Access (GAA)). The SAS thus serves as an advanced, highly automated frequency coordinator across the band—protecting higher tier users from those beneath and optimizing frequency use to allow maximum capacity and coexistence in the band.

Incumbent users represent the highest tier in the new 3.5 GHz framework and receive interference protection from Citizens Broadband Radio Service users. Protected incumbents include the federal operations described above, as well as FSS and, for a finite period, grandfathered terrestrial wireless operations in the 3650–3700 MHz portion of the band. The Citizens Broadband Radio Service itself consists of two tiers—Priority Access and GAA—both authorized in any given location and frequency by an SAS. As the name suggests, Priority Access operations

receive protection from GAA operations. Priority Access Licenses, defined as an authorization to use a 10 megahertz channel in a single census tract for three years, will be assigned in up to 70 megahertz of the 3550–3650 MHz portion of the band. GAA will be allowed, by rule, throughout the 150 megahertz band. GAA users will receive no interference protection from other Citizens Broadband Radio Service users. In general, under this three-tiered licensing framework incumbent users would be able to operate on a fully protected basis, while the technical benefits of small cells are leveraged to facilitate innovative and efficient uses in the 3.5 GHz Band.

As a result of the Commission's actions in the *R&O*, small business will have access to spectrum that is currently unavailable to them. The potential uses for this spectrum are vast. For example, wireless carriers can deploy small cells on a GAA basis where they need additional capacity. Real estate owners can deploy neutral host systems in high-traffic venues, allowing for cost-effective network sharing among multiple wireless providers and their customers. Manufacturers, utilities, and other large economic sectors, can construct private wireless broadband networks to automate industrial processes that require some measure of interference protection and yet are not appropriately outsourced to a commercial cellular network. All of these applications can potentially share common wireless technologies, providing economies of scale and facilitating intensive use of the spectrum. The Commission's actions in the *R&O* thus constitute a significant benefit for small businesses.

In the *R&O*, the Commission also adopted its supplemental proposal to integrate the 3650–3700 MHz band within the Citizens Broadband Radio Service, thereby encompassing an additional 50 megahertz of contiguous spectrum. The Commission currently licenses the 3650–3700 MHz band on a non-exclusive basis, with protections for incumbent FSS operations. Smart grid, rural broadband, small cell backhaul, and other point-to-multipoint networks will enjoy three times more bandwidth than was available under our previous 3650–3700 MHz band rules. The adoption of the supplemental proposal will promote spectrum efficiency and availability, as well as economies of scale for equipment across the full 150 MHz band.

#### B. Legal Basis

The actions are authorized under Sections 1, 2, 4(i), 4(j), 5(c), 302a, 303, 304, 307(e), and 316 of the

Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 154(j), 155(c), 302a, 303, 304, 307(e), and 316.

#### C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules and policies, if adopted (5 U.S.C. 603(b)(3)). The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction (5 U.S.C. 601(6)).” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act (5 U.S.C. 601(3)). A “small business concern” is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA (15 U.S.C. 632).

*Small Businesses, Small Organizations, and Small Governmental Jurisdictions.* Our action may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards that encompass entities that could be directly affected by the proposals under consideration (5 U.S.C. 601(3)–(6)). As of 2010, there were 27.9 million small businesses in the United States, according to the SBA. Additionally, a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field (5 U.S.C. 601(4)).” Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand (5 U.S.C. 601(5)).” Census Bureau data for 2007 indicate that there were 89,527 governmental jurisdictions in the United States. We estimate that, of this total, as many as 88,761 entities may qualify as “small governmental jurisdictions.” Thus, we estimate that most governmental jurisdictions are small.

*Wireless Telecommunications Carriers (except satellite).* This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.

Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services. The appropriate size standard under SBA rules is for the category Wireless Telecommunications Carriers. The size standard for that category is that a business is small if it has 1,500 or fewer employees (13 CFR 121.201, NAICS code 517210). Census Bureau data for 2007, show that there were 1,383 firms in this category that operated for the entire year. Of this total, 1,368 had employment of 999 or fewer, and 15 firms had employment of 1,000 employees or more. Thus, under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our actions.

*Satellite Telecommunications and All Other Telecommunications.* Satellite telecommunications service providers include satellite and earth station operators. Since 2007, the SBA has recognized two census categories for satellite telecommunications firms: "Satellite Telecommunications" and "Other Telecommunications." Under the "Satellite Telecommunications" category, a business is considered small if it had \$32.5 million or less in annual receipts (13 CFR 121.201, NAICS code 517410). Under the "Other Telecommunications" category, a business is considered small if it had \$32.5 million or less in annual receipts (13 CFR 121.201, NAICS code 517919).

The first category of Satellite Telecommunications "comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." For this category, Census Bureau data for 2007 show that there were a total of 512 satellite communications firms that operated for the entire year. Of this total, 482 firms had annual receipts of under \$25 million.

The second category of Other Telecommunications is comprised of entities "primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities

connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry." For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year (13 CFR 121.201, NAICS code 517919). Of this total, 2,346 firms had annual receipts of under \$25 million. We anticipate that some of these "Other Telecommunications firms," which are small entities, are earth station applicants/licenses that might be affected by our rule changes.

While, our rule changes may have an impact on earth and space station applicants and licensees, space station applicants and licensees rarely qualify under the definition of a small entity. Generally, space stations cost hundreds of millions of dollars to construct, launch and operate. Consequently, we do not anticipate that any space station operators are small entities that would be affected by our actions.

*Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: Transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA has developed a small business size standard for firms in this category, which is: All such firms having 750 or fewer employees (13 CFR 121.201, NAICS code 334220). According to Census Bureau data for 2010, there were a total of 810 establishments in this category that operated for the entire year. Of this total, 787 had employment of under 500, and an additional 23 had employment of 500 to 999. Thus, under this size standard, the majority of firms can be considered small.

*3650–3700 MHz Band Licensees.* In March 2005, the Commission released an order providing for the nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (*i.e.*, 3650–3700 MHz). As of April 2010, more than 1270 licenses have been granted and more than 7433 sites have

been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

#### *D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities*

Under the new rules, Citizens Broadband Radio Services Devices (CBSDs) must comply with technical and operational requirements aimed at preventing interference to Incumbent Access and Priority Access users, including: Complying with technical parameters (*e.g.*, power and unwanted emissions limits) and specific deployment conditions; reporting location information to an SAS as part of initial registration by a professional installer; having the ability to operate across all frequencies from 3550–3700 MHz; having the ability to measure and report on their local interference levels; and incorporating security features to protect against modification of software and firmware by unauthorized parties, and to protect communication data that are exchanged between CBSDs and End User Devices. Under the new rules, End User Devices must operate under the power and control of an SAS-authorized CBSD and contain security features to protect against modification of software and firmware by unauthorized parties. The new rules require Citizens Broadband Radio Service users to meet certain qualification requirements, designate whether they will provide service on a common carrier or non-common carrier basis, and register their devices with an SAS.

In the *R&O*, the Commission adopted a number of measures to protect Incumbent operators. To protect incumbent federal users, the Commission established Exclusion Zones and Protection Zones to ensure compatibility between Federal Incumbent Users and Citizens Broadband Radio Service users. In addition, Fixed Satellite Service Earth Stations in the 3600–3650 MHz Band and the 3700–4200 MHz Band will be afforded protection from harmful interference from CBSDs under the new rules if they register with the Commission annually. Likewise, Grandfathered Wireless Broadband Providers in the 3650–3700 MHz Band must register their frequency usage with an SAS in order to receive protection from harmful interference during their grandfathered period.



In addition, the Commission adopted its supplemental proposal to incorporate the 3650–3700 MHz band into the Citizens Broadband Radio Service. Accordingly, small businesses operating in this band must transition from the current non-exclusive nationwide licensing approach to the Citizens Broadband Radio Service licensing framework. Recognizing that this transition would likely entail additional costs and administrative burdens, the Commission adopted enhanced protections for Grandfathered Wireless Broadband Providers in the 3650–3700 MHz Band. First, the Commission determined not to allow Priority Access use in the 3650–3700 MHz band segment; this means that this portion of the band will continue to be licensed on a non-exclusive basis, and thus will continue to be available on a non-exclusive basis to former part 90 incumbents. Second, the Commission adopted technical rules for Category B CBSDs, which will accommodate existing 3650–3700 MHz network deployments and, in fact, will increase technical flexibility in rural areas. Third, the Commission exempted equipment already deployed under preexisting rules in part 90, subpart Z of this chapter from the band-wide operability requirement. This exemption will allow 3650–3700 MHz users to continue operating under the new 3.5 GHz Band rules, without need to retrofit or abandon their existing equipment. Fourth, defining a CBSD in a flexible way to encompass a *network* of base stations should allow legacy network equipment to interact with the SAS at relatively low cost, through the addition of a proxy controller device. The Commission believes that it has made necessary and appropriate rule accommodations to allow prior existing 3650–3700 MHz licensees to continue operations in the band under a framework that provides access to greater spectrum that may better meet their needs in the long run. To the extent that the Commission may have overlooked any technical obstacles to achieving this goal, part 90 incumbents may avail themselves of the Commission's waiver process on a case-by-case basis.

While our proposals require small businesses to register with an SAS and comply with the rules established for the Citizens Broadband Radio Service, they will receive the ability to access spectrum that is currently unavailable to them. On balance, this would constitute a significant benefit for small business.

#### *E. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered*

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities (5 U.S.C. 604(a)(6)).

The reporting, recordkeeping, and other compliance requirements resulting from the *R&O* will apply to all entities in the same manner. The Commission believes that applying the same rules equally to all entities in this context promotes fairness. The Commission does not believe that the costs and/or administrative burdens associated with the rules will unduly burden small entities. The rules the Commission adopts should benefit small entities by giving them more information, more flexibility, and more options for gaining access to valuable wireless spectrum. Specifically, the hybrid framework adopted in the *R&O* leverages advances in computing technology and economics to select, automatically, the best approach based on local conditions. Where competitive rivalry for spectrum access is low, the General Authorized Access tier provides a low-cost mode of access, similar to unlicensed uses. Where rivalry is high, an auction resolves mutually exclusive applications in specific geographic areas for Priority Access Licenses. Finite-term licensing facilitates evolution of the band and an ever-changing mix of General Authorized Access and Priority Access bandwidth over time.

#### *F. Federal Rules That May Duplicate, Overlap, or Conflict With the Final Rules*

None.

#### *G. Report to Congress*

The Commission will send a copy of the *Report and Order*, including the FRFA, in a report to Congress pursuant to the Congressional Review Act (*See* 5 U.S.C. 801(a)(1)(A)). In addition, the Commission will send a copy the *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of this

*Report and Order* and FRFA (or summaries thereof) will be published in the **Federal Register** (5 U.S.C. 604(b)).

#### **List of Subjects**

##### *47 CFR Part 0*

Administrative practice and procedure, Telecommunications.

##### *47 CFR Part 1*

Administrative practice and procedure, Communications common carriers, Telecommunications.

##### *47 CFR Part 2*

Communications equipment, Telecommunications.

##### *47 CFR Part 90*

Business and industry.

##### *47 CFR Part 95*

Radio.

##### *47 CFR Part 96*

Telecommunications, Radio.  
Federal Communications Commission.

**Gloria J. Miles,**

*Federal Register Liaison Officer.*

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 0, 1, 2, 90, 95 and 96 as follows:

#### **PART 0—COMMISSION ORGANIZATION**

■ 1. The authority citation for part 0 continues to read as follows:

**Authority:** Sec. 5, 48 Stat. 1068, as amended; 47 U.S.C. 155, 225, unless otherwise noted.

■ 2. Section 0.241 is amended by adding paragraph (j) to read as follows:

##### **§ 0.241 Authority delegated.**

\* \* \* \* \*

(j) The Chief of the Office of Engineering and Technology is delegated authority jointly with the Chief of the Wireless Telecommunications Bureau to administer the Spectrum Access System (SAS) and SAS Administrator functions set forth in part 96 of this chapter. The Chief is delegated authority to develop specific methods that will be used to designate SAS Administrators; to designate SAS Administrators; to develop procedures that these SAS Administrators will use to ensure compliance with the requirements for SAS operation; to make determinations regarding the continued acceptability of individual SAS Administrators; and to perform other functions as needed for the administration of the SAS. The Chief is delegated the authority to

perform these same functions with regard to the Environmental Sensing Capability.

- 3. Section 0.331 is amended by adding paragraph (f) to read as follows:

§ 0.331 Authority delegated.

\* \* \* \* \*

(f) The Chief of the Wireless Telecommunications Bureau is delegated authority jointly with the Chief of the Office of Engineering and Technology to administer the Spectrum Access System (SAS) and SAS Administrator functions set forth in part 96 of this chapter. The Chief is delegated authority to develop specific methods that will be used to designate SAS Administrators; to designate SAS Administrators; to develop procedures that these SAS Administrators will use to ensure compliance with the requirements for SAS operation; to make determinations regarding the continued acceptability of individual SAS Administrators; and to perform other functions as needed for the administration of the SAS. The Chief is delegated the authority to perform these same functions with regard to the Environmental Sensing Capability.

PART 1—PRACTICE AND PROCEDURE

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

Authority: 15 U.S.C. 79, et seq.; 47 U.S.C. 151, 154(i), 154(j), 155, 157, 160, 201, 225, 227, 303, 309, 332, 1403, 1404, 1451, 1452, and 1455.

- 5. Section 1.901 is revised to read as follows:

§ 1.901 Basis and purpose.

The rules in this subpart are issued pursuant to the Communications Act of 1934, as amended, 47 U.S.C. 151 et seq. The purpose of the rules in this subpart is to establish the requirements and conditions under which entities may be licensed in the Wireless Radio Services as described in this part and in parts 13, 20, 22, 24, 26, 27, 74, 80, 87, 90, 95, 96, 97 and 101 of this chapter.

- 6. Section 1.902 is revised to read as follows:

§ 1.902 Scope.

In case of any conflict between the rules set forth in this subpart and the rules set forth in parts 13, 20, 22, 24, 26, 27, 74, 80, 87, 90, 95, 96, 97, and 101 of title 47, chapter I of the Code of Federal Regulations, the rules in part 1 shall govern.

- 7. Section 1.907 is amended by revising the definitions to “Private Wireless Services,” “Wireless Radio Services,” and “Wireless Telecommunications Services” to read as follows:

§ 1.907 Definitions.

\* \* \* \* \*

Private Wireless Services. Wireless Radio Services authorized by parts 80, 87, 90, 95, 96, 97, and 101 that are not Wireless Telecommunications Services, as defined in this part.

\* \* \* \* \*

Wireless Radio Services. All radio services authorized in parts 13, 20, 22, 24, 26, 27, 74, 80, 87, 90, 95, 96, 97 and 101 of this chapter, whether commercial or private in nature.

Wireless Telecommunications Services. Wireless Radio Services, whether fixed or mobile, that meet the definition of “telecommunications service” as defined by 47 U.S.C. 153, as amended, and are therefore subject to regulation on a common carrier basis. Wireless Telecommunications Services include all radio services authorized by parts 20, 22, 24, 26, and 27 of this chapter. In addition, Wireless Telecommunications Services include Public Coast Stations authorized by part 80 of this chapter, Commercial Mobile Radio Services authorized by part 90 of this chapter, common carrier fixed microwave services, Local Television Transmission Service (LTTS), Local Multipoint Distribution Service (LMDS), and Digital Electronic Message Service (DEMS), authorized by part 101 of this chapter, and Citizens Broadband Radio Services authorized by part 96 of this chapter.

- 8. Section 1.1307 is amended by revising paragraph (b)(2)(i) to read as follows:

§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

\* \* \* \* \*

(b) \* \* \*

(2)(i) Mobile and portable transmitting devices that operate in the Commercial Mobile Radio Services pursuant to part 20 of this chapter; the Cellular Radiotelephone Service pursuant to part 22 of this chapter; the Personal Communications Services (PCS) pursuant to part 24 of this chapter; the Satellite Communications Services pursuant to part 25 of this chapter; the Miscellaneous Wireless Communications Services pursuant to part 27 of this chapter; the Maritime Services (ship earth stations only) pursuant to part 80 of this chapter; the Specialized Mobile Radio Service, the 4.9 GHz Band Service, or the 3650 MHz Wireless Broadband Service pursuant to part 90 of this chapter; the Wireless Medical Telemetry Service (WMTS), or the Medical Device Radiocommunication Service (MedRadio) pursuant to part 95 of this chapter; or the Citizens Broadband Radio Service pursuant to part 96 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in §§ 2.1091 and 2.1093 of this chapter.

\* \* \* \* \*

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

- 9. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

- 10. Section 2.106, the Table of Frequency Allocations, is amended as follows:

■ a. Revise pages 39–40.

■ b. In the list of United States (US) Footnotes, add footnotes US105, US107, and US433 in alphanumerical order, and revise footnote US109.

The revisions and additions read as follows:

§ 2.106 Table of frequency allocations.

\* \* \* \* \*

International Table			United States Table		FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
2655-2670 FIXED 5.410 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.208B 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2670 FIXED 5.410 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2670 FIXED 5.410 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2690 Earth exploration-satellite (passive) Radio astronomy US385 Space research (passive)	2655-2690 FIXED US205 MOBILE except aeronautical mobile Earth exploration-satellite (passive) Radio astronomy Space research (passive)	Wireless Communications (27)
5.149 5.412	5.149 5.208B	5.149 5.208B 5.420			
2670-2690 FIXED 5.410 MOBILE except aeronautical mobile 5.384A Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2670-2690 FIXED 5.410 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.208B 5.415 MOBILE except aeronautical mobile 5.384A Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2670-2690 FIXED 5.410 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) 5.351A 5.419 Earth exploration-satellite (passive) Radio astronomy Space research (passive)			
5.149 5.412	5.149	5.149	US205	US385	
2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)			2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive)		
5.340 5.422			US246		
2700-2900 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation			2700-2900 METEOROLOGICAL AIDS AERONAUTICAL RADIONAVIGATION 5.337 US18 Radiolocation G2	2700-2900	Aviation (87)
5.423 5.424			5.423 G15	5.423 US18	
2900-3100 RADIOLOCATION 5.424A RADIONAVIGATION 5.426			2900-3100 RADIOLOCATION 5.424A G56 MARITIME RADIONAVIGATION	2900-3100 MARITIME RADIONAVIGATION Radiolocation US44	Maritime (80) Private Land Mobile (90)
5.425 5.427			5.427 US44 US316	5.427 US316	
3100-3300 RADIOLOCATION Earth exploration-satellite (active) Space research (active)			3100-3300 RADIOLOCATION G59 Earth exploration-satellite (active) Space research (active)	3100-3300 Earth exploration-satellite (active) Space research (active) Radiolocation	Private Land Mobile (90)
5.149 5.428			US342	US342	
3300-3400 RADIOLOCATION	3300-3400 RADIOLOCATION Amateur Fixed Mobile	3300-3400 RADIOLOCATION Amateur	3300-3500 RADIOLOCATION US108 G2	3300-3500 Amateur Radiolocation US108	Private Land Mobile (90) Amateur Radio (97)
5.149 5.429 5.430	5.149	5.149 5.429			

3400-3600 FIXED FIXED-SATELLITE (space-to-Earth) Mobile 5.430A Radiolocation	3400-3500 FIXED FIXED-SATELLITE (space-to-Earth) Amateur Mobile 5.431A Radiolocation 5.433  5.282	3400-3500 FIXED FIXED-SATELLITE (space-to-Earth) Amateur Mobile 5.432B Radiolocation 5.433  5.282 5.432 5.432A			
5.431 3600-4200 FIXED FIXED-SATELLITE (space-to-Earth) Mobile	3500-3700 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation 5.433	3500-3600 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.433A Radiolocation 5.433	3500-3550 RADIOLOCATION G59 AERONAUTICAL RADIONAVI- GATION (ground-based) G110	3500-3550 Radiolocation	Private Land Mobile (90)
		3600-3700 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation 5.433	3550-3650 RADIOLOCATION G59 AERONAUTICAL RADIONAVI- GATION (ground-based) G110	3550-3600 FIXED MOBILE except aeronautical mobile US105 US433	Citizens Broadband (96)
		5.435	US105 US107 US245 US433	3600-3650 FIXED FIXED-SATELLITE (space-to-Earth) US107 US245 MOBILE except aeronautical mobile US105 US433	Satellite Communications (25) Citizens Broadband (96)
	3700-4200 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile		3650-3700	3650-3700 FIXED FIXED-SATELLITE (space-to-Earth) NG169 NG185 MOBILE except aeronautical mobile US109 US349	
			US109 US349	3700-4200 FIXED FIXED-SATELLITE (space-to-Earth) NG180	Satellite Communications (25) Fixed Microwave (101)
4200-4400 AERONAUTICAL RADIONAVIGATION 5.438 5.439 5.440			4200-4400 AERONAUTICAL RADIONAVIGATION 5.440 US261		Aviation (87)
4400-4500 FIXED MOBILE 5.440A			4400-4500 FIXED MOBILE	4400-4500	
4500-4800 FIXED FIXED-SATELLITE (space-to-Earth) 5.441 MOBILE 5.440A			4500-4800 FIXED MOBILE US245	4500-4800 FIXED-SATELLITE (space-to-Earth) 5.441 US245	
4800-4990 FIXED MOBILE 5.440A 5.442 Radio astronomy			4800-4940 FIXED MOBILE US203 US342 4940-4990	4800-4940  US203 US342 4940-4990 FIXED MOBILE except aeronautical mobile	Public Safety Land Mobile (90Y)
5.149 5.339 5.443			5.339 US342 US385 G122	5.339 US342 US385	Page 40

\* \* \* \* \*

**United States (US) Footnotes**

\* \* \* \* \*

US105 In the band 3550–3650 MHz, non-Federal stations in the radiolocation service that were licensed or applied for prior to July 23, 2015 may continue to operate on a secondary basis until the end of the equipment’s useful lifetime.

US107 In the band 3600–3650 MHz, the following provisions shall apply to earth stations in the fixed-satellite service (space-to-Earth):

(a) Earth stations authorized prior to, or granted as a result of an application filed prior to, July 23, 2015 and constructed within 12 months of initial authorization may continue to operate on a primary basis. Applications for modifications to such earth station facilities filed after July 23, 2015 shall not be accepted, except for changes in polarization, antenna orientation, or ownership; and increases in antenna size for interference mitigation purposes.

(b) The assignment of frequencies to new earth stations after July 23, 2015 shall be authorized on a secondary basis.

US109 The band 3650–3700 MHz is also allocated to the Federal radiolocation service on a primary basis at the following sites: St. Inigoes, MD (38°10’ N, 76°23’ W); Pascagoula, MS (30°22’ N, 88 29’ W); and Pensacola, FL (30°21’28” N, 87°16’26” W). The FCC shall coordinate all non-Federal operations authorized under 47 CFR part 90 within 80 km of these sites with NTIA on a case-by-case basis. For stations in the Citizens Broadband Radio Service these sites shall be protected consistent with the procedures set forth in 47 CFR 96.15(b) and 96.67.

\* \* \* \* \*

US433 In the band 3550–3650 MHz, the following provisions shall apply to Federal use of the aeronautical radionavigation (ground-based) and radiolocation services and to non-Federal use of the fixed and mobile except aeronautical mobile services:

(a) Non-Federal stations in the fixed and mobile except aeronautical mobile services are restricted to stations in the Citizens Broadband Radio Service and shall not cause harmful interference to, or claim protection from, Federal stations in the aeronautical radionavigation (ground-based) and radiolocation services at the locations listed at: *ntia.doc.gov/category/3550-3650-mhz*. New and modified federal stations shall be allowed at current or new locations, subject only to approval

through the National Telecommunications and Information Administration frequency assignment process with new locations added to the list at: *ntia.doc.gov/category/3550-3650-mhz*. Coordination of the Federal stations with Citizens Broadband Radio Service licensees or users is not necessary. Federal operations, other than airborne radiolocation systems, shall be protected consistent with the procedures set forth in 47 CFR 96.15 and 96.67.

(b) Non-federal fixed and mobile stations shall not claim protection from federal airborne radar systems.

(c) Federal airborne radar systems shall not claim protection from non-Federal stations in the fixed and mobile except aeronautical mobile services operating in the band.

\* \* \* \* \*

■ 11. Section 2.1091 is amended by revising paragraph (c)(1) introductory text to read as follows:

**§2.1091 Radiofrequency radiation exposure evaluation: Mobile devices.**

\* \* \* \* \*

(c)(1) Mobile devices that operate in the Commercial Mobile Radio Services pursuant to part 20 of this chapter; the Cellular Radiotelephone Service pursuant to part 22 of this chapter; the Personal Communications Services pursuant to part 24 of this chapter; the Satellite Communications Services pursuant to part 25 of this chapter; the Miscellaneous Wireless Communications Services pursuant to part 27 of this chapter; the Maritime Services (ship earth station devices only) pursuant to part 80 of this chapter; the Specialized Mobile Radio Service, and the 3650 MHz Wireless Broadband Service pursuant to part 90 of this chapter; and the Citizens Broadband Radio Service pursuant to part 96 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if:

\* \* \* \* \*

■ 12. Section 2.1093 is amended by revising paragraph (c)(1) to read as follows:

**§2.1093 Radiofrequency radiation exposure evaluation: portable devices.**

\* \* \* \* \*

(c)(1) Portable devices that operate in the Cellular Radiotelephone Service pursuant to part 22 of this chapter; the Personal Communications Service (PCS) pursuant to part 24 of this chapter; the Satellite Communications Services pursuant to part 25 of this chapter; the Miscellaneous Wireless Communications Services pursuant to

part 27 of this chapter; the Maritime Services (ship earth station devices only) pursuant to part 80 of this chapter; the Specialized Mobile Radio Service, the 4.9 GHz Band Service, and the 3650 MHz Wireless Broadband Service pursuant to part 90 of this chapter; the Wireless Medical Telemetry Service (WMTS) and the Medical Device Radiocommunication Service (MedRadio), pursuant to subparts H and I of part 95 of this chapter, respectively, unlicensed personal communication service, unlicensed NII devices and millimeter wave devices authorized under §§ 15.253(f), 15.255(g), 15.257(g), 15.319(i), and 15.407(f) of this chapter; and the Citizens Broadband Radio Service pursuant to part 96 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use.

\* \* \* \* \*

**PART 90—PRIVATE LAND MOBILE RADIO SERVICES**

■ 13. The authority citation for part 90 continues to read as follows:

**Authority:** Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7), and Title VI of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112–96, 126 Stat. 156.

■ 14. Section 90.103 is amended by:  
 ■ a. Removing the “3500 to 3650” entry and adding new “3500 to 3550” and “3550 to 3650” entries in numerical order in the Megahertz portion of the Radiolocation Service Frequency Table in paragraph (b).

■ b. Revising paragraph (c)(30).  
 The additions and revision read as follows:

**§ 90.103 Radiolocation Service.**

\* \* \* \* \*

(b) \* \* \*

**RADIOLOCATION SERVICE FREQUENCY TABLE**

Frequency or band	Class of station(s)	Limitation
<b>Kilohertz</b>		
* * * * *	* * * * *	* * * * *
<b>Megahertz</b>		
3500 to 3550 ....	.....do .....	12
3550 to 3650 ....	.....do .....	30
* * * * *	* * * * *	* * * * *

(c) \* \* \*

(30) This frequency band is shared with and is on a secondary basis to the Government Radiolocation Service, the Fixed Satellite Service (part 25), and the Citizens Broadband Radio Service (part 96). No new licenses for Non-Federal Radiolocation Services in this band will be issued after July 23, 2015.

\* \* \* \* \*

■ 15. Section 90.1307 is revised to read as follows:

**§ 90.1307—Licensing.**

(a) The 3650–3700 MHz band is licensed on the basis of non-exclusive nationwide licenses. Non-exclusive nationwide licenses will serve as a prerequisite for registering individual fixed and base stations. A licensee cannot operate a fixed or base station before registering it under its license and licensees must delete registrations for unused fixed and base stations.

(b) The Commission shall issue no new licenses or license renewals under this section after April 17, 2015, except as specified in paragraph (c) of this section.

(c) If a license issued under this Section expires between April 17, 2015 and April 17, 2020, the licensee may request a one-time renewal and the Commission may renew that license for a term ending no later than April 17, 2020.

(d) Licenses that were issued after January 8, 2013 will be afforded protection from harmful interference from Citizens Broadband Radio Service users pursuant to § 90.1338 until April 17, 2020 regardless of their expiration date.

■ 16. Section 90.1311 is revised to read as follows:

**§ 90.1311 License term.**

The license term is ten years, except as set forth in § 90.1307, beginning on the date of the initial authorization (non-exclusive nationwide license) grant. Registering fixed and base stations will not change the overall renewal period of the license.

■ 17. Section 90.1331 is amended by revising paragraph (b)(1) and the Note to paragraph (b)(1) to read as follows:

**§ 90.1331 Restrictions on the operation of base and fixed stations.**

\* \* \* \* \*

(b)(1) Except as specified in paragraph (b)(2) of this section, base and fixed stations may not be located within 80 km of the following Federal Government radiolocation facilities:  
St. Inigoes, MD—38° 10' N., 76°, 23' W  
Pensacola, FL—30° 21' 28" N., 87°, 16' 26" W  
Pascagoula, MS—30° 22' N, 88° 29' W

**Note to paragraph (b)(1):** Licensees installing equipment in the 3650–3700 MHz band should determine if there are any nearby Federal Government radar systems that could affect their operations. Information regarding the location and operational characteristics of the radar systems operating adjacent to this band are provided in NTIA TR-99-361.

\* \* \* \* \*

■ 18. Section 90.1338 is added to read as follows:

**§ 90.1338 Grandfathered operation and transition to Citizens Broadband Radio Service.**

(a) Fixed and base station registrations filed in ULS on or before April 17, 2015 that are constructed, in service, and fully compliant with the rules in part 90, subpart Z as of April 17, 2016 will be afforded protection from harmful interference caused by Citizens Broadband Radio Service users until the end of their license term (with one exception that fixed and base stations registered under licenses issued after January 8, 2013 will only be afforded protection until April 17, 2020), consistent with § 90.1307. Protection criteria for such registered base stations are described in § 96.21 of this chapter. Registrations originally filed after April 17, 2015 will only be afforded protection from harmful interference under this section within the licensee's Grandfathered Wireless Protection Zone, as defined in §§ 96.3 and 96.21 of this chapter.

(b) Existing licensees as of April 17, 2015 may add new mobile or portable stations (as defined in § 90.1333) and/or add new subscriber units that operate above the power limit defined in § 90.1333, only if they can positively receive and decode an enabling signal from a base station. Such units will be afforded protection within the licensee's Grandfathered Wireless Protection Zone (as defined in §§ 96.3 and 96.21 of this chapter) until April 17, 2020 or until the end of their license term, whichever is later (with one exception that mobile and portable stations associated with licenses issued after January 8, 2013 will only be afforded protection until April 17, 2020).

**PART 95—PERSONAL RADIO SERVICES**

■ 19. The authority citation for part 95 continues to read as follows:

**Authority:** 47 U.S.C. 154, 301, 302(a), 303, and 307(e).

■ 20. Section 95.401 is amended by adding paragraph (h) to read as follows:

**§ 95.401 (CB Rule 1) What are Citizens Band Radio Services?**

\* \* \* \* \*

(h) Citizens Broadband Radio Service—The rules for this service, including technical rules, are contained in part 96 of this chapter. Only Citizens Broadband Radio Service Devices authorized on a General Authorized Access basis, as those terms are defined in § 96.3, are considered part of the Citizens Band Radio Services.

■ 21. Section 95.601 is revised to read as follows:

**§ 95.601 Basis and purpose.**

This section provides the technical standards to which each transmitter (apparatus that converts electrical energy received from a source into RF (radio frequency) energy capable of being radiated) used or intended to be used in a station authorized in any of the Personal Radio Services listed below must comply. This section also provides requirements for obtaining certification for such transmitters. The Personal Radio Services to which these rules apply are the GMRS (General Mobile Radio Service)—subpart A, the Family Radio Service (FRS)—subpart B, the R/C (Radio Control Radio Service)—subpart C, the CB (Citizens Band Radio Service)—subpart D, the Low Power Radio Service (LPRS)—subpart G, the Wireless Medical Telemetry Service (WMTS)—subpart H, the Medical Device Radiocommunication Service (MedRadio)—subpart I, the Multi-Use Radio Service (MURS)—subpart J, and Dedicated Short-Range Communications Service On-Board Units (DSRCS—OBUs)—subpart L.

■ 22. Add part 96 to read as follows:

**PART 96—CITIZENS BROADBAND RADIO SERVICE**

**Subpart A—General Rules**

Sec.  
96.1 Scope.  
96.3 Definitions.  
96.5 Eligibility.  
96.7 Authorization required.  
96.9 Regulatory status.  
96.11 Frequencies.  
96.13 Frequency assignments.

**Subpart B—Incumbent Protection**

96.15 Protection of federal incumbent users.  
96.17 Protection of existing fixed satellite service (FSS) earth stations in the 3550–3650 MHz Band and 3700–4200 MHz Band.  
96.19 Operation near Canadian and Mexican borders.  
96.21 Protection of existing operators in the 3650–3700 MHz Band.

**Subpart C—Priority Access**

- 96.23 Authorization.
- 96.25 Priority access licenses.
- 96.27 Application window.
- 96.29 Competitive bidding procedures.
- 96.31 Aggregation of priority access licenses.

**Subpart D—General Authorized Access**

- 96.33 Authorization.
- 96.35 General authorized access use.

**Subpart E—Technical Rules**

- 96.39 Citizens Broadband Radio Service Device (CBSD) general requirements.
- 96.41 General radio requirements.
- 96.43 Additional requirements for category A CBSDs.
- 96.45 Additional requirements for category B CBSDs.
- 96.47 End user device additional requirements.
- 96.49 Equipment authorization.
- 96.51 RF safety.

**Subpart F—Spectrum Access System**

- 96.53 Spectrum access system purposes and functionality.
- 96.55 Information gathering and retention.
- 96.57 Registration, authentication, and authorization of Citizens Broadband Radio Service Devices.
- 96.59 Frequency assignment.
- 96.61 Security.
- 96.63 Spectrum access system administrators.
- 96.65 Spectrum access system administrator fees.

**Subpart G—Environmental Sensing Capability**

- 96.67 Environmental sensing capability.

**Authority:** 47 U.S.C. 154(i), 303, and 307.

**Subpart A—General Rules****§ 96.1 Scope.**

(a) This section sets forth the regulations governing use of devices in the Citizens Broadband Radio Service. Citizens Broadband Radio Service Devices (CBSDs) may be used in the frequency bands listed in § 96.11. The operation of all CBSDs shall be coordinated by one or more authorized Spectrum Access Systems (SASs).

(b) The Citizens Broadband Radio Service includes Priority Access and General Authorized Access tiers of service. Priority Access Licensees and General Authorized Access Users must not cause harmful interference to Incumbent Users and must accept interference from Incumbent Users. General Authorized Access Users must not cause harmful interference to Priority Access Licensees and must accept interference from Priority Access Licensees.

**§ 96.3 Definitions.**

The definitions in this section apply to this part.

*Census tract.* Statistical subdivisions of a county or equivalent entity that are updated prior to each decennial census as part of the Census Bureau's Participant Statistical Areas Program. Census tracts are defined by the United States Census Bureau and census tract maps can be found at <http://www.census.gov>. For purposes of this part, Census Tracts shall be defined as they were in the 2010 United States Census. The Commission may from time to time update this definition to reflect boundaries used in subsequent decennial Census definitions.

*Citizens Broadband Radio Service Device (CBSD).* Fixed Stations, or networks of such stations, that operate on a Priority Access or General Authorized Access basis in the Citizens Broadband Radio Service consistent with this rule part. For CBSDs which comprise multiple nodes or networks of nodes, CBSD requirements apply to each node even if network management and communication with the SAS is accomplished via a single network interface. End User Devices are not considered CBSDs.

(1) *Category A CBSD.* A lower power CBSD that meets the general requirements applicable to all CBSDs and the specific requirements for Category A CBSDs set forth in §§ 96.41 and 96.43.

(2) *Category B CBSD.* A higher power CBSD that meets the general requirements applicable to all CBSDs and the specific requirements for Category B CBSDs set forth in §§ 96.41 and 96.45.

*Coastline.* The mean low water line along the coast of the United States drawn according to the principles, as recognized by the United States, of the Convention on the Territorial Sea and the Contiguous Zone, 15 U.S.T. 1606, and the 1982 United Nations Convention on the Law of the Sea, 21 I.L.M. 1261.

*End user device.* A device authorized and controlled by an authorized CBSD. These devices may not be used as intermediate service links or to provide service over the frequencies listed in § 96.11 to other End User Devices or CBSDs.

*Environmental Sensing Capability (ESC).* A system that detects and communicates the presence of a signal from an Incumbent User to an SAS to facilitate shared spectrum access consistent with §§ 96.15 and 96.67.

*Exclusion zone.* A geographic area wherein no CBSD shall operate. Exclusion Zones shall be enforced and maintained by the SAS. Exclusion Zones will be converted to Protection Zones following the approval and

commercial deployment of an ESC and SAS consistent with this part.

*Fixed station.* A CBSD or End User Device that transmits and/or receives radio communication signals at a fixed location. Fixed Stations may be moved from time to time but Fixed CBSDs must turn off and re-register with the SAS prior to transmitting from a new location.

*Geo-location capability.* The capability of a CBSD to register its geographic coordinates within the level of accuracy specified in § 96.39. The CBSD location is used by the SAS to determine frequency availability and maximum transmit power limits for CBSDs.

*General Authorized Access (GAA) User.* An authorized user of one or more CBSDs operating on a General Authorized Access basis, consistent with subpart D of this part.

*Grandfathered wireless broadband licensee.* A licensee authorized to operate in the 3650–3700 MHz band consistent with § 90.1338 of this chapter.

*Grandfathered wireless protection zone.* A geographic area and frequency range in which Grandfathered Wireless Broadband Licensees will receive protection from Citizens Broadband Radio Service transmissions and defined using methodology determined by the Wireless Telecommunications Bureau and Office of Engineering and Technology.

*Incumbent user.* A federal entity authorized to operate on a primary basis in accordance with the table of frequency allocations, fixed satellite service operator, or Grandfathered Wireless Broadband Licensee authorized to operate on a primary basis on frequencies designated in § 96.11.

*License area.* The geographic component of a PAL. Each License Area consists of one Census Tract.

*Mobile station.* A device intended to be used while in motion or during halts at unspecified points.

*Portable station.* A device designed to be used within 20 centimeters of the body of the user.

*Priority Access License (PAL).* A license to operate on a Priority Access basis, consistent with subpart C of this part.

*Priority access licensee.* A holder of one or more PALs. Priority Access Licensees shall be entitled to protection from General Authorized Access Users and other Priority Access Licensees within the defined temporal, geographic, and frequency limits of their PAL, consistent with the rules set forth in this part.

*Protection zone.* A geographic area wherein CBSDs may operate only with the permission of an approved SAS and ESC.

*Rural area.* For purposes of this part, any Census Tract which is not located within, or overlapping:

(1) A city, town, or incorporated area that has a population of greater than 20,000 inhabitants; or

(2) An urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants.

*Service area.* One or more contiguous License Areas held by the same Priority Access Licensee.

*Spectrum Access System (SAS).* A system that authorizes and manages use of spectrum for the Citizens Broadband Radio Service in accordance with subpart F of this part.

*Spectrum Access System (SAS) administrator.* An entity authorized by the Commission to operate an SAS in accordance with the rules and procedures set forth in § 96.63.

#### § 96.5 Eligibility.

Any entity, other than those precluded by Section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, and otherwise meets the technical, financial, character, and citizenship qualifications that the Commission may require in accordance with such Act is eligible to be a Priority Access Licensee or General Authorized Access User under this part; provided further, that no entity barred by 47 U.S.C. 1404 is eligible to be a Priority Access Licensee.

#### § 96.7 Authorization required.

(a) CBSDs and End User Devices must be used and operated consistent with the rules in this part.

(b) Authorizations for PALs may be granted upon proper application, provided that the applicant is qualified in regard to citizenship, character, financial, technical and other criteria established by the Commission, and that the public interest, convenience and necessity will be served. See 47 U.S.C. 301, 308, 309, and 310. The holding of an authorization does not create any rights beyond the terms, conditions, and period specified in the authorization and shall be subject to the provisions of the Communications Act of 1934, as amended, and the Commission's rules and policies thereunder.

(c) Grandfathered Wireless Broadband Licensees are authorized to operate consistent with § 90.1338 of this chapter.

#### § 96.9 Regulatory status.

Priority Access Licensees and General Authorized Access Users are permitted to provide services on a non-common carrier and/or on a common carrier basis. An authorized Citizens Broadband Radio Service user may render any kind of communications service consistent with the regulatory status in its authorization and with the Commission's rules applicable to that service.

#### § 96.11 Frequencies.

(a) The Citizens Broadband Radio Service is authorized in the 3550–3700 MHz frequency band.

(1) General Authorized Access Users may operate in the 3550–3700 MHz frequency band.

(2) Priority Access Users may operate in the 3550–3650 MHz frequency band.

(3) Grandfathered Wireless Broadband Licensees may continue to use the 3650–3700 MHz band in accordance with § 90.1338 of this chapter.

(b) [Reserved]

#### § 96.13 Frequency assignments.

(a) Each PAL shall be authorized to use a 10 megahertz channel in the 3550–3650 MHz band.

(1) No more than seven PALs shall be assigned in any given License Area at any given time.

(2) Multiple channels held by the same Priority Access Licensee in a given License Area shall be assigned consistent with the requirements of § 96.25.

(3) Any frequencies designated for Priority Access that are not in use by a Priority Access Licensee may be utilized by General Authorized Access Users.

(b) The 3650–3700 MHz band shall be reserved for Grandfathered Wireless Broadband Licensees and GAA Users.

(c) An SAS shall assign authorized CBSDs to specific frequencies, which may be reassigned by that SAS, consistent with this part.

#### Subpart B—Incumbent Protection

##### § 96.15 Protection of federal incumbent users.

(a) This paragraph (a) applies only to CBSDs operating in the 3550–3650 MHz band.

(1) CBSDs and End User Devices must not cause harmful interference to and must accept interference from federal Incumbent Users authorized to operate in the 3550–3700 MHz band and below 3550 MHz.

(2) The SAS shall only authorize the use of CBSDs consistent with information on federal frequency use obtained from an approved ESC, except as provided in this section.

(3) For Category A CBSDs, Exclusion Zones shall be maintained along the Coastline, as shown at [ntia.doc.gov/category/3550-3650-mhz](http://ntia.doc.gov/category/3550-3650-mhz). Exclusion Zones shall also be maintained around federal radiolocation sites as set forth at [ntia.doc.gov/category/3550-3650-mhz](http://ntia.doc.gov/category/3550-3650-mhz). NTIA shall notify the Commission in writing if and when the list of protected federal radiolocation sites is updated. Exclusion Zones shall be maintained and enforced until one or more ESCs are approved and used by at least one SAS, in accordance with § 96.67. Thereafter, Exclusion Zones shall be converted to Protection Zones.

(i) Category A CBSDs may be authorized by an approved SAS in geographic areas outside of Exclusion Zones before an ESC is approved.

(ii) Once an ESC is approved and used by at least one SAS, Category A CBSDs may only be authorized consistent with information on federal frequency use provided to the SAS by an approved ESC.

(iii) Category B CBSDs may only be authorized consistent with information on the presence of a signal from a federal system provided to the SAS by an approved ESC.

(4) Within 60 seconds after the ESC communicates that it has detected a signal from a federal system in a given area, the SAS must either confirm suspension of the CBSD's operation or its relocation to another unoccupied frequency, if available.

(5) The Commission will, as necessary, add or modify Exclusion Zones or Protection Zones to protect current and future federal Incumbent Users.

(6) The Commission may temporarily extend or modify Exclusion Zones and Protection Zones to protect temporary operations by federal Incumbent Users. Federal Incumbent Users will coordinate with the Commission prior to the beginning of any non-emergency operation requiring additional protection. Such modifications will be communicated to the SAS along with the expiration date and time of any modification.

(b) This paragraph (b) applies to CBSDs operating in the 3650–3700 MHz band.

(1) CBSDs and End User Devices must not cause harmful interference to and must accept interference from federal Incumbent Users authorized to operate in the 3500–3700 MHz band.

(2) Exclusion Zones shall be maintained for an 80 km radius around the federal radiolocation sites listed in 47 CFR 90.1331 and 47 CFR 2.106, US 109. These Exclusion Zones shall be maintained and enforced until one or



more ESCs are approved and used by at least one SAS, in accordance with § 96.67. Thereafter, Exclusion Zones shall be converted to Protection Zones.

(3) CBSDs may only be authorized within these Protection Zones consistent with information on the presence of a signal from a federal system provided to the SAS by an approved ESC, in accordance with § 96.67.

(4) Within 60 seconds after the ESC communicates that it has detected a signal from a federal system in a given area, the SAS must either confirm suspension of the CBSD's operation or its relocation to another unoccupied frequency.

**§ 96.17 Protection of existing fixed satellite service (FSS) earth stations in the 3600–3650 MHz Band and 3700–4200 MHz Band.**

(a) CBSDs shall protect the FSS earth stations authorized to operate in the 3600–3650 MHz band listed at *fcc.gov/cbrs-protected-fss-sites* in accordance with the Commission's rules.

(b) CBSDs shall protect the FSS earth stations authorized to operate in the 3700–4200 MHz band listed at *fcc.gov/cbrs-protected-fss-sites* in accordance with the Commission's rules.

(c) These protection criteria will be enforced by the Spectrum Access System authorized consistent with subpart F of this part.

(d) FSS earth station licensees requesting protection under this part must register with the Commission annually, no later than 30 days before the end of the preceding calendar year, or upon making changes to any of the operational parameters listed in this section. Registration information will be made available to all approved SASs.

(1) Annual registration for each earth station shall include, at a minimum:

- (i) The earth station's geographic location (Using NAD83 coordinates);
- (ii) Antenna gain;
- (iii) Azimuth and elevation antenna gain pattern;
- (iv) Antenna azimuth relative to true north; and
- (v) Antenna elevation angle.

(2) Such information must be made available to SAS Administrators and maintained consistent with § 96.55.

(e) CBSDs may operate within areas that may cause interference to FSS earth stations provided that the licensee of the FSS earth station and the authorized user of the CBSD mutually agree on such operation and the terms of any such agreement are provided to an SAS Administrator that agrees to enforce them. The terms of any such agreement shall be communicated promptly to all other SAS Administrators.

**§ 96.19 Operation near Canadian and Mexican borders.**

Citizens Broadband Radio Service operation in the 3550–3700 MHz band is subject to current and future international agreements with Mexico and Canada. The terms of these agreements shall be implemented by the SAS.

**§ 96.21 Protection of existing operators in the 3650–3700 MHz Band.**

(a) Grandfathered Wireless Broadband Licensees shall be granted Incumbent User status consistent with §§ 90.1307 and 90.1338 of this chapter. Notwithstanding this status, Grandfathered Wireless Broadband Licensees shall not cause harmful interference to federal Incumbent Users and grandfathered FSS earth stations consistent with the rules governing Citizens Broadband Radio Service operators in this part.

(1) Incumbent User protections for a Grandfathered Wireless Broadband Licensee shall only apply within its Grandfathered Wireless Protection Zone.

(2) Incumbent User protections for a Grandfathered Wireless Broadband Licensee shall only apply to Grandfathered Wireless Protection Zones around base or fixed stations that are registered in ULS on or before April 17, 2015 and constructed, in service, and fully compliant with the rules in part 90, subpart Z of this chapter as of April 17, 2016. Grandfathered Wireless Protection Zones will be reduced in geographic area and/or applicable frequency range if portions of the protected network fail to meet the above criteria after April 17, 2016. Grandfathered Wireless Protection Zones will not be defined for subscriber units operated by Grandfathered Wireless Broadband Licensees, regardless of whether they have been registered in ULS.

(3) Grandfathered Wireless Protection Zones must be registered in the SAS for these protections to apply.

(b) Grandfathered Wireless Broadband Licensees may operate within their Grandfathered Wireless Protection Zones and operational frequencies consistent with the technical rules in part 90, subpart Z, consistent with the transition period set forth in §§ 90.1307 and 90.1338 of this chapter.

(c) Grandfathered Wireless Broadband Licensees and Citizens Broadband Radio Service users must protect authorized grandfathered FSS earth stations in the 3650–3700 MHz band, consistent with the existing protection criteria in part 90, subpart Z of this chapter until the last Grandfathered Wireless Broadband

Licensee's license expires within the protection area defined for a particular grandfathered FSS earth station. Thereafter, the protection criteria in § 96.17 applicable to similarly situated facilities shall apply.

**Subpart C—Priority Access**

**§ 96.23 Authorization.**

- (a) Applications for PALs must:
  - (1) Demonstrate the applicant's qualifications to hold an authorization;
  - (2) State how a grant would serve the public interest, convenience, and necessity;
  - (3) Contain all information required by FCC rules and application forms;
  - (4) Propose operation of a facility or facilities in compliance with all rules governing the Citizens Broadband Radio Service; and
  - (5) Be amended as necessary to remain substantially accurate and complete in all significant respects, in accordance with the provisions of § 1.65 of this chapter.

(b) CBSDs used for Priority Access must register with an SAS and comply with its instructions consistent with § 96.39 and subpart F of this part.

(c) Records pertaining to PALs, including applications and licenses, shall be maintained by the Commission in a publicly accessible system.

**§ 96.25 Priority access licenses.**

(a) Priority Access Licensees must operate CBSDs consistent with the technical rules and interference protection requirements set forth in this part.

(b) PALs have the following parameters:

(1) *Geography*: Each PAL consists of a single License Area.

(i) *Contiguous geographic areas*: An SAS must assign geographically contiguous PALs held by the same Priority Access Licensee to the same channels in each geographic area, to the extent feasible. The SAS may temporarily reassign individual PALs held by the same Priority Access Licensee to different channels, so that geographical contiguity is temporarily not maintained, to the extent necessary to protect Incumbent Users or if necessary to perform its required functions under subpart F of this part.

(ii) [Reserved]

(2) *Channels*: Each PAL consists of a 10 megahertz channel within the frequency range set forth in § 96.11. Channels must be assigned by the SAS. Priority Access Licensees may request a particular channel or frequency range from the SAS but will not be guaranteed a particular assignment.

(i) *Contiguous channels*: An SAS must assign multiple channels held by the same Priority Access Licensee to contiguous channels in the same License Area, to the extent feasible. The SAS may temporarily reassign individual PALs to non-contiguous channels to the extent necessary to protect Incumbent Users or if necessary to perform its required functions under subpart F of this part.

(ii) [Reserved]

(3) *License term*: Each PAL has a three-year license term. Each PAL must automatically terminate at the end of its three-year term and may not be renewed. However, Priority Access Licensees may reapply for subsequent authorizations in the same License Area, subject to the limitations set forth in § 96.27. Priority Access Licensees may hold consecutive PALs up to the maximum number set forth in § 96.27.

(c) Unused PAL channels shall be made available for assignment by the SAS for General Authorized Access use.

#### § 96.27 Application window.

(a) Applications for PALs will be accepted every three years, or at such other times with respect to PALs not previously licensed as determined by the Wireless Telecommunications Bureau in accordance with the rules in this chapter. The application window and application process will be announced via public notice.

(b) The Wireless Telecommunications Bureau must make up to two consecutive three-year terms for any given PAL available during the first application window. During subsequent application windows, the Wireless Telecommunications Bureau shall make only one three-year license term available for any given PAL.

#### § 96.29 Competitive bidding procedures.

(a) Mutually exclusive initial applications for a Priority Access License are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

(b) Applications for Priority Access Licenses are mutually exclusive when they seek in total more PALs in a particular geographic area than the number of PALs available in that geographic area.

(c) When there are two or more accepted applications for PALs in a given License Area for a specific auction, the Commission will make available for assignment one less PAL than the total number of PALs in that License Area for which all applicants

have applied, up to a maximum of seven.

(d) When there is only one application for initial Priority Access Licenses in a License Area that is accepted for filing for a specific auction, no PAL will be assigned for that License Area, the auction with respect to that License Area will be canceled, and the spectrum will remain accessible solely for shared GAA use until the next filing window for competitive bidding of PALs.

#### § 96.31 Aggregation of priority access licenses.

Priority Access Licensees may aggregate up to four PAL channels in any License Area at any given time.

#### Subpart D—General Authorized Access

##### § 96.33 Authorization.

(a) Any party meeting the requirements set forth in § 96.5 is eligible to operate a CBSD on a General Authorized Access basis.

(b) CBSDs used for General Authorized Access must register with the SAS and comply with its instructions.

##### § 96.35 General authorized access use.

(a) General Authorized Access Users shall be permitted to use frequencies assigned to PALs when such frequencies are not in use, as determined by the SAS.

(b) Frequencies that are available for General Authorized Access Use shall be made available on a shared basis.

(c) General Authorized Access Users shall have no expectation of interference protection from other General Authorized Access Users operating in accordance with this part.

(d) General Authorized Access Users must not cause harmful interference to and must accept interference from Priority Access Licensees and Incumbent Users in accordance with this part.

(e) General Authorized Access Users operating Category B CBSDs must make every effort to cooperate in the selection and use of available frequencies provided by an SAS to minimize the potential for interference and make the most effective use of the authorized facilities. Such users shall coordinate with an SAS before seeking station authorization, and make every effort to ensure that their CBSDs operate at a location, and with technical parameters, that will minimize the potential to cause and receive interference among CBSDs. Operators of CBSDs suffering from or causing harmful interference are expected to cooperate and resolve

interference problems through technological solutions or by other mutually satisfactory arrangements.

#### Subpart E—Technical Rules

##### § 96.39 Citizens Broadband Radio Service Device (CBSD) general requirements.

This section applies to all CBSDs. Additional rules applicable only to Category A or Category B CBSDs are set forth in §§ 96.43 and 96.45.

(a) *Geo-location and reporting capability*. (1) All CBSDs must be able to determine their geographic coordinates (referenced to the North American Datum of 1983 (NAD83)) to an accuracy of  $\pm 50$  meters horizontal and  $\pm 3$  meters of elevation. Such geographic coordinates shall be reported to an SAS at the time of first activation from a power-off condition.

(2) For professionally installed CBSDs, geographic coordinates to the same accuracy specified in paragraph (a)(1) of this section may be determined and reported to the SAS as part of the installation and registration process. Geographic coordinates must be determined and reported each time the CBSD is moved to a new location.

(3) A non-professionally installed CBSD must check its location and report to the SAS any location changes exceeding 50 meters horizontal and  $\pm 3$  meters elevation from its last reported location within 60 seconds of such location change.

(b) *Operability*. All CBSDs must be capable of two-way operation on any authorized frequency assigned by an SAS. Equipment deployed by Grandfathered Wireless Broadband Licensees during their license term will be exempt from this requirement.

(c) *Registration with SAS*. A CBSD must register with and be authorized by an SAS prior to its initial service transmission. The CBSD must provide the SAS upon its registration with its geographic location, antenna height above ground level (in meters), CBSD class (Category A/Category B), requested authorization status (Priority Access or General Authorized Access), FCC identification number, call sign, user contact information, air interface technology, unique manufacturer's serial number, sensing capabilities (if supported), and additional information on its deployment profile required by §§ 96.43 and 96.45. If any of this information changes, the CBSD shall update the SAS within 60 seconds of such change, except as otherwise set forth in this section. All information provided by the CBSD to the SAS must be true, complete, correct, and made in good faith.

(1) A CBSD must operate at or below the maximum power level authorized by an SAS, consistent with its FCC equipment authorization, and within geographic areas permitted by an SAS on the channels or frequencies authorized by an SAS.

(2) A CBSD must receive and comply with any incoming commands from its associated SAS about any changes to power limits and frequency assignments. A CBSD must cease transmission, move to another frequency range, or change its power level within 60 seconds as instructed by an SAS.

(d) *Signal Level Reporting.* A CBSD must report to an SAS regarding received signal strength in its occupied frequencies and adjacent frequencies, received packet error rates or other common standard metrics of interference for itself and associated End User Devices as directed by an SAS.

(e) *Frequency reporting.* If directed by the SAS, a CBSD that receives a range of available frequencies or channels from an SAS must promptly report to the SAS which of the available channels or frequencies it will utilize.

(f) *Security.* CBSDs shall incorporate security measures sufficient to ensure that they are capable of communicating only with SASs operated by approved SAS Administrators, and that

communications between CBSDs and SASs, between individual CBSDs, and between CBSDs and End User Devices are secure to prevent corruption or unauthorized interception of data.

(1) For purposes of obtaining operational limits and frequency availabilities and their updates, CBSDs shall only contact SASs operated by SAS Administrators approved by the Commission in accordance with subpart F of this part.

(2) All communications between CBSDs and SASs must be transmitted using secure methods that protect the systems from corruption or unauthorized modification of the data.

(3) Communications between a CBSD and its associated End User Devices for purposes of obtaining operational power, location, and frequency assignments shall employ secure methods that protect the system from corruption or unauthorized modification of the data.

(g) *Device security.* All CBSDs and End User Devices must contain security features sufficient to protect against modification of software and firmware by unauthorized parties. Applications for certification of CBSDs and End User Devices must include an operational description of the technologies and measures that are incorporated in the device to comply with the security

requirements of this section. In addition, applications for certification of CBSDs and End User Devices must identify at least one of the SAS databases operated by an approved SAS Administrator that the device will access for channel/frequency availability and affirm that the device will conform to the communications security methods used by such databases.

(h) *Airborne operations.* Airborne operations by CBSDs and End User Devices are prohibited.

**§ 96.41 General radio requirements.**

The requirements in this section apply to CBSDs and their associated End User Devices, unless otherwise specified.

(a) *Digital modulation.* Systems operating in the Citizens Broadband Radio Service must use digital modulation techniques.

(b) *Conducted and emitted power limits.* Unless otherwise specified in this section, the maximum conducted output power, maximum EIRP, and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the table below:

Device	Geographic area	Maximum conducted output power (dBm/10 megahertz)	Maximum EIRP (dBm/10 megahertz)	Maximum conducted PSD (dBm/MHz)
End User Device .....	All .....	n/a	23	n/a
Category A CBSD .....	All .....	24	30	14
Category B CBSD <sup>1</sup> .....	Non-Rural .....	24	40	14
Category B CBSD <sup>1</sup> .....	Rural .....	30	47	20

<sup>1</sup> Category B CBSDs will only be authorized for use after an ESC is approved and commercially deployed consistent with §§ 96.15 and 96.67.

(c) *Power management.* CBSDs and End User Devices shall limit their operating power to the minimum necessary for successful operations.

(1) CBSDs must support transmit power control capability and the capability to limit their maximum EIRP and the maximum EIRP of associated End User Devices in response to instructions from an SAS.

(2) End User Devices shall include transmit power control capability and the capability to limit their maximum EIRP in response to instructions from their associated CBSDs.

(d) *Received signal strength limits.* (1) For both Priority Access and GAA users, CBSD transmissions must be managed such that the aggregate received signal strength, measured at any location on the Service Area boundary of any co-

channel PAL, shall not exceed an average (rms) power level of -80 dBm in any direction when integrated over a 10 megahertz reference bandwidth, with the measurement antenna placed at a height of 1.5 meters above ground level, unless the affected PAL licensees agree to an alternative limit and communicate that to the SAS.

(2) These limits shall not apply for co-channel operations at the boundary between geographically adjacent PALs held by the same Priority Access Licensee.

(e) *3.5 GHz Emissions and interference limits—(1) General protection levels.* Except as otherwise specified in this section, for channel and frequency assignments made by the SAS to CBSDs, the power of any emission outside the fundamental

emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the power of any emission shall not exceed -25 dBm/MHz. The upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

(2) *Additional protection levels.* Notwithstanding paragraph (d)(1) of this section, the power of any emissions

below 3530 MHz or above 3720 MHz shall not exceed  $-40\text{dBm}/\text{MHz}$ .

(3) *Measurement procedure.* (i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (*i.e.*, 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(ii) When measuring unwanted emissions to demonstrate compliance with the limits, the CBSD and End User Device nominal carrier frequency/channel shall be adjusted as close to the licensee's authorized frequency block edges, both upper and lower, as the design permits.

(iii) Emission power measurements shall be performed with the CBSD and End User Devices operating at their maximum EIRP levels.

(iv) Emission power measurements shall be performed with a peak detector in maximum hold.

(4) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

(f) *Reception limits.* Priority Access Licensees must accept adjacent channel and in-band blocking interference (emissions from other authorized Priority Access or GAA CBSDs transmitting between 3550 and 3700 MHz) up to a power spectral density level not to exceed  $-40\text{ dBm}$  in any direction with greater than 99% probability when integrated over a 10 megahertz reference bandwidth, with the measurement antenna placed at a height of 1.5 meters above ground level, unless the affected Priority Access Licensees agree to an alternative limit and communicates that to the SAS.

Note to paragraph (f): Citizens Broadband Radio Service users should be aware that there are Federal Government radar systems in the band and adjacent bands that could adversely affect their operations.

#### **§ 96.43 Additional requirements for category A CBSDs.**

(a) Category A CBSDs shall not be deployed or operated outdoors with antennas exceeding 6 meters height above average terrain. CBSDs deployed or operated outdoors with antennas exceeding 6 meters height above average terrain will be classified as, and subject to, the operational requirements of Category B CBSDs.

(b) When registering with an SAS, Category A CBSDs must transmit all information required under § 96.39. This transmission shall also indicate whether the device will be operated indoors or outdoors.

(c) Any CBSD operated at higher power than specified for Category A CBSDs in § 96.41 will be classified as, and subject to, the operational requirements of a Category B CBSD.

#### **§ 96.45 Additional requirements for category B CBSDs.**

(a) Category B CBSDs must be professionally installed.

(b) In the 3550–3650 MHz band, Category B CBSDs must be authorized consistent with information received from an ESC, as described in § 96.15.

(c) Category B CBSDs are limited to outdoor operations.

(d) When registering with an SAS, Category B CBSDs must transmit all information required under § 96.39 plus the following additional information: antenna gain, beamwidth, azimuth, downtilt angle, and antenna height above ground level.

#### **§ 96.47 End user device additional requirements.**

(a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

(2) [Reserved]

(b) Any device operated at higher power than specified for End User Devices in § 96.41 will be classified as, and subject to, the operational requirements of a CBSD.

#### **§ 96.49 Equipment authorization.**

(a) Each transmitter used for operation under this part and each transmitter marketed as set forth in § 2.803 of this chapter must be of a type which has been certificated for use under this part.

(b) Any manufacturer of radio transmitting equipment to be used in

these services must request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter.

#### **§ 96.51 RF safety.**

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in §§ 1.1307(b), 1.1310, 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of Mobile or Portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions and technical information showing the basis for this statement must be submitted to the Commission upon request.

### **Subpart F—Spectrum Access System**

#### **§ 96.53 Spectrum access system purposes and functionality.**

The purposes of the SAS include:

(a) To enact and enforce all policies and procedures developed by the SAS Administrator pursuant to § 96.63.

(b) To determine and provide to CBSDs the permissible channels or frequencies at their location.

(c) To determine and provide to CBSDs the maximum permissible transmission power level at their location.

(d) To register and authenticate the identification information and location of CBSDs.

(e) To retain information on, and enforce, Exclusion Zones and Protection Zones in accordance with §§ 96.15 and 96.17.

(f) To communicate with the ESC to obtain information about federal Incumbent User transmissions and instruct CBSDs to move to another frequency range or cease transmissions.

(g) To ensure that CBSDs operate in geographic areas and within the maximum power levels required to protect federal Incumbent Users from harmful interference, consistent with the requirements of §§ 96.15 and 96.21.

(h) To ensure that CBSDs protect non-federal Incumbent Users from harmful interference, consistent with the requirements of §§ 96.17 and 96.21.

(i) To protect Priority Access Licensees from interference caused by other PALs and from General Authorized Access Users consistent with § 96.25.

(j) To facilitate coordination between GAA users operating Category B CBSDs, consistent with § 96.35.

(k) To resolve conflicting uses of the band while maintaining, as much as

possible, a stable radio frequency environment.

(l) To ensure secure and reliable transmission of information between the SAS and CBSDs.

(m) To protect Grandfathered Wireless Broadband Licensees consistent with §§ 90.1307 and 90.1338 of this chapter, and § 96.21.

(n) To implement the terms of current and future international agreements as they relate to the Citizens Broadband Radio Service.

#### **§ 96.55 Information gathering and retention.**

(a) The SAS shall maintain current information on registered CBSDs, the geographic locations and configuration of protected FSS locations as set forth in § 96.17, and the federal Incumbent User Exclusion Zones and Protection Zones.

(1) For registered CBSDs, such information shall include all information required by §§ 96.39 and 96.45.

(2) SAS Administrators must make all information necessary to effectively coordinate operations between and among CBSDs available to other SAS Administrators.

(3) SAS Administrators must make CBSD registration information available to the general public, but they must obfuscate the identities of the licensees providing the information for any public disclosures.

(4) For non-federal Incumbent Users, the SAS shall maintain a record of the location of protected earth stations as well as the all registration information required by § 96.17.

(b) The SAS shall maintain records not pertaining to federal Incumbent User transmissions for at least 60 months.

(c) The SAS shall only retain records of information or instructions received regarding federal Incumbent User transmissions from the ESC in accordance with information retention policies established as part of the ESC approval process.

(d) The SAS shall be technically capable of directly interfacing with any necessary FCC database containing information required for the proper operation of an SAS.

(e) The SAS shall process and retain acknowledgements by all entities registering CBSDs that they understand the risk of possible interference from federal Incumbent User radar operations in the band.

#### **§ 96.57 Registration, authentication, and authorization of Citizens Broadband Radio Service Devices.**

(a) An SAS must register, authenticate, and authorize operations of CBSDs consistent with this part.

(b) CBSDs composed of a network of base and fixed stations may employ a subsystem for aggregating and communicating all required information exchanges between the SAS and CBSDs.

(c) An SAS must also verify that the FCC identifier (FCC ID) of any CBSD seeking access to its services is valid prior to authorizing it to begin providing service. A list of devices with valid FCC IDs and the FCC IDs of those devices is to be obtained from the Commission's Equipment Authorization System.

(d) An SAS must not authorize operation of CBSDs within Protection Zones except as set forth in § 96.15.

#### **§ 96.59 Frequency assignment.**

(a) An SAS must determine the available and appropriate channels/frequencies for CBSDs at any given location using the information supplied by CBSDs, including location, the authorization status and operating parameters of other CBSDs in the surrounding area, information communicated by the ESC, other SASs, and such other information necessary to ensure effective operations of CBSDs consistent with this part. All such determinations and assignments shall be made in a non-discriminatory manner, consistent with this part.

(1) Upon request from the Commission or a CBSD, an SAS must confirm whether frequencies are available in a given geographic area.

(2) Upon request from the Commission, an SAS must confirm that CBSDs in a given geographic area and frequency band have been shut down or moved to another available frequency range in response to information received from the ESC.

(3) If an SAS provides a range of available frequencies or channels to a CBSD, it may require that CBSD to confirm which channel or range of frequencies it will utilize.

(b) Consistent with the requirements of § 96.25, an SAS shall assign geographically contiguous PALs held by the same Priority Access Licensee to the same channels in each geographic area, where feasible. The SAS shall also assign multiple channels held by the same Priority Access Licensee to contiguous frequencies within the same License Area, where feasible.

(c) An SAS may temporarily assign PALs to different channels (within the frequency range authorized for Priority Access use) to protect Incumbent Access

Users or if necessary to perform its required functions.

#### **§ 96.61 Security.**

(a) An SAS must employ protocols and procedures to ensure that all communications and interactions between the SAS and CBSDs are accurate and secure and that unauthorized parties cannot access or alter the SAS or the information it sends to a CBSD.

(b) Communications between CBSDs and an SAS, between an ESC and an SAS, between individual CBSDs, and between different SASs, must be secure to prevent corruption or unauthorized interception of data. An SAS must be protected from unauthorized data input or alteration of stored data.

(c) An SAS must verify that the FCC identification number supplied by a CBSD is for a certified device and must not provide service to an uncertified device.

#### **§ 96.63 Spectrum access system administrators.**

The Commission will designate one or more SAS Administrators to provide nationwide service. The Commission may, at its discretion, permit the functions of an SAS, such as a data repository, registration, and query services, to be divided among multiple entities; however, it shall designate one or more specific entities to be an SAS Administrator responsible for coordinating the overall functioning of an SAS and providing services to operators in the Citizens Broadband Radio Service. Each SAS Administrator designated by the Commission must:

(a) Maintain a regularly updated database that contains the information described in § 96.55.

(b) Establish a process for acquiring and storing in the database necessary and appropriate information from the Commission's databases, including PAL assignments, and synchronizing the database with the current Commission databases at least once a day to include newly licensed facilities or any changes to licensed facilities.

(c) Establish and follow protocols and procedures to ensure compliance with the rules set forth in this part, including the SAS functions set forth in subpart F of this part.

(d) Establish and follow protocols and procedures sufficient to ensure that all communications and interactions between the SAS, ESC, and CBSDs are accurate and secure and that unauthorized parties cannot access or alter the SAS or the information transmitted from the SAS to CBSDs.

(e) Provide service for a five-year term. This term may be renewed at the Commission's discretion.

(f) Respond in a timely manner to verify, correct or remove, as appropriate, data in the event that the Commission or a party brings a claim of inaccuracies in the SAS to its attention. This requirement applies only to information that the Commission requires to be stored in the SAS.

(g) Securely transfer the information in the SAS, along with the IP addresses and URLs used to access the system, and a list of registered CBSDs, to another approved entity in the event it does not continue as the SAS Administrator at the end of its term. It may charge a reasonable price for such conveyance.

(h) Cooperate to develop a standardized process for coordinating operations with other SASs, avoiding any conflicting assignments, maximizing shared use of available frequencies, ensuring continuity of service to all registered CBSDs, and providing the data collected pursuant to § 96.55.

(i) Coordinate with other SAS Administrators including, to the extent possible, sharing information, facilitating non-interfering use by CBSDs connected to other SASs, maximizing available General Authorized Access frequencies by assigning PALs to similar channels in the same geographic regions, and other functions necessary to ensure that available spectrum is used efficiently consistent with this part.

(j) Provide a means to make non-federal non-proprietary information available to the public in a reasonably accessible fashion in conformity with the rules in this part.

(k) Ensure that the SAS shall be available at all times to immediately respond to requests from authorized Commission personnel for any and all information stored or retained by the SAS.

(l) Establish and follow protocols to respond to instructions from the President of the United States, or another designated Federal government entity, issued pursuant to 47 U.S.C. 606.

(m) Establish and follow protocols to comply with enforcement instructions from the Commission.

(n) Ensure that the SAS:

(1) Operates without any connectivity to any military or other sensitive federal database or system, except as otherwise required by this part; and

(2) Does not store, retain, transmit, or disclose operational information on the movement or position of any federal system or any information that reveals other operational information of any federal system that is not required by this part to effectively operate the SAS.

#### **§ 96.65 Spectrum access system administrator fees.**

(a) An SAS Administrator may charge Citizens Broadband Radio Service users a reasonable fee for provision of the services set forth in subpart F of this part.

(b) The Commission, upon request, will review the fees and can require changes to those fees if they are found to be unreasonable.

#### **Subpart G—Environmental Sensing Capability**

##### **§ 96.67 Environmental sensing capability.**

(a) The primary purpose of the ESC is to facilitate coexistence of Citizens Broadband Radio Service users with federal Incumbent Users through signal sensing. An ESC will be operated by a non-governmental entity and, except as set forth in this section, will not rely on governmental agencies to affirmatively communicate information about the operations of incumbent radio systems.

(b) An ESC may only operate after receiving approval by the Commission. Such approval shall be conditioned on meeting the requirements of this part and any other requirements imposed by

the Commission. The Commission may revoke, modify, or condition ESC approval at its discretion.

(c) An ESC must meet the following requirements:

(1) Be managed and maintained by a non-governmental entity;

(2) Accurately detect the presence of a signal from a federal system in the 3550–3700 MHz band and adjacent frequencies using approved methodologies that ensure that any CBSDs operating pursuant to ESC will not cause harmful interference to federal Incumbent Users;

(3) Communicate information about the presence of a signal from a federal Incumbent User system to one or more approved SASs;

(4) Maintain security of detected and communicated signal information;

(5) Comply with all Commission rules and guidelines governing the construction, operation, and approval of ESCs;

(6) Ensure that the ESC shall be available at all times to immediately respond to requests from authorized Commission personnel for any information collected or communicated by the ESC; and

(7) Ensure that the ESC operates without any connectivity to any military or other sensitive federal database or system and does not store, retain, transmit, or disclose operational information on the movement or position of any federal system or any information that reveals other operational information of any federal system that is not required by this part to effectively operate the ESC.

(d) ESC equipment may be deployed in the vicinity of the Exclusion Zones and Protection Zones to accurately detect federal Incumbent User transmissions.

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