No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and Pistoia Alliance, Inc. intends to file additional written notifications disclosing all changes in membership.

On May 28, 2009, Pistoia Alliance, Inc. filed its original notification pursuant to Section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to Section 6(b) of the Act on July 15, 2009 (74 FR 34364).

The last notification was filed with the Department on November 20, 2014. A notice was published in the **Federal Register** pursuant to Section 6(b) of the Act on December 31, 2014 (79 FR 78908).

Patricia A. Brink,

Director of Civil Enforcement,Antitrust Division.

[FR Doc. 2015–05853 Filed 3–12–15; 8:45 am]

BILLING CODE 4410–11–P

DEPARTMENT OF JUSTICE

Antitrust Division

Notice Pursuant to the National Cooperative Research and Production Act of 1993; National Armaments Consortium

Notice is hereby given that, on February 13, 2015, pursuant to Section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* (''the Act''), National Armaments Consortium (''NAC'') has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in its membership. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, AEgis Technologies Group, Inc., Huntsville, AL; Aerojet Ordnance Tennessee, Jonesborough, TN; AGM Container Controls, Inc., Tucson, AZ; Anyar, Inc., Fort Walton Beach, FL; BANC3, Inc., Princeton, NJ; Chesapeake Testing Services, Inc., Belcamp, MD; DRS Sustainment Systems, Inc., Saint Louis, MO; Ellwood National Forge Company, Irvine, IN; Fastcom Supply Corporation, Franklin, NJ; Group W, Fairfax, VA; Hydrosoft International, Livermore, CA; Kord Technologies, Inc., Huntsville, AL; Michigan Research Institute, Ann Arbor, MI; Prime Photonics, LC, Blacksburg, VA; Sabre Global Services, Wharton, NJ; SCHOTT North America, Southbridge, VA; Scot Forge Company, Spring Grove, IL; Teamvantage Molding LLC, Forest Lake, MN; Technical Professional Services, Inc., Wayland, MI; TELEGRID Technologies, Inc., Livingston, NJ; TimkenSteel Corporation, Canton, OH; and Universal Propulsion Company, Inc., Fairfield, CA, have been added as parties to this venture.

The following members have withdrawn as parties to this venture: Bulova Technologies Group, Inc., Tampa, FL; Colt Defense, Hartford, CT; Decatur Mold Tool & Engineering, Inc., North Vernon, IN; DRS ICAS, LLC, Buffalo, NY; Ervine Industries, Inc., Ann Arbor, MI; Fibertek, Inc., Herndon, VA; Matrix Systems, Inc., Ashland, VA; Metal Storm, Herndon, VA; Microcosm, Inc., Hawthorne, CA; NI Industries, Inc., Riverbank, CA; Olin Corporation—Winchester Division, East Alton, IL; Otis Products, Inc., Lyons Falls, NY; Parsons Government Services, Pasadena, CA; Polaris Sensor Technologies, Inc., Huntsville, AL; Quantum Technology Consultants, Inc., Franklin Park, NJ; Solidica, Inc., Ann Arbor, MI; The Timken Company, Canton, OH; and UTRON, Manassas, VA.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and NAC intends to file additional written notifications disclosing all changes in membership.

On May 2, 2000, NAC filed its original notification pursuant to Section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to Section 6(b) of the Act on June 30, 2000 (65 FR 40693).

The last notification was filed with the Department on August 18, 2014. A notice was published in the **Federal Register** pursuant to Section 6(b) of the Act on September 17, 2014 (79 FR 55830).

Patricia A. Brink,

Director of Civil Enforcement, Antitrust Division.

[FR Doc. 2015–05835 Filed 3–12–15; 8:45 am]

BILLING CODE 4410–11–P

LIBRARY OF CONGRESS

Copyright Royalty Board

[Docket No. 2008–1 CRB CD 98–99 (Phase II)]

Distribution of 1998 and 1999 Cable Royalty Funds

AGENCY: Copyright Royalty Board, Library of Congress.

ACTION: Final distribution determination.

SUMMARY: The Copyright Royalty Judges announce the final Phase II distribution of cable royalty funds for the year 1999. The judges issued their initial determination in December 2014 and received no motions for rehearing.

DATES: *Effective date:* March 13, 2015.

ADDRESSES: The final distribution order is also published on the agency's Web site at *www.loc.gov/crb* and on the Federal eRulemaking Portal at *www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Richard Strasser, Senior Attorney, or Kim Whittle, Attorney Advisor, (202) 707–7658 or *crb@loc.gov*.

SUPPLEMENTARY INFORMATION:

I. Introduction

In this proceeding, the Copyright Royalty Judges (Judges) determine the final distribution of royalty funds deposited by cable system operators (CSOs) for the right to retransmit television programming carried on distant over-the-air broadcast signals during calendar year 1999.[1] Participants have received prior partial distributions of the 1999 cable royalty funds.[2] The remaining funds at issue are those allocated to the Devotional Claimants category.[3] Two participants are pursuing distribution from the Devotional Claimants funds for 1999: Worldwide Subsidy Group LLC dba Independent Producers Group (IPG) and the ''Settling Devotional Claimants'' (SDC).[4] The Judges conducted three and

[1] Although this proceeding consolidates royalty years 1998 and 1999, all claims to 1998 royalties have been resolved, and the funds have been distributed. IPG's appeal of the order approving distribution of 1998 royalties was dismissed for lack of jurisdiction. *Ind. Producers Group* v. *Librarian of Congress,* 759 F.3d 100 (D.C. Cir. 2014).

[2] The 1999 cable royalty deposits equaled approximately $118.8 million at the outset. The Judges authorized partial distributions that the Copyright Licensing Office made on October 31, 2001, March 27, 2003, April 19, 2007, June 7, 2007, and February 28, 2013. Authorized distributions equaled in the aggregate approximately $126.9 million, including accrued interest, leaving a balance available for distribution of $827,842.

[3] *See infra* note 18, and accompanying text. The Devotional Claimants category has been defined by agreements of the Phase I participants as ''Syndicated programs of a primarily religious theme, not limited to those produced by or for religious institutions.''

[4] The Settling Devotional Claimants are: The Christian Broadcasting Network, Inc., Coral Ridge Ministries Media, Inc., Crystal Cathedral Ministries, Inc., In Touch Ministries, Inc., and Oral Roberts Evangelistic Association, Inc. The SDC previously reached a confidential settlement with devotional program claimants represented by the National Association of Broadcasters, Liberty Broadcasting Network, Inc., and Family Worship Center Church,

Continued

a half days of hearings. After considering written evidence and oral testimony, the Judges determine that the SDC should receive 71.3% and IPG should receive 28.7% of the 1999 fund allocated to the Devotional Claimants category.[5]

II. Background

A. Statement of Facts

In the present proceeding, IPG represents the interests of four entities[6] owning copyrights in 10 distinct programs. The SDC represent five entities[7] owning copyrights in 20 distinct programs. CSOs remotely retransmitted IPG-claimed titles 11,041 times and the SDC-claimed titles 6,684 times during 1999. *See* IPG PFF at 6; SDC PFF at 1–2.

B. Statement of the Case

On January 30, 2008, the Judges commenced a proceeding to determine the Phase II distribution of 1998 and 1999 royalties deposited by CSOs for the cable statutory license.[8] Beginning in July 2008, the Judges stayed the proceeding pending the outcome of California state court litigation initiated by IPG regarding the validity and interpretation of settlement agreements by and between IPG, the Motion Picture Association of America as representative of certain program suppliers (MPAA), and the Librarian of Congress.[9] In a September 2012 filing, IPG acknowledged that the California proceedings had been resolved in favor of MPAA. *See Opposition of Independent Producers group to Motion for Final Distribution of 1998 and 1999 Cable Royalty Funds* at 4, Docket No. 2008–1 CRB CD 98–99 (September 5, 2012). IPG continued to assert claims to 1999 royalties allocated to the Devotional Claimants category. In July 2013, the Judges issued an order establishing the schedule and order of proceedings for the present matter.[10]

On May 5 and 6, 2014, the Judges held a Preliminary Hearing to adjudicate disputes regarding the validity of claims asserted by each party. At the conclusion of the Preliminary Hearing, the Judges dismissed two claims asserted by IPG. *See Ruling and Order Regarding Claims* (June 18, 2014). Beginning September 2, 2014, the Judges presided over three and a half days of hearings at which IPG presented two witnesses and the SDC presented three live witnesses and designated testimony of seven witnesses from prior proceedings.[11] The Judges admitted 35 paper and electronic exhibits into evidence. On September 23, 2014, the parties filed their proposed findings of fact and conclusions of law.

III. IPG's Motion *in Limine*

A. Issues Presented

On August 26, 2014, IPG filed with the Judges a motion *in limine* (Motion) to exclude the SDC's Nielsen Household Devotional Viewing Report sponsored by SDC witness, Alan Whitt.[12] IPG contends that the SDC failed to include in its exhibit list foundational data for the methodology used in the report and failed to produce all foundational data and electronic files underlying the report. *Motion* at 1. IPG requests that the Judges strike any evidence relying on or referring to the report that the SDC presented.

The SDC oppose IPG's request, arguing, among other things, that IPG has failed to present any competent evidence that the purportedly missing data either were in the SDC's custody, possession, or control, or were not publicly available. SDC Opposition at 1 (September 2, 2014). The SDC also contend that IPG's motion *in limine* merely attempts to revisit issues the Judges resolved in their May 2, 2014, *Order Denying IPG's Motion to Strike Portions of SDC Written Direct Statement* (''May 2, 2014, Order''). The SDC contend that IPG has presented no new evidence that would justify revisiting that decision. SDC Opposition at 3 & n.1.

Moreover, the SDC contend that IPG's arguments go to the weight rather than to the admissibility of the proffered report. SDC Opposition at 2, *citing U.S.* v. *H & R Block, Inc.,* 831 F.Supp.2d 27, 34 (D.D.C. 2011) (denying motion *in limine* ''because [defendant's proffered] survey [was] not so unreliable as to be deemed inadmissible.'') and *Graves* v. *D.C.,* 850 F.Supp.2d 6, 13 (D.D.C. 2011) (''[M]otions in limine are designed to address discrete evidentiary issues related to trial and are not a vehicle for resolving factual disputes or testing the sufficiency of the plaintiff's evidence.'').

Finally, the SDC argue that even if the Judges were inclined to believe that the unavailability of data underlying the proffered report was relevant in an admissibility determination, this fact would not warrant a prehearing exclusion of the evidence. According to the SDC, the facts and data underlying an expert's opinion need not be admissible for the opinion or reference to be admitted if the facts or data are of a type reasonably relied upon by experts in the field. SDC Opposition at 4, *citing* Rule 703 of the Federal Rules of Evidence. On this point, the SDC refer to the written direct testimony of the SDC's witness, John S. Sanders, who, according to the SDC, determined that ''Mr. Whitt's report is sufficiently reliable to render his opinion concerning the relative market value of the SDC and IPG programs.'' SDC Opposition at 5.

The Judges heard oral argument on the Motion on September 2, 2014, and deferred ruling until the end of the proceeding. For the reasons discussed below, the Judges deny the Motion and admit the proffered report.

Inc. The programming giving rise to the latter groups' claims is not included in the Judges' analysis in this proceeding.

[5] From prior partial distributions, the SDC have received over $693,000. The SDC alone is responsible to make adjustments, if any, to comply with the conclusions of this Determination and to comply with confidential settlements it reached with former participants.

[6] IPG represents Benny Hinn Ministries, Creflo A. Dollar Ministries, Eagle Mountain International Church aka Kenneth Copeland Ministries, and Life Outreach International.

[7] *See supra,* n.4.

[8] *See* 73 FR 5596 (Jan. 30, 2008). Before the effective date of the Copyright Royalty and Distribution Reform Act of 2004, Public Law 108–419, 118 Stat. 2341 (Nov. 30, 2004), the Copyright Office, with oversight by the Librarian of Congress, managed distribution of cable retransmission royalties. To resolve controversies regarding the appropriate distribution of royalties, the Librarian would order appointment of a Copyright Arbitration Royalty Panel (CARP). In 2001, the Library of Congress initiated Phase I proceedings to determine distribution of, *inter alia,* royalties for distant retransmission by cable in 1999 of broadcast television programming. In November 2003, all claimants to funds in the 1998 Devotional Claimants category reached agreement regarding distribution of those funds and the Register of Copyrights ordered final distribution of 1998 Devotional Claimants royalties by order dated November 19, 2003. By Order dated April 3, 2007, the Register finalized the Phase I allocation of uncontroverted funds for 1998 and 1999 cable retransmissions among the claimant categories. After enactment of the current statute, the Register terminated the CARP proceeding relating to the 1998–99 funds. *See* 72 FR 45071 (Aug. 10, 2007). The Judges have managed all subsequent proceedings relating to the 1998 and 1999 cable royalties fund.

[9] *Order Granting Motions to Stay,* Docket No. 2008–1 CRB CD 98–99 (July 23, 2008). The Judges granted eight continuations of the original stay order, entering the last continuation order on July 27, 2012. *See Eighth Order Continuing Stay of Proceedings* (July 27, 2012).

[10] Order Setting Deadline for Filing Written Direct Statements, Announcing Discovery Period, and Requiring Settlement Conference (Jul 25, 2013).

[11] Because of the delay of the present proceeding occasioned by outside litigation, the Judges concluded their determination of distributions of cable retransmission royalties for the period 2000 to 2003, inclusive, before completing the instant proceeding regarding 1999 funds. The participants in the 2000–03 proceeding presented many of the same issues relevant to the present proceeding; thus, one of the ''prior proceedings'' from which participants could designate testimony is a proceeding involving funds deposited after the relevant period at issue in the present proceeding.

[12] The SDC, whose witness introduced the report, sometimes refer to it as the Household Viewing Hours Report or ''HHVH Report.''

B. The Judges' May 2, 2014, Discovery Order

The dispute between IPG and the SDC began with a discovery request from IPG in which it requested from the SDC ''evidentiary support for a report by the SDC's expert witness, Mr. Whitt, setting forth viewership levels for Devotional programming.'' *See* May 2, 2014, Order at 1. In the motion to compel discovery that gave rise to the Judges' May 2, 2014, Order, IPG sought an order striking Mr. Whitt's report and the SDC's reliance on that report. According to IPG, the SDC failed to meet its discovery obligations by failing to provide electronic files or computer codes that Mr. Whitt purportedly used to (1) merge viewership data sets compiled by Tribune Media Services and the Nielsen Company and (2) cull claimed devotional titles from numerous program titles in the merged data sets (referred to in the May 2, 2014, Order as ''Merger Information''). *Id.* at 3.

The Judges determined that the discovery dispute could not be resolved without an evidentiary hearing, and scheduled one for April 8, 2014. During the hearing, the Judges heard testimony from the SDC's witnesses, Mr. Whitt and Dr. Erkan Erdem, as well as from Dr. Laura Robinson, who testified for IPG.

Mr. Whitt testified that he did not have access to the files and codes he had used that contained the Merger Information because he had done most of the work in question when he was employed with an independent company that was a contractor for MPAA. Mr. Whitt completed his MPAA assignment several years prior to the current proceeding. 04/08/14 Tr. at 105 (Whitt). Therefore, according to Mr. Whitt, neither Mr. Whitt nor the SDC could provide the requested information to IPG. *Id.* at 121–22. Dr. Robinson testified that, based on discovery that the SDC provided, she was unable to replicate the results that Mr. Whitt had reached, although she admitted that she could have merged the Tribune and Nielsen data sets. *Id.* at 35–6, 66 (Robinson). Finally, Dr. Erdem testified that, based on discovery the SDC had provided to IPG, and certain other publicly available information, Dr. Erdem was able to closely approximate, although not duplicate, Mr. Whitt's results. *Id.* at 162 (Erdem).

The Judges found that nothing in the record allowed them to conclude that SDC violated its duties under the applicable procedural rule governing discovery by not producing the Merger Information. *See* May 2, 2014, Order at 9. The Judges further concluded that the SDC's discovery responses were sufficient for IPG to ''test'' the process Mr. Whitt used in compiling the report. The Judges noted that the purpose of an earlier discovery order addressing IPG's discovery request was to

> allow IPG sufficient discovery to allow it to confirm either that Mr. Whitt had performed his work correctly . . . *or* that Mr. Whitt had performed his work incorrectly or inaccurately. In that latter case, IPG would be able to: (a) file a Written Rebuttal Statement contradicting Mr. Whitt's work and/or (b) cross-examine Mr. Whitt at the hearing on the merits regarding claimed errors or inaccuracies in his work.

Id. (emphasis in original).

The Judges concluded that they ''would not—and did not—assert that discovery regarding expert testimony must result in a consensus between adverse participants as to the correctness of the result (or the amount) calculated by the expert.'' *Id.* at 11. Specifically, the Judges concluded

> with the discovery [the SDC provided to IPG, Dr. Robinson] could test Mr. Whitt's computational process by producing her own merger of the Tribune Data and the Nielsen Data. However, Dr. Robinson also testified that her merger and the concomitant results might differ from (*i.e.,* falsify) rather than replicate Mr. Whitt's results. Likewise, [Dr. Erdem] produced a merger of the Tribune Data and the Nielsen Data that was quite proximate to Mr. Whitt's results, albeit not a complete replication. Thus, it is clear that Mr. Whitt's computational processes can be tested and subject to meaningful cross-examination and rebuttal.

Id. Based on this conclusion the Judges denied IPG's motion to strike portions of the SDC's written direct statement on grounds that the SDC violated its discovery obligations.

In its discovery motion, IPG also asked the Judges to strike any reliance on or reference to the distant rating study presented by the SDC as inadmissible. *See* [IPG] Motion to Strike Portions of [SDC] Direct Statement at 10–11 (February 20, 2014). The Judges declined to consider these issues at that stage of the proceeding reasoning that:

> [a]n order regarding these issues would essentially constitute a premature *in limine* ruling based on SDC's non-production of the Merger Information in discovery. Given that SDC introduced new testimony and new exhibits at the April 8, 2014, discovery hearing, the Judges decline to rule without a formal motion *in limine,* addressing these issues in the context of the new hearing exhibits and the hearing testimony, should IPG decide to renew these arguments.

May 2, 2014, Order at 11. IPG filed that motion *in limine* on August 26, 2014, *viz.,* the Motion at issue here.

C. Substance of IPG's Motion

In the present Motion, IPG asserts that ''Merger Information existed and was not produced to IPG, including sweeps period data, a sweeps period algorithm, a file that prepared the Tribune data for merger, a process to reconcile Nielsen and Tribune data, and another 'quality control process' performed by Mr. Whitt.'' *Motion* at 2. IPG further asserts that ''SDC's witness [Dr. Erdem] approximated Mr. Whitt's results only after utilization of data and information that had not been produced to IPG, and that the SDC's attempted replication of the Merger Information occurred months after both the discovery deadline and the deadline for filing amended direct statements.'' *Id.* According to IPG, the ''SDC neither produced the original Merger Information, nor attempted to replicate it until March 28, 2014, all the while knowing the evidentiary requirements for the introduction of the study. . . .'' *Id.* at 3.

IPG continues:

> Alan Whitt asserts that his analysis relied, *inter alia,* (i) on a sample of television stations selected by Marsha Kessler [an MPAA witness in past cable distribution proceedings, including the 2000–2003 proceeding and the Phase I proceeding for the instant royalty year], and (ii) household diaries of distant program viewing for those programs from Nielsen's six ''sweep'' months. [Yet, l]iterally no information or data regarding the station sampling process exists, nor information or data that explains the methodological processes utilized in connection with the produced Nielsen data.

Id. at 3 (internal quotations omitted).

IPG asserts that:

> stations selected by Ms. Kessler for inclusion in the 1999 MPAA/Nielsen study were altogether different than those appearing in data produced by the SDC. . . . [Therefore,] Mr. Whitt's statement that the SDC-produced data was derived from a sample of stations selected by Marsha Kessler is simply inaccurate or, at minimum, without evidentiary foundation [but] IPG has been denied any ability to investigate that determination because of the SDC's failure to produce underlying documents substantiating such assertion.

Id. at 4.

IPG further asserts that, in prior proceedings, Nielsen and the MPAA have used a wide variety of sampling methodologies and methods of data collection. IPG contends that with respect to the Nielsen data produced by the SDC in the current proceeding, however, the SDC provided none of those methodological details. Consequently, IPG asserts that it has ''no means of determining the method by which the stations on which the Whitt analysis relies were selected, and no means to determine what Nielsen data was collected, how it was collected, the limitations on the data, the scope and meaning of the data, the possible alternatives that were employed, etc.'' *Id.* at 5–6. As a result, IPG requests that the Judges strike any evidence relying on or referring to Mr. Whitt's HHVH report. *Id.* at 8.

D. Judges' Analysis and Ruling on the Motion

Much of IPG's Motion rehashes discovery issues that the Judges addressed fully in the May 2, 2014, Order. The Judges will not revisit those discovery-related issues. The Judges now consider only whether to grant or deny IPG's Motion, which requests that the Judges preclude the SDC from relying on or referring to the HHVH report on grounds of admissibility.

IPG's arguments for excluding the HHVH report are that the SDC failed to: (1) Retain or produce to IPG input data from the HHVH report, (2) produce information relating to the sampling processes that were followed for the selection of stations included as part of the Whitt analysis, and (3) produce the methodological processes followed by Nielsen in the creation of the Nielsen data that were referred to in the HHVH report. *See Motion* at 7–8.

At oral argument on the motion, IPG's counsel contended that even if the SDC did not have the underlying documents that IPG sought, the SDC was required to create such documents and produce them to IPG. 09/02/14 Tr. at 14–15. As a preliminary matter, the Judges view this argument as yet another attempt by IPG to resurrect its complaint that the SDC failed to meet its discovery obligations. The Judges already addressed this issue in the May 2, 2014, Order.[13]

IPG also asserts that the SDC's failure to create a document in response to IPG's discovery requests somehow violated a statutory provision dealing with written direct statements. At the hearing, IPG's counsel contended that the SDC ''never put this information or alluded to it or referenced or incorporated it by reference in an Amended Written Direct Statement. Therefore, for the record, it does not exist. It is not before [the Judges]. And as such, the SDC study is hopelessly missing a piece, and therefore, it should not be heard. It should be excluded.'' 09/02/14 Tr. at 15 (Att'y Boydston).

The requirement to file written direct statements is codified in section 803(b)(6)(C) of the Copyright Act. That section circuitously requires the Judges to issue regulations that require the parties to file written direct statements and written rebuttal statements by a date specified by the Judges. 17 U.S.C. 803(b)(6)(C)(i). The statutory provision does not address the content of written direct statements. Moreover, the regulation the Judges promulgated under that provision does not impose the content requirements that IPG suggests.[14] Therefore, the Judges reject IPG's assertion that the SDC violated the statutory provisions dealing with the filing of written direct statements. The HHVH report was properly before the Judges.[15] On balance, the Judges find that the SDC's written direct statement was adequate to satisfy the requirements of the Act and applicable rules. IPG's complaints about the completeness or persuasiveness of that testimony go to the weight rather than the admissibility of the testimony.

IPG also objects to the purported lack of clarity surrounding the way in which the television stations analyzed in the HHVH report were selected. Mr. Whitt stated in his written direct testimony that the television stations he studied in the report were based on a list of stations compiled by Ms. Kessler. Ex. SDC–D–001 at 3. IPG, evidently assuming that the list referred to by Mr. Whitt was the list of stations that was attached to Ms. Kessler's written direct testimony in Phase I of this proceeding,[16] contends that it compared the selection of stations in the Whitt HHVH report with Ms. Kessler's list and found that the two do not correspond. IPG states that of Mr. Whitt's 72 stations, only half of them can be found in Ms. Kessler's list. 09/02/14 Tr. at 16. IPG contends that it does not know where the other 36 stations that Mr. Whitt studied came from. *Id.*

The SDC reply that the Kessler list that IPG compared with the Whitt list was not the basis for the HHVH report. The SDC represent that the Kessler list of stations that Mr. Whitt used for his report was based on the Nielsen data that Ms. Kessler ordered for the study that she prepared for the 2000–03 proceeding. 09/02/14 Tr. at 28–30 (Att'y MacLean). Mr. Whitt addressed this issue in his testimony in the April hearing on IPG's discovery motion. 04/08/14 Tr. at 113–15 (Whitt). That being said, the SDC are unsure how Ms. Kessler determined what Nielsen data to order. 09/04/14 Tr. at 29 (Att'y MacLean). Nevertheless, the SDC's witness, Mr. Sanders, testified that the list upon which the Whitt report was compiled was ''sufficiently representative for the purpose that it is being put forth.'' *Id.* at 31. The SDC further assert, based on an analysis by Dr. Erdem, that the SDC's Nielsen sample, which was based on the Nielsen information that was ordered by Ms. Kessler, ''does not have a bias in terms of coverage of quarter-hours of IPG versus SDC programs. Or, if it does have a bias, the same bias is in all of the data that IPG is using as well, whatever bias there is.'' *Id.* at 32. Finally, the SDC state that they ''had absolutely nothing to do with choosing this [station] sample—it was chosen years before we ever purchased it from MPAA—there

[13] Even if the Judges had not addressed the issue in the May 2, 2014, Order, they would nonetheless reject IPG's assertion that the SDC was obligated to create documents to comply with a discovery request. The Judges have consistently held that ''[t]he limited discovery permitted in proceedings before the Judges should permit the parties to test admissible evidence, but not create an extensive burden of time and expense.'' *Order Granting In Part and Denying In Part the Motion of SoundExchange to Compel XM Satellite Radio Inc., Sirius Satellite Radio Inc., and Music Choice to Produce Surveys and Supporting Documents,* Docket No. 2006–1 CRB DSTRA (May 15, 2007). In the May 2, 2014, Order, the Judges ruled that the SDC had provided IPG with sufficient discovery to enable IPG to test the HHVH report. IPG points to no provision in the CRB rules that requires a party to create documents in response to a discovery request. The Judges see no reason in this instance to impose such a requirement by order.

[14] The rule states: ''[t]he written direct statement shall include all testimony, including each witness's background and qualifications, along with all the exhibits.'' 37 CFR 351.4(b). The SDC's written direct statement included Mr. Whitt's testimony as well as that of Mr. Sanders. The SDC included in its rebuttal statement the testimony of Dr. Erdem. The SDC's written direct statement may not have been exquisitely complete. Indeed, the SDC's counsel concedes that Mr. Whitt's written testimony did not describe a ''quality control'' process that he conducted to eliminate duplicative entries and to fix errors in program titles. 09/02/14 Tr. at 37 (Att'y MacLean). The SDC contends, however, that Mr. Whitt's process resulted in the elimination of a handful of program titles, none of which was claimed by either party in this proceeding. *Id.* at 37–8. The Judges find no persuasive evidence in the record to contradict the SDC's contention, rendering the SDC's omission harmless. Moreover, the Judges note that the dates for Nielsen sweeps weeks, used by Dr. Erdem in his analysis to replicate Mr. Whitt's report, either were produced to IPG or were otherwise publicly available. *See* 04/08/14 Tr. at 23–24, 204 (Att'y MacLean). The SDC satisfied its discovery obligations with respect to this information.

[15] IPG raised similar objections in the 2000–03 distribution proceeding. Docket No. 2008–2 CRB CD 2000–03. In that proceeding, the Judges excluded Mr. Whitt's testimony, which relied on data similar to that which the SDC proffer in the current proceeding. The Judges' decision not to consider Mr. Whitt's testimony in the 2000–2003 proceeding, however, was based the SDC's failure to provide Mr. Whitt's testimony until its rebuttal case, three weeks before the hearing. In that context, the Judges found the SDC's delay ''deprived IPG of the opportunity to review the work undertaken by Mr. Whitt.'' 78 FR 64984, 65004 (Oct. 30, 2013)

[16] Ms. Kessler's written direct testimony was included in the prior testimony designated by the SDC for consideration in this proceeding under 37 CFR 351.4(b)(2).

was absolutely zero incentive for everybody to intentional *[sic]* bias the data in any way.'' *Id.* at 33.

For purposes of ruling on the Motion, the Judges do not examine the weight, if any, they might place on the proffered evidence. Rather, the Judges must examine whether the SDC offered the evidence in a manner that was consistent with the applicable rules for offering this type of evidence.

The Judges' procedural rules address evidence in proceedings before the Judges. Rule 351.10(a) addresses admissibility of evidence. Under the rule, evidence that is relevant and not unduly repetitious or privileged is admissible. Proponents must authenticate or identify written testimony and exhibits for them to be admissible. *See* 37 CFR 351.10(a). The admissibility requirements of authentication or identification are satisfied by evidence sufficient to support a finding that the matter in question is what its proponent claims. *Id.*

IPG does not contend that the SDC violated any provision of Rule 351.10(a); that is, that the Whitt report is irrelevant, unduly repetitious, or privileged. Rather, IPG focuses on Rule 351.10(e). That provision of the rule provides if studies or analyses are offered in evidence, they must state clearly ''the study plan, the principles and methods underlying the study, all relevant assumptions, all variables considered in the analysis, the techniques of data collection, the techniques of estimation and testing, and the results of the study's actual estimates and tests.'' 37 CFR 351.10(e). This information must be presented in a ''format commonly accepted within the relevant field of expertise implicated by the study.'' *Id.* Facts and judgments upon which conclusions are based must be ''stated clearly, together with any alternative courses of action that were considered.'' *Id.* The party offering the study into evidence must retain summaries and tabulations of input data and the input data themselves. *Id.*

IPG asserts that by not explaining precisely how the Whitt report was created, the SDC failed to provide an adequate foundation for the report. In considering whether there was an adequate foundation for admitting the Whitt report into evidence, the Judges must consider not only the exhibit that contains the report but also any written or live testimony offered to explain how the exhibit was created. In his written direct statement, Mr. Whitt included the household viewing report that he had prepared and discussed the sources of the data and a description of how he prepared the report. In the April 8, 2014, hearing on IPG's motion to strike portions of the SDC's written direct statement, Mr. Whitt provided additional details about he created the report, including the sources of the data, the processes he followed to merge Nielsen and Tribune data files, and the ''quality control'' process he used to eliminate erroneous program titles.

IPG's counsel and the Judges had ample opportunity to question Mr. Whitt on all elements of the report. After noting IPG's objection, the Judges admitted provisionally Mr. Whitt's written testimony during the hearing on September 3, 2014. 09/03/14 Tr. at 416. IPG's counsel then had another opportunity to cross-examine Mr. Whitt on the processes he used to construct the report. On both occasions, Mr. Whitt was open and forthright about how he prepared the report, including the manner in which he used a list of stations based on a set of Nielsen data ordered by Ms. Kessler for MPAA in a separate proceeding. *See, e.g.,* 09/03/14 Tr. at 422 (Whitt) (''I just accepted whatever stations they sent me.''). Mr. Whitt made no efforts to gloss over the potential weaknesses in the preparation of the report. Indeed, the SDC's counsel correctly identified Mr. Whitt as more akin to a fact witness than an expert witness. 09/02/14 Tr. at 35 (Whitt).

In the end, the Judges are satisfied that the SDC provided an adequate foundation for the admission of Mr. Whitt's written direct statement into the record. That is not to say that there are not issues with respect to how the HHVH report was created. The SDC concede as much. *See* 09/02/14 Tr. at 24 (Att'y MacLean) (''[I]t is not that any of the specific problems that the parties raised were invalid or that they shouldn't be raised. . . .''). Not the least of these issues is the fact that the Whitt report relies on a list of stations selected according to criteria that were seemingly unknown even to Ms. Kessler who purportedly selected the stations. These issues go to the weight, not to the admissibility, of the report. For the foregoing reasons, the Judges DENY IPG's Motion and admit Exhibit SDC–D–001 (Written Direct Testimony of Whitt with Exhibits) for all purposes in this proceeding.

IV. Applicable Law and Precedent

Twice each year, CSOs deposit with the Copyright Office royalties accrued for the retransmission of over-the-air television programming outside the originating station's local broadcast area. The amount of fee deposits is statutory. *See* 17 U.S.C. 111(d)(1). Every July, copyright owners file claims for the funds on deposit for the preceding calendar year's retransmissions. On motion of a claimant or *sua sponte,* the Judges publish notice of the commencement of proceedings to distribute those royalty funds.

By convention, claimants and claimants' representatives begin each proceeding with an allocation process that has come to be called ''Phase I.''[17] Traditionally, the claimants divide themselves into eight Phase I categories based upon the nature of the programs in which they claim copyright.[18] If the participants do not agree to an allocation of deposited royalties among the Phase I categories, they submit their controversy to the Judges for adjudication. Once the allocation is decided, the claimants in each category seek distribution. If the claimants within each category do not agree to the distribution scheme among themselves, the Judges adjudicate disputes and make a determination of the appropriate distribution among claimants within each category. This process has become known as ''Phase II'' of the distribution proceeding.

A. The Relevant Statutory Language

The Copyright Act (Act) does not mandate (or even suggest) a formula for royalty distribution.[19] As the Librarian[20] has stated:

> Section 111 does not prescribe the standards or guidelines for distributing royalties collected from cable operators

[17] The Copyright Royalty Tribunal (CRT), a predecessor to the CRB, began bifurcation of the distribution proceedings to mitigate what it perceived to be an unwieldy process. *See 1979 Cable Royalty Distribution Determination,* 47 FR 9879 (Mar. 8, 1982). Bifurcation of distribution proceedings is not mandated by statute or regulation, but is acknowledged in the Judges' current regulations at 37 CFR 351.1(b)(2).

[18] The program categories are: Program Suppliers (syndicated programming and movies); Joint Sports Claimants (live college and professional team sports); Commercial Television (programs produced by local commercial TV stations); Public Broadcasting; Devotional Claimants; and Canadian Claimants. Two additional categories represent non-TV interests: Music Claimants (copyright owners of musical works carried on broadcast TV signals); and National Public Radio (copyright owners of all non-music content broadcast on NPR stations)

[19] Section 111(d)(4) of the Act merely provides that, in the event of a controversy concerning the distribution of royalties, ''the Copyright Royalty Judges shall, pursuant to Chapter 8 of [title 17], conduct a proceeding to determine the distribution of royalty fees.''

[20] The Librarian was responsible for administering the Copyright Arbitration Royalty Panel (CARP) process for distributing cable royalties from 1993, when Congress abolished the CRT, a predecessor adjudicative body, until 2005, when Congress established the Copyright Royalty Judges program. The Librarian had the obligation of reviewing CARP decisions and, on recommendation of the Register, adopting, modifying, or rejecting them.

under the statutory license. Instead, Congress decided to let the Copyright Royalty Tribunal ''consider all pertinent data and considerations presented by the claimants'' in determining how to divide the royalties.

Distribution of 1993, 1994, 1995, 1996 and 1997 Cable Royalty Funds, Order, in Docket No. 2000–2 CARP CD 93–97, 66 FR 66433, 66444 (Dec. 26, 2001) (quoting H.R. Rep. No. 1476, at 97 (1976)) (1993–1997 Librarian Order).[21]

The Act does require, however, that the Judges act in accordance with prior determinations and interpretations of the Copyright Royalty Tribunal, the Librarian, the Register of Copyrights (Register), Copyright Arbitration Royalty Panels, to the extent that precedent is consistent with the Register's opinions on questions of copyright law, and decisions of the Court of Appeals relating to distribution proceedings. *See* 17 U.S.C. 803(a)(1).

Determining the proper distribution of cable royalties among claimants requires a determination of the ''relative marketplace value'' of the respective claimants' programs. *See, e.g., Program Suppliers* v. *Librarian of Congress,* 409 F.3d 395, 401 (D.C. Cir. 2005); *1993–1997 Librarian Order,* 66 FR at 66445. The Judges defined ''relative marketplace value'' in detail in a previous Determination. *See Determination of the Distribution of the 2000–03 Cable Royalty Funds, Docket No. 2008–2, CRB CD 2000–2003,* 78 FR 64984, 64985–6 nn. 8 and 9 (October 30, 2013) (*2000–03 Determination*). In the present Determination, the Judges adopt and restate the ''relative market value'' standard they described in the *2000–03 Determination,* and provide further detail consistent with that standard, including detail presented through the expert economic testimony in the present proceeding.

To assess relative marketplace value, the Judges previously have looked to hypothetical, simulated, or analogous markets, as Congress has imposed the compulsory license regime *in lieu* of an unfettered free market for cable retransmission of broadcast television programs. *2000–03 Determination,* 78 FR at 64986; *see also 1993–97 Librarian Order,* 66 FR at 66445; *1987 Music Determination,* 55 FR at 11993. Consistent with precedent, in the current proceeding the Judges look to the evidence presented by the parties, if any, to identify the parameters of a hypothetical market that would exist *but for* the compulsory license regime.[22]

B. The Economic Standard: ''Relative Market Value''

As explained in the *2000–03 Determination,* to construct the hypothetical market, it is important at the outset to appreciate the *reason* for the statutory license and the concomitant distribution proceedings. Statutory licenses substitute for free market negotiations because of a perceived intractable ''market failure'' inherent in the licensing of copyrights—particularly the assumed prohibitively high ''transaction costs'' of negotiating a multitude of bilateral contracts between potential sellers and buyers. *See, e.g.,* R. Picker, *Copyright as Entry Policy: The Case of Digital Distribution,* 47 Antitrust Bull. 423, 464 (2002) (''The modern structure of . . . validating or conferring rights in copyright holders yet coupling those rights with statutory licenses has the virtue of mitigating the exercise of monopoly power and minimizing the transaction costs of negotiations.''); S. Willard, *A New Method of Calculating Copyright Liability for Cable Rebroadcasting of Distant Television Signals,* 94 Yale L.J. 1512, 1519 (1985) (''One important reason for compulsory licensing . . . was to avoid the 'prohibitive' transaction costs of negotiating rebroadcast consent.''); S. Besen, W. Manning & B. Mitchell, *Copyright Liability for Cable Television: Compulsory Licensing and the Coase Theorem,* 21 J.L. & Econ. 67, 87 (1978) (''Compulsory licensing . . . has lower negotiating costs than a system based on full copyright liability. . . .''). Thus, the hypothetical market that the Judges must construct must be a market that would be unencumbered by either transaction costs or the restrictions imposed by the statutory license.

1. ''Relative'' Market Value

The Judges begin, as they did in the *2000–03 Determination,* parsing the phrase ''relative market value'' by first considering the import of the word ''relative.'' The word ''relative'' denotes that the value of any retransmitted program is to be determined in relation to the value of all other programs within the bounds of the respective Phase I category definitions, and thus can be expressed as a percentage of total ''market value.''

2. Relative ''Market Value''

In turn, ''market value'' is traditionally stated in decisional and administrative law more fully as ''fair market value.'' The Supreme Court has stated the traditional definition of ''fair market value'' as ''the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts.'' *U.S.* v. *Cartwright,* 411 U.S. 546, 551 (1973). It is necessary to further define the various terms that comprise the foregoing definition of relative market value.

a. The Hypothetical ''Willing Sellers'' (the Copyright Owners)

Copyright Owners seek to maximize profit from licensing their programs for retransmission by CSOs. Copyright Owners' marginal costs are low and approach zero. Most of the costs incurred in creating the work are sunk, fixed costs. Even so, Copyright Owners seek to maximize the revenue they receive from CSOs. Given the minimal marginal costs, Copyright Owners, as the hypothetical willing sellers, will always have an incentive to sell at some positive price, but will likely engage in bargaining whereby a Copyright Owner might threaten to deny the license unless the CSO offers the Copyright Owner's (undisclosed) reservation price. *See* Besen, *et al, supra,* at 81.

b. The Hypothetical ''Willing Buyers'' (the CSOs)

For CSOs, the economics are less straightforward. CSO revenues are derived from the sale of cable bundles (commonly described as ''packages'' or ''tiers'') to subscribers, *i.e.,* the ultimate consumers. In turn, many variables affect the number of consumers that subscribe to a particular CSO's service, including the retransmitted broadcasts that the CSO includes as part of its subscription package.[23]

[21] The 1993–1997 Librarian Order was vacated as moot after the parties settled their appeals. *Distribution of 1993, 1994, 1995, 1996 and 1997 Cable Royalty Funds, Notice of termination of proceeding,* Docket No. 2000–2 CARP CD 93–97, 69 *FR* 23821 (Apr. 30, 2004). The settlement and vacatur of the 1993–1997 Librarian Order did not disturb the reasoning articulated therein. *Id.* at 23822.

[22] ''*Simulations* aim at imitating an economically relevant real or possible system by creating societies of artificial agents and . . . institutional structure. . . .'' A. Lehtinen and J. Kuorikoski, *Computing the Perfect Model: Why Do Economists Shun Simulations?,* 74 Phil. of Sci. 304, 307 (2007) (emphasis in original). However, the parties to this proceeding did not proffer evidence of any simulations. Further, the parties did not provide evidence or testimony from sellers/licensors and buyers/licensees in ''*analogous*'' markets, such as perhaps the markets for cable programming or syndication rights (nor the results of any surveys of such market participants) that the Judges might use as benchmarks to establish a distribution methodology in the present proceeding. The SDC did provide, however, evidence of ratings from the local markets in which the SDC and IPG programs aired.

[23] The compulsory license regime requires CSOs to license a station's signal in its entirety, 17 U.S.C. 111(d)(1)(B), and to retransmit the programs

To CSOs, the programs offered by the Copyright Owners are inputs—factors of production—utilized to create the products that the CSOs sell to their customers, *viz.,* the various subscription bundles of cable channels. In a hypothetical program market, CSOs would buy the rights to retransmit programs as they would purchase any factor of production, up to the level at which that ''factor price'' equals the ''Marginal Revenue Product'' (MRP) of that program. In simple terms, a CSO in a competitive factor market would only pay for a license to retransmit a program if the revenue the CSO could earn on the next (marginal) sale of the final product were at least equal to that price.[24] In practical terms, why would a CSO pay $50,000 to retransmit a program that the CSO estimates would add only $40,000 to the CSO's subscriber revenue? *See* Besen, *et al., supra,* at 80 (''To the cable system the value of carrying the signal is equal to the revenue from the extra subscribers that the programming will attract and any higher subscriber fees it can charge less the additional costs of importing the program.'').[25]

c. ''Neither Being Under Any Compulsion to Buy or Sell''

In the *actual* (*i.e.,* non-hypothetical) market, terrestrial broadcast stations create the program lineup, which is only available for purchase by CSOs as a pre-bundled signal. The CSOs cannot selectively license for retransmission some programs broadcast on the retransmitted station and decline to license others; rather, the signal must be purchased *in toto.* 17 U.S.C. 111(d)(1)(B) (statutory license royalty computed based on number of ''distant signal equivalents'').

Is this required bundling a form of ''compulsion'' upon CSOs? In the *actual* market, they are *compelled* to take every program pre-bundled on the retransmitted distant station, despite the fact that the various pre-bundled programs would each add different monetary value (or zero value) in the form of new subscriber volume, subscriber retention, or higher subscription fees. Indeed, some programs on the retransmitted station may have so few viewers that CSOs—if they had the right—would decide not to purchase such low viewership programs but for the requirements of the compulsory license regime.

Further, certain programs may have more substantial viewership, but that viewership might merely duplicate viewership of another program that generates the same sub-set of subscribers. To restate the example offered in the *2000–03 Determination,* the viewers of reruns of the situation comedy ''*Bewitched*'' may all be the same as the viewers of reruns of ''*I Dream of Jeannie,*'' a similar supernatural-themed situation comedy. However, ''*Bewitched''* may have fewer viewers than ''*I Dream of Jeannie.*''

In the *hypothetical* market in which the compulsory licensing regime did not exist, a rational profit-maximizing CSO that had already paid for a license to retransmit ''*I Dream of Jeannie*'' would not also pay for ''*Bewitched*'' in this hypothetical marketplace, because it fails to add marginal *subscriber revenue* for the CSO. Rather, the rational CSO would seek to license and retransmit a show that marginally increased subscriber revenue (or volume, if market share was more important than profit maximization), even if that program had lower total viewership than ''*Bewitched.*''

Alternately stated, why should CSOs in the *hypothetical* market be *compelled* to pay for a program based on its higher viewership, even though it adds less value than another show with lower viewership? Simply put, the hypothetical, rational profit-maximizing CSOs would not pay Copyright Owners based solely on levels of viewership. Rather, the hypothetical CSOs would (1) utilize viewership principally as a tool to estimate how the addition of any given program might change the CSO's subscriber revenue, (2) attempt to factor in the economics of various bundles; and (3) pay for a program license (or eschew purchasing that license) based on that analysis.

Thus, the Judges consider the hypothetical market to be free of the compulsion that arises from the pre-bundling that exists in the actual market.

On the other side of the coin, are the sellers, *i.e.,* the Copyright Owners, under any ''compulsion'' to sell? In the actual market, one in which the terrestrial station signal is acquired in a single specific bundle by a CSO, the answer appears to be yes, there is ''compulsion.'' Copyright Owners cannot carve out their respective programs and seek to maximize their values to CSOs independent of the prepackaged station bundles in which they exist.

Of course, in the ''hypothetical market'' that the Judges are charged with constructing, it would be inappropriate not to acknowledge the inherent bundling that would occur. That is, the bundling decision is a ''feature'' rather than a ''bug'' in even a hypothetical market for distant retransmissions in which the statutory license framework does not exist. Thus, while Copyright Owners could offer to supply their respective programs at given prices, the equilibrium market price at which supply and demand would intersect would reflect the CSOs' demand schedules, which are based in part upon the fact that the buyers, *i.e.,* the CSOs, would pay only a price that is equal to (or less than) the MRP of that program in a bundle to be purchased by *subscribers.*

3. The Optimal Economic Approach to Determining ''Relative Market Value''

In the present proceeding, the Judges considered the general interrelationship among bundling, subscribership, and viewership, and their impact on ''relative market value,'' in more detail than in prior proceedings. Specifically, the Judges inquired as to whether the parties' experts had considered utilizing a method of valuation known as the ''Shapley value'' methodology[26] to determine their respective allocations.

Broadly stated, ''the Shapley value gives each player his 'average marginal contribution to the players that precede him,' where averages are taken with respect to all potential orders of the players.'' U. Rothblum, *Combinatorial Representations of the Shapley Value Based on Average Relative Payoffs,* in *The Shapley Value: Essays in Honor of Lloyd S. Shapley* 121 (A. Roth ed. 1988) (hereinafter, ''Roth'') (*quoting* Shapley, *supra*). A Shapley valuation in the

(including advertisements) without alteration. 17 U.S.C. 111(c)(3). Therefore, retransmitting CSOs cannot sell advertising on retransmitted broadcast channels in the *actual* market under the compulsory license regime. However, in the *hypothetical* market, where the limiting provisions of the compulsory license regime would not apply, retransmitting CSOs arguably could sell local replacement advertising, which would render viewership an important metric of relative market value. However, this point was not presented by either of the parties in the present proceeding.

[24] A focus on marginal costs and benefits is not only efficient for the hypothetical buyers and sellers, but also for the consuming public: ''Optimal program diversity will result if cable operators and the public they serve pay to copyright owners the marginal value derived from viewing syndicated programming.'' Willard, *supra,* at 1518.

[25] If the CSO, as a program licensee, had some degree of monopsony power in the factor market, it could pay less than a price equal to MRP, but still would pay to license programs in a *quantity* at which MRP would equal the marginal cost to license an additional program.

[26] *See* L. Shapley, *A Value for n-person Games,* in H. Kuhn and A. Tucker, *Contributions to the Theory of Games* (1953). A definition and an example of a Shapley valuation are set forth in the text, *infra.* For the statistical formula for a Shapley value, *see* 9/8/14 Tr. at 1075–79 (Erdem); *see also SDC Proposed Findings of Fact* (PFF) ¶ 64.

present context is best understood through the following example: [27]

• Assume there is only one CSO (C), and there are two program owners (P1 and P2) with programs available for retransmission.

In a hypothetical market, the Shapley model defines the values of C, P1, and P2 under all of the possible orderings of arrival of the three entities to negotiations and at each point of arrival.

For C, P1, and P2, there are the following 6 (that is 3 factorial, or 3!) possible orderings by which each arrives in the market:

(1) C, P1, P2
(2) C, P2, P1
(3) P1, C, P2
(4) P1, P2, C
(5) P2, C, P1
(6) P2, P1, C

• Assume the following.

(a) An entity (C, P1, or P2)—*alone in the market—generates* $0 in retransmission value regardless of who that player is (because a cable system without programming or a program without a CSO will not be viewed and thus has no value);

(b) regardless of the order in which the respective owners of P1and P2 arrive in the market to attempt to license their respective programs, both of their respective programs generate $0 in retransmission value without a CSO (because programs without a CSO cannot be retransmitted and therefore provide no value);

(c) if C is present, it generates $6 by retransmitting P1 alone and $5 by retransmitting P2 alone;

(d) if all three players are present, then the retransmission of P1 and P2 by C generates an assumed synergistic value of $12.

• The Shapley value of P1 in each of the six possible orderings is thus:

$6 in ordering (1) (because P1 increases the value from $0 to $6);

$7 in ordering (2) (because P1 increases the value from $5 to the synergistic $12);

$0 in ordering (3) (because P1 adds no value when it arrives first to the market);

$0 in ordering (4) (because P1 adds no value when it arrives first to the market);

$7 in ordering (5) (because P1 increases the value from $5 to the synergistic $12); and

$0 in ordering (6) (because P1 does not add value if there is no CSO in the market).

The Shapley value of P1 is the average value of P1 over all possible arrival sequences, or

$$\frac{\$6 + \$7 + \$0 + \$0 + \$7 + 0}{6} = \frac{20}{6} = \$3.33.$$

By a similar calculation, the Shapley value of P2 is $2.83. (Similarly, the Shapley value of C, the CSO, is $5.83.) The sum of the values each provides is approximately $12, which equals the synergistic business value generated when all three entities are present in the market.

Shapley valuations constitute ''the unique efficient solution'' because they ''valu[e] each player['s] direct marginal contribution to [a] grand coalition.'' S. Hart and A. Mas-Colell, ''*The Potential of the Shapley Value,*'' in Roth, *supra,* at 127–28. The Shapley value analysis not only enriches the development of the relative market value standard, but it also would allow the Judges in this proceeding to carry out their statutory mandate to distribute the deposited royalties by comparing the parties' respective valuation methodologies to that optimal standard, to determine which of their methodologies more closely reflects the optimal hypothetical market.

To summarize, as in the *2000–03 Determination,* the Judges will apply in this Determination a hypothetical market that contains the following participants and elements: (1) The hypothetical sellers are the owners of the copyrighted programs; (2) the hypothetical buyers are the CSOs that acquire the programs as part of their hypothetical bundles of programs; and (3) the requirement of an absence of compulsion dictates that the terrestrial stations' initial bundling of programs does not affect the marginal profit-maximizing decisions of the hypothetical buyers and sellers.[28]

V. Description and Analysis of the Parties' Proposals for Distribution

A. The SDC Methodology

1. The Details of the SDC Methodology

The SDC's calculation of relative market value (SDC Methodology) is based upon the analyses of two expert witnesses who testified on behalf of the SDC in their direct case and upon certain designated testimony from prior proceedings.[29] The first live witness upon whom the SDC relied was Mr. Whitt, a systems analyst, programmer and database analyst, who had worked for a company he founded, IT Processing LLC (IT Processing). 9/3/14 Tr. at 418 (Whitt).[30] Mr. Whitt had formed IT Processing to engage in ''massive data projects'' that required ''millions of unique items of data to be accurately and efficiently entered and

[27] This example is inspired by a similar example set forth by Professor Richard Watt, Managing Editor of the *Review of Economic Research on Copyright Issues* and a past president of *The Society for Economic Research on Copyright Issues. See* R. Watt, *Fair Copyright Remuneration: The Case of Music Radio,* 7 Rev. of Econ. Res. on Copyright Issues 21, 25–26 (2010).

[28] The construction of the hypothetical market is of *particular* importance in this proceeding. As explained *infra,* IPG mistakenly argues that the *preexisting* bundling of programs on the retransmitted stations in the *actual* market renders ratings irrelevant to a CSO that must purchase and retransmit the actual bundle *in toto.* IPG confuses the actual market with the hypothetical market the Judges are obligated to construct. The actual market is distorted by the existence of the compulsory statutory license, and the Judges are required to determine the values of the copyrighted programs by hypothesizing an unregulated market in which such statutory compulsion does not exist.

[29] The SDC designated the following testimony from the 1998–99 Phase I Proceeding (Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001–8 CARP CD 98–99) from the following witnesses: (a) Marsha Kessler (a retired MPAA vice president, responsible for retransmission royalties): June 2, 2003 (pp. 6347–6454); June 3, 2003 (pp. 6456–6613); July 14, 2003 (pp. 9478–9491); and July 15, 2003 (pp. 9724–9753); (b) Paul Lindstrom (a Nielsen employee): June 9, 2003 (7175–7445); and (c) Paul Donato (a Nielsen employee) June 9, 2003 (pp. 7445–7520). From the 2000–2003 Phase II Proceeding (In the Matter of Distribution of 2000, 2001, 2002, and 2003 Cable Royalty Funds, Docket No. 2008–2 CRB CD 2000–2003), the SDC designated testimony from the following witnesses: (a) Ms. Kessler: June 3, 2013 (pp. 101–218); (b) Paul Lindstrom: June 3, 2013 (pp. 280–324); and June 4, 2013 (pp. 368–433); (c) Dr. William Brown: June 6, 2013 (pp. 1364–1420); (d) Jonda Martin: June 3, 2013 (pp. 219–236); (e) Kelvin Patterson: June 3, 2013 (pp. 237–280); and (f) Mr. Whitt: June 6, 2013 (pp. 1346–1363).

[30] The SDC proffered Mr. Whitt's testimony from a prior hearing in this proceeding (discussed in Part III, *supra*) conducted on April 8, 2014, in lieu of eliciting his testimony during the September hearing. IPG consented to this procedure (subject to its foundational challenge as set forth in its Motion *in Limine* discussed *supra*) and the Judges incorporated by reference Mr. Whitt's April 8, 2014, testimony as part of the present record. 9/3/14 Tr. at 413–15. IPG also cross-examined Mr. Whitt during the September 2014 hearings, and the SDC then conducted redirect examination of Mr. Whitt.

analyzed.'' Whitt WDT at 2; Ex. SDC–D–001 at 2.

Mr. Whitt's work on behalf of the SDC was derivative of earlier work he had undertaken on behalf of MPAA. More particularly, Mr. Whitt had been engaged by MPAA ''to process large data files consisting of cable and satellite copyright programming and viewing associated with claims filed with the Copyright Royalty Arbitration Panels . . . and [the] Copyright Royalty Board.'' *Id.* at 3.

According to Mr. Whitt, he was contacted by the SDC in 2006 to assist in preparing their case in this proceeding. 4/8/14 Tr. at 106 (Whitt). The SDC engaged Mr. Whitt to utilize his prior work and data from his MPAA assignment to prepare the HHVH Report for 1999, relating to the retransmission of certain Devotional programming on broadcast television stations that were distantly retransmitted to other markets. Whitt WDT at 3 and Ex. 1 thereto; Ex. SDC–D–001 at 3 and Ex. 1 thereto; 4/8/14 Tr. at 106 (Whitt).

Mr. Whitt's 1999 HHVH Report was based on following three data sources:

(1) Programs on a sample of television stations whose signals were distantly transmitted on cable that Mr. Whitt believed Ms. Kessler, a former employee of the MPAA, chose based on whether the signals were ''distant'' for cable copyright purposes;

(2) distant program viewing data from Nielsen, presented on a quarter-hour basis, for programs from Nielsen's six ''sweeps'' months of diary data (January, February, May, July, October and November) (Nielsen Data); [31] and

(3) program data from Tribune Media Services (''TMS'') (including station, date, time, title and program category) (TMS Data).

Id. at 3.

Mr. Whitt then matched the Nielsen Data with the TMS Data in order to merge the Nielsen Data for reported quarter-hour segments with the titles of the programs and other program information in the TMS Data. *Id.* at 4; 4/8/14 Tr. at 108 (Whitt).[32] In addition, Mr. Whitt identified what he described as ''character strings'' from program titles (44 in total) that he discretionally determined were devotional in nature but had not been captured in the merging of the Nielsen Data and the TMS Data. *Id.* at 4–6. Mr. Whitt also used his discretion to delete certain programs that he concluded were not in fact devotional, although their titles initially suggested that they were devotional in nature. 4/8/14 Tr. at 126–28 (Whitt).

Mr. Whitt completed his analysis by ''aggregat[ing] by title and station summing the adjusted household viewing hours from [the] Nielsen [data].'' Whitt WDT at 6; Ex. SDC–D–001 at 3. Thus, Mr. Whitt was able to identify the potentially compensable broadcasts of the programs claimed by SDC and IPG that aired on the sample stations. Whitt WDT at 3; Ex. SDC–D–001 at 3.

The SDC also presented John Sanders as an expert ''to make a fair determination of the relative market values of particular devotional television programs claimed by the parties'' using Mr. Whitt's report. Ex. SDC–D–002 at 2. Mr. Sanders previously had ''actively participated in the appraisal of more than 3,000 communications and media businesses,'' and his work has focused on, *inter alia,* ''the television and cable industries and the appraisal of . . . subscribership-based assets . . . .'' *Id.* at 3. In the course of that work, since 1982, Mr. Sanders has frequently engaged in the valuation of television programs for both buyers and sellers, and the valuation of cable systems, in connection with market transactions (as contrasted with valuations as an expert witness). 9/3/14 Tr. at 461–62 (Sanders). Accordingly, and without objection, Mr. Sanders was qualified as an expert in the valuation of media assets, including television programs. 9/3/14 Tr. at 463–64.

Mr. Sanders testified that if he were representing a buyer or a seller of a license to retransmit a program into a distant market, the first step in his analysis of value would be to ''measure the audience that is being generated by the various programs in question . . . .'' 9/3/14 Tr. at 476–79 (Sanders). Mr. Sanders testified that the reason for this initial emphasis on audience viewership is as follows:

> [I]n terms of a cable system, the objective is to have categories of programming that will attract subscribers. But, within those categories, to have individual program titles that viewers will actually be interested in watching. And those that show greater evidence of viewership will obviously attract more subscribers and, [as a] consequence, would have greater value.

9/3/14 Tr. at 478–79 (Sanders).

Accordingly, Mr. Sanders based his relative valuation estimate primarily on Mr. Whitt's 1999 HHVH Report. Sanders WDT at 4; Ex. SDC–D–002 at 4. He relied on that measure of viewing for the following reasons:

> To allocate reasonably the available funds between [the] SDC and IPG in this proceeding, it is my opinion that audience measurements relying on surveys conducted by Nielsen Media Research are the best available tools to allocate shares. . . .
>
> . . .
>
> Within the category of devotional programming, all of the programs claimed by [the] SDC and IPG appear to be directed predominantly to a Christian audience, and can therefore be thought of as homogeneous in terms of the subscriber base to which they are likely to appeal. Where programs are homogeneous, the most salient factor to distinguish them in terms of subscribership is the size of the audience. A religious program with a larger audience is more likely to attract and retain more subscribers or [sic] the [CSO], and is therefore of proportionately higher value.

Sanders WDT at 5–6; Ex. SDC–D–002 at 5–6. To ascertain the size of a program's audience, Mr. Sanders relied upon Nielsen ratings because he understood such ratings to be ''the currency of the broadcast and cable industry, and . . . generally regarded as the most reliable available measure of audience size.'' *Id.* As Mr. Sanders elaborated in his oral testimony:

> Ultimately, the valuation will be based upon the benefit that it brings to the holder of the programming. And most commonly, the measurement of that value is based upon the audience that that programming is able to generate. . . . Nielsen audience measurement data . . . is the most ubiquitous and authoritative source of audience measurement data in the broadcasting and cable fields.

9/3/14 Tr. at 465–66 (Sanders).

[31] Nielsen ratings estimate the number of homes tuned to a program based upon a sample of television households selected from all television households. The findings within the sample are ''projected'' to national totals. Although there was no evidence or testimony regarding how Nielsen conducted its data collection for sweeps weeks in 1999, Mr. Lindstrom described the general process in his testimony in the 2000–03 proceeding, which the SDC designated in this proceeding. In that regard, Mr. Lindstrom testified that diary data is collected in Nielsen's diary markets during November, February, May, July, and in some cases October and March, which are also known as the ''sweeps'' ratings periods (Nielsen Diary Data). (Diaries are paper booklets in which each person in the household manually records viewing information.) Nielsen mails seven-day diaries to homes randomly selected by Nielsen to keep a tally of when each television in the household was on, what it was tuned to, and who in the household was watching. Over the course of a four-week sweeps period, Nielsen mails diaries to a new panel of randomly selected homes each week. At the end of each sweeps period, all of the viewing data from the individual weeks are aggregated into Nielsen's database. Each sweeps period yielded a sample of approximately 100,000—aggregating to 400,000 households over the course of a year. *2000–03 Determination,* 78 FR at 6993; 6/3/13 Tr. at 290, 296–98, 312 (Lindstrom) (SDC Designated Testimony).

[32] More precisely, Mr. Whitt had performed this merger on behalf of the MPAA. Then, after being retained by the SDC, he derived his 1999 HHVH Report for Devotional programming by narrowing that prior work on behalf of the MPAA to isolate the Devotional programming. 4/8/14 Tr. at 108–10 (Whitt).

Accordingly, Mr. Sanders added the household viewing hours for the distantly retransmitted compensable programming for each party. This calculation totaled 1,237,396 viewing hours for the SDC and 280,063 for IPG. Sanders WDT at 9; Ex. SDC–D–002 at 9; *see also id.* at Appendix E. In percentage terms, SDC-compensable programming accounted for 81.5% of the devotional viewing of the two parties' programs, and IPG-compensable programming accounted for 18.5%.

Based on his analysis, Mr. Sanders calculated the viewership (and distribution) shares of the SDC and IPG programming as follows.

SDC: 81.5%
IPG: 18.5%

Mr. Sanders was unable to provide any confidence interval for these allocations, given that the statistical bases for the analysis were not random in nature. However, Mr. Sanders testified that he was able to confirm the overall ''reasonableness'' of his analysis by comparing the results with an analysis of local Nielsen viewing data for the same IPG and SDC programs in the February 1999 sweeps period. Mr. Sanders testified that he believed the Nielsen analysis was performed through a random sampling of viewers and constituted the ''granular'' or ''niche'' type of report that Mr. Sanders understood to be necessary in order to rely with greater certainty on the results of the analysis. 9/3/14 Tr. at 512 (Sanders).

That analysis revealed the following distribution of viewers:

SDC: 71.3%
IPG: 28.7%

Mr. Sanders also noted that there was a ''correlation coefficient for the HHVH shares relative to the Nielsen shares [of] approximately 0.75, which ''signifies that 75% of the variance between HHVH results for different programs is connected with the variance between local ratings for those programs.'' Sanders WDT at 10; Ex. SDC–D–002 at 10. The Judges understand Mr. Sanders's testimony to mean that the ''connected'' or correlated nature of the two sets of viewership data demonstrates that each data set is a form of confirmation as to the reasonableness of the other data set.

Indeed, Mr. Sanders testified that, in his expert opinion, this 71.3%:28.7% ratio should be ''characterized as a reasonableness check'' on his analysis. 9/3/14 Tr. at 501. *See also* 9/3/14 Tr. at 510 (Sanders) (restating his ''reasonableness'' conclusion). Mr. Sanders emphasized the importance of his ''reasonableness check,'' stating that the ''body of data'' that led to a 71.3%:28.7% distribution ''is very relevant and, in my opinion, should not be ignored.'' 9/3/14 Tr. at 503 (Sanders) (emphasis added). In that regard, Mr. Sanders further noted that, had his primary analysis resulted in a 71.3%:28.7% distribution and, had his ''reasonableness'' check resulted in an 81.5%:18.5% distribution, he would have proposed the 71.3%:28.7% distribution. 9/3/14 Tr. at 509–10 (Sanders).

2. Evaluation of the SDC Methodology

IPG sets forth several criticisms of the SDC Methodology. First, IPG claims that the SDC Methodology incorrectly assumes that household viewing constitutes an appropriate measure of relative market value. Assuming *arguendo* viewership can be a basis for value, IPG asserts, second, that the SDC did not provide a sufficient evidentiary foundation for the Nielsen Data and, therefore, for the 1999 HHVH Report. Third, again assuming, *arguendo,* that viewership is probative of value IPG argues that the incidence of ''zero viewing'' sample points in the Nielsen Data utilized to create the 1999 HHVH Report invalidates the Nielsen Data as a reliable source of viewership information. Fourth, IPG asserts again assuming, *arguendo,* the probative nature of viewership, that the SDC could have provided better data to support the SDC Methodology. Fifth, IPG argues that the SDC's own reasonableness test demonstrates that IPG programming has a significantly higher value than the 18.5% allocation proposed by the SDC.

a. Viewership Is an Acceptable ''Second-Best'' Measure of Value, Even Though It Is Not the Optimal Metric

IPG opposes a relative market value assessment based solely on viewership because: (1) A CSO primarily benefits from attracting subscribers rather than viewers; (2) retransmitting a program with more viewers will not necessarily increase aggregate subscribership for a CSO; and (3) retransmitting a program with fewer viewers might increase a CSO's aggregate subscribership. Robinson WRT at 8.

The Judges agree that a relative market value assessment based solely on viewership is less than optimal. In reaching this conclusion, the Judges refer to their earlier discussion of the Shapley valuation approach. In the present context, the Judges believe that the optimal approach to determining relative market value would have been to compare the SDC programs with those of IPG using Shapley or Shapley-approximate valuations. Such an approach was not possible on the record before the Judges in the current proceeding because of the non-existence, unavailability, or, from the parties' perspective, prohibitive development cost of the necessary evidence upon which such a comparison could be made.

The SDC's expert economic witness, Dr. Erkan Erdem, agreed that, *in theory,* a Shapley valuation would be a more precise way to measure relative value in this proceeding. 9/8/14 Tr. at 1084 (Erdem). However, as Dr. Erdem noted, there was no evidence in the record (or apparently otherwise available) by which one could calculate the Shapley values in this proceeding. Tr. 9/8/14 at 1084–85 (Erdem).[33] Indeed, no expert attempted to utilize a Shapley methodology to determine relative market value of the SDC and IPG programs.

Dr. Erdem did acknowledge, however, that, as an alternative, a CSO could utilize the general principles of a Shapley valuation to rank ordinally the shows available for retransmission in a hypothetical market, and thus create heuristic Shapley values. 9/8/14 Tr. at 1100–01 (Erdem). Such a ranking by CSOs in the present case could have served as a basis for benchmarking the ''relative marketplace values.'' However, neither of the parties proffered a witness who had experience in creating a roster of television programs.

Thus, the Judges have no evidence or testimony by which to establish the relative marketplace values of the SDC and IPG programs in the optimal theoretical manner or in a manner that uses ''Shapley-approximate'' values. This evidentiary constraint places the Judges in a ''second best'' situation. In that situation, it is not necessarily optimal to attempt to satisfy other efficient conditions, because to do so would further worsen the already sub-optimal situation. *See* R.G. Lipsey and K. Lancaster, *The General Theory of Second Best,* 24 Rev. Econ. Stud. 11 (1956). Colloquially stated, the theory of the second best may generally be defined as ''not letting the perfect be the enemy of the good.'' When the parties have not proffered evidence or testimony to permit Shapley-type valuations, it would not be efficient also to reject valuations based predominantly on viewing data.

[33] Professor Watt recognized this practical problem. *See* Watt, *supra* note 27, at 27 (''The Shapley model provides a reasonable working solution for regulators . . . . However, it does suffer from a particularly pressing problem—that of data availability.'').

To reject viewing-centric valuations would require the Judges instead either to adopt a less probative or seriously deficient methodology,[34] or figuratively to throw up their hands and refuse to make any allocation or distribution.[35] The Judges will not compound the problem of the absence of the most theoretically probative evidence by rejecting the SDC's viewer-centric valuations, notwithstanding the limitations in using those valuations. [36]

The Judges' decision to issue a determination based on the extant evidence, rather than to reject all evidence because it is less than optimal, is consistent with D.C. Circuit precedent. Specifically, the D.C. Circuit has held that, in making distributions under Section 111 of the Copyright Act, *mathematical precision is not required. See National Ass'n of Broadcasters* v. *Librarian of Congress,* 146 F.3d 907, 929, 932 (D.C. Cir. 1998); *Nat'l Cable Television Ass'n* v. *Copyright Royalty Tribunal,* 724 F.2d 176, 187 (D.C. Cir. 1983). Rather, the Judges may render a determination premised on ''the only'' evidence presented by the parties, notwithstanding that ''the character of the evidence presented'' may fall short of more precise evidence that the parties did not or could not present. *See Nat'l Cable Television,* 724 F.2d at 187.

Applying a viewership-based model of valuation in deciding distribution allocations also is consistent with Library precedent. Specifically, in an analogous context in a Phase I proceeding, the Librarian held that a measure of ''relative market value'' could be made by reliance on viewership information when a more optimal valuation tool was not available. *Distribution of 1998 and 1999 Cable Royalty Funds,* Docket No. 2001–8 CARP CD 98–99, 69 FR 3606, 3614 (January 26, 2004) (noting that survey evidence may be superior to viewing evidence but, in the absence of that superior evidence, viewing information can properly be relied upon by the factfinder in a distribution proceeding).

IPG's own witness acknowledges the importance of viewership data generally in assessing the value of programming. In her oral testimony, Dr. Robinson conceded that viewership is an important metric in the determination of relative market value. 9/2/14 Tr. at 175; 9/4/14 Tr. at 784. (Robinson). Additionally, Dr. Robinson acknowledged that viewership is important to a CSO in order to retain subscribers, 9/4/14 Tr. at 777–78 (Robinson), confirming the common sense idea that subscribers would not continue to subscribe if they did not watch the offered programming.

The Judges are also confident that, generally, Nielsen-derived viewership data presents a useful measurement of actual viewership. They base this conclusion on, among other things, the fact that the television industry relies on Nielsen data for a wide range of business decisions. The SDC's expert industry witness, Mr. Sanders, testified that those in the television industry consider viewership data, as compiled by Nielsen, to be the best and most comprehensive measure of viewership. 9/3/14 Tr. at 480–81 (Sanders). Mr. Sanders acknowledged that the Nielsen Data are not perfect, but that their status as the best and most comprehensive measure of viewership has caused the television industry to utilize Nielsen data as a ''convention'' for ''economic decision makers.'' *Id.* IPG did not present any evidence to rebut either of these points.

If the Judges were to discount the Nielsen Data in this proceeding simply on the basis that Nielsen data are imperfect, the Judges would in essence be substituting their own opinion of the Nielsen yardstick for the collective opinion of the ''economic decision makers'' in the market. The Judges will not engage in such substitution; it is their job to develop a hypothetical market by eliminating the impact of the compulsory licensing regime—but otherwise to hew as closely as is reasonably appropriate to the conduct, performance, customs and standards of the actual market.

Despite the Judges' conclusion that viewership is a *type* of metric that the Judges may consider, the Judges must consider whether the *particular* viewership analysis undertaken by the SDC contains imperfections, as noted by IPG, or otherwise. *See, e.g., 1987 Devotional Determination,* 55 FR at 5650; *1986 Determination,* 54 FR at 16153–54 (noting that viewing measurements might not be perfect and must be appropriately adjusted if claimants are able to prove that their programs have not been measured properly or may be significantly undermeasured). Accordingly, the Judges must analyze the SDC's particular viewership evidence and address the issues raised by IPG in that regard.

b. The Evidentiary Foundation for the SDC Methodology

(1) ''Replication'' and ''Testing'' of the SDC's HHVH Report

The SDC's viewership evidence consisted largely of the HHVH Report presented by SDC's witness, Mr. Whitt. IPG asserts that the SDC did not provide sufficient underlying data to allow IPG's expert, Dr. Robinson, to test the accuracy of the SDC's HHVH Report for 1999. 9/4/14 Tr. at 755–56, 765–68 (Robinson). However, the Judges disagree with IPG's assertion, based upon Dr. Robinson's own testimony. Specifically, Dr. Robinson testified that she indeed ''merged the underlying data and ran the search terms for devotional programming [and] reached substantially the same results [as the SDC] in all material respects.'' *Id.* at 850–61 (Robinson). In her prior testimony on IPG's Motion to Strike, Dr. Robinson had presaged her subsequent successful replication of the HHVH Report by admitting that she was able to merge the Nielsen Data and the TMS Data, run Mr. Whitt's search terms and test the accuracy of his results. 4/8/14 Tr. 68–69 (Robinson); *Order Denying Motion to Strike* at 6. Based on Dr.

[34] The only other methodology presented in this proceeding is the IPG Methodology. For the reasons set forth *infra,* the Judges have concluded that the IPG Methodology is seriously deficient and far less probative than the SDC Methodology. Thus, even if the Judges had not analyzed and considered a Shapley-type valuation, they would have analysis or consideration by the Judges, they would have given far more weight to the viewer-centric SDC Methodology than the seriously deficient IPG Methodology.

[35] The Judges had considered whether they could decline to make any distribution determination in light of the imperfections of the parties' evidence, and asked counsel for the parties to provide guidance as to that alternative. *Cf. Final Determination, 1993–1997 Cable Proceedings (Phase II),* 66 FR 66433, 66454 (Dec. 26, 2001) (the Librarian accepted the Register's recommendation to reject a CARP Report distributing royalties because ''the record . . . is insufficient on which to base a distribution determination.''). Both counsel in the present proceeding urged the Judges not to render a determination that declined to distribute the royalties if a determination that made an allocation could be based upon adequate evidence and would not be arbitrary or capricious. 9/8/14 Tr. at 1172–75 (counsel for the SDC); 9/8/14 Tr. at 1176–79 (counsel for IPG). The Judges are confident that this Determination satisfies those standards.

[36] The limitations might inure to IPG's benefit. As Dr. Erdem explained, when there is an overlap in viewership between programs, a purely viewership-based valuation, such as that proffered by the SDC, might *understate* the relative value of programs with higher viewership (*i.e.,* the SDC programs) and *overstate* the IPG distribution percentage compared to a Shapley valuation. 9/8/14 Tr. at 1082–83 (Erdem). The Judges also note that in the hypothetical market, *several* CSOs might be competing for the right to retransmit programs. Thus, to use a prior example, if a CSO has purchased a license to retransmit *I Dream of Jeannie,* rather than *Bewitched,* because the former has more viewers and its viewers overlap significantly with the latter's viewers, a *competing* retransmitter might then find the total viewership for *Bewitched* so valuable (given that the retransmission rights to *I Dream of Jeannie* were no longer available) that *Bewitched* is that competing retransmitter's first choice even under a Shapley-type valuation. Therefore, in a competitive market, absolute viewership would be particularly probative of program value.

Robinson's testimony, the Judges conclude that the HHVH Report was replicable and that the results were capable of being tested. As a result, the Judges conclude that the report should carry at least some weight in assessing the relative market value of the SDC and IPG programs.

(2) Issues Regarding the Kessler Sample

IPG also criticizes the HHVH Report because the SDC (1) did not produce a witness with ''firsthand knowledge of the method or basis for the station sample selection'' used to create the Kessler sampling of stations, (2) presented no evidence directly establishing that Ms. Kessler selected the stations appearing in the Nielsen Data, and (3) presented ''[n]o information or data regarding the station sampling process.'' *See* IPG PFF at 26–29.

There is some validity to IPG's criticisms. The SDC did not call Ms. Kessler as a witness to explain how she selected her 1999 sample of stations. Further, Mr. Whitt acknowledged that he had not participated in the selection of the Kessler Sample of stations, so he had no knowledge of the method by which those stations were selected. 4/8/14 Tr. at 112 (Whitt). The extent of Mr. Whitt's knowledge in this regard was limited to his recollection that ''the MPAA conducted a detailed study of what stations to select[,] . . . and then I was given a list of those stations[,] and then that's what I used to combine the two files. . . . So, all the Nielsen stations should have represented the complete list of the Kessler stations.'' 4/8/14 Tr. at 113 (Whitt); 9/3/14 Tr. at 444 (Whitt).[37]

Further, the SDC's expert witness, Mr. Sanders, admitted that the Kessler Sample and, derivatively, the HHVH Report and his own report are subject to valid criticism because the Kessler Sample—upon which both reports rely—was created by a non-random selection of stations. 9/3/14 Tr. at 496 (Sanders).[38]

IPG properly takes the SDC to task for relying on only a small portion (72 of 800, or 9%) of distantly retransmitted stations.[39] *See* 9/4/14 Tr. at 626 (Sanders) (confirming that Mr. Whitt's analysis covered 72 stations.) [40] As IPG noted, in 1986 the CRT found that a study of 18.8% of 622 total stations to be not sufficiently large to be ''*perfectly projected* to other stations. . . .'' IPG PFF at 50 (emphasis added) (citing *1983 Cable Royalty Distribution Proceeding,* Docket No. CRT 84–1 83CD, 51 FR 12792, 12794 (April 15, 1986)).[41]

The Judges acknowledge that the Kessler Sample was non-random.[42] That being said, the manner in which the sample was chosen will influence the weight the Judges place on the station sample, and by extension, on the HHVH Report. For example, the presence of a clear bias either in favor of or against a particular participant in the current proceeding would render the report all but useless. Therefore, for the Judges to give any weight to the SDC Methodology, the Judges must analyze the origination of and the purposes for creating the Kessler Sample.

The SDC argues that the Judges can and should rely on the Kessler Sample notwithstanding the aforementioned defects. Mr. Sanders opined that the non-random nature of the Kessler sample, and its uncertain genesis, do not pose a problem because:

- The Kessler Sample ''employs viewing results from the most distantly retransmitted broadcast stations as reported by Form 3 cable systems.'' [43]
- Although the Kessler Sample is non-random, it is ''close to a census,'' because ''the most important and relevant *titles* [of] the principal programs of all SDC- and IPG-represented claimants appear in the survey.'' (Emphasis added).[44]
- The Kessler Sample comprises many of the regions identified by Nielsen as ''Designated Market Areas (DMAs),'' [45] and the first 10 stations in the Kessler Sample covered approximately 30–40% of the population of the country, thereby covering some of the largest stations.
- There is no evidence ''to suggest that the sample was chosen to benefit or prejudice either party in this proceeding [and] . . . it is neutral on that score.''

Sanders WDT at 2; Ex. SDC–D–002 at 7; 9/4/14 Tr. at 627 (Sanders). Mr. Whitt likewise defended the use of the Kessler Sample, observing that ''it appeared that the stations were national, geographically scattered around the country[, a]nd they included several large stations, but also a few small stations.'' 9/3/14 Tr. at 420 (Whitt).

Under cross-examination, however, Mr. Sanders did acknowledge that many large metropolitan areas were not represented in the Kessler Sample of stations. He noted the ''possibility'' that there was no measurable viewing of the SDC and IPG programs in those areas or that the programs were not retransmitted in those areas. 9/4/14 Tr. at 631–33 (Sanders). Of course, those speculative ''possibilities'' are precisely the sort of concerns that a truly random sample would address objectively. The non-random nature of the Kessler Sample leaves unanswered the question

[37] Although the SDC provided an example of such a Kessler Sample to IPG in discovery (from the Phase I 1999 proceeding), the SDC did not represent that this earlier sample constituted the sample used to select the stations identified in the Nielsen Data. *See* 4/8/14 Tr. at 229 (SDC counsel ''stipulat[ing]'' that ''Ms. Kessler's list from Phase I is not the list of stations that was ordered from Nielsen'').

[38] In the 2000–03 proceeding, Ms. Kessler testified that her sampling was not (and was not intended to be) a random sample. *See* 6/3/13 Tr. at 122–25 (Kessler).

[39] All things being equal, the larger the sample size, the more likely it is that the sample will be representative of the population the sample purports to measure. Although sampling 100% of the population is ideal, it is typically not cost effective or practicable to sample an entire population. The smaller the sample size, however, the greater the margin of error. *See* H. Zeisel, *. . . And Then There Were None: The Diminution of the Federal Jury,* 38 U. Chi. L. Rev. 710, 718 (1971).

[40] IPG also asserts that there is an inconsistency between the number of stations (123) in the Kessler Sample and the number of stations (72) in the sample analyzed by Mr. Whitt. *See IPG Proposed Findings of Fact* at 28. That claimed inconsistency is a red herring, however, because the sample that IPG claims may be the ''Kessler Sample'' was a Phase I sample she had selected—one that the SDC acknowledged was *not* the sample from which Mr. Whitt identified stations with Devotional programming in this Phase II proceeding. *See, e.g.,* 4/8/14 Tr. at 113–15, 229.

[41] Dr. Robinson also pointed out that the Kessler Sample's apparent exclusion of Canadian stations suggests that the sample was unrepresentative. By comparison, Dr. Robinson's own station selection contains only a single Canadian station on which programs claimed in this proceeding were broadcast; that station broadcasted both an IPG program and an SDC program. 9/8/14 Tr. 1092 (Erdem). The Judges find no persuasive evidence in the record that the exclusion of Canadian stations from the HHVH Report materially affects the results as to either side in this case. Therefore, the Judges conclude that the probative value of the HHVH Report is not diminished by the absence of Canadian stations. *Accord Distribution of the 2000–03 Cable Royalty Funds,* 78 FR at 64998 (''The Judges conclude that, while the exclusion of the Canadian stations was an error, it did not have a significant effect on the relative shares computed by MPAA'').

[42] Given this analysis, it is perhaps inaccurate to continue referring to the SDC's sample of stations as the ''Kessler Sample.'' However, because the parties have identified the sample in this manner, for ease of reference the Judges have continued with that short-hand identifier in this Determination.

[43] ''Form 3 cable systems'' are cable systems whose semiannual gross receipts for secondary transmissions total $527,600 or more, and are thus required to file statements of account on Copyright Office form SA3. *See* 37 CFR 201.17(d)(2)(ii).

[44] When questioned by the Judges, Mr. Sanders acknowledged that he would have no basis for also asserting that the ''Kessler Sample'' approximates a ''census'' of all retransmitted stations or of all broadcasts of IPG and SDC programs. 9/4/14 Tr. at 637–39 (Sanders). Moreover, IPG takes the SDC to task for relying on a sample of only 123 stations (about 17.5%) of the approximately 700 stations distantly retransmitted by Form 3 cable systems.

[45] The term ''DMA'' is used by Nielsen to identify an exclusive geographic area of counties in which the home market television stations hold a dominance of total hours viewed. *See www.nielsenmedia.com/glossary/terms/D/* (last visited December 3, 2014).

of why those metropolitan areas were not represented.

Mr. Sanders concluded that, on balance, he could nonetheless give some weight to this non-random selection of stations. 9/3/14 Tr. at 498–500. It is noteworthy that IPG's expert, Dr. Robinson, likewise acknowledged that even a non-random sample can be representative and therefore probative of facts concerning an entire population. 9/3/14 Tr. at 234–35 (Robinson). In fact, Dr. Robinson testified that the results of her own non-random sample were representative of the population she was measuring (subscriber fees paid to CSOs) because, ''as a practical matter . . . in terms of understanding the population that we care about, if we have the majority of the data, then at least we know the truth for the majority of the data. . . .'' 9/2/14 Tr. at 156 (Robinson).

Non-random (a.k.a. ''nonprobability'') sampling, although inferior to random sampling, can be of some limited use. As explained in a treatise on the subject:

> [N]onprobability samples cannot depend upon the rationale of probability theory. At least with a probabilistic sample, you know the odds or probability that you have represented the population well. You can estimate the confidence intervals for the statistic. With nonprobability samples, you may or may not represent the population well . . . . In general, researchers prefer probabilistic or random sampling methods over nonprobabilistic ones, and consider them to be more accurate and rigorous. However, in some circumstances in applied social research *there may be circumstances where it is not feasible, practical or theoretically sensible to do random sampling.*

W. Trochim and J. Donnelly, *Research Methods, The Concise Knowledge Base* at 41 (2005) (emphasis added).

In the present case, ''feasibility'' was certainly a constraint because, as Mr. Sanders explained, it was cost-prohibitive for the SDC to invest additional money into the development of evidence. The costliness of undertaking random sampling can render an analysis unfeasible. As one survey organization has noted, ''costs are important and must be considered in a practical sense'' and therefore a ''broader framework'' is needed to assess the results of nonrandom sampling in terms of ''fitness for purpose.'' *Rep. of the Am. Ass'n of Pub. Opinion Res. Task Force on NonProbability Sampling* at 96 (2013).

To summarize, had the HHVH Report been based on a random sample of stations, it would have been more probative. Nevertheless, the Kessler Sample was not prepared in anticipation of the current proceeding and contained no discernible bias either in favor of or against the programs that are at issue in this proceeding. Cost is a reasonable factor for the parties to consider in preparing evidence for a proceeding and, given the relatively modest amount of royalties involved in the current proceeding, it likely would not have been cost effective for the SDC to conduct an entirely new study based on a random sample of stations, even assuming that one could have been prepared so long after the royalty year at issue. Therefore, the Judges find that the Kessler Sample is sufficiently robust to allow the Judges to afford some weight to the SDC Methodology while remaining mindful of its deficiencies.

(3) Imperfections in the Nielsen Data

Mr. Sanders acknowledged that *the particular Nielsen Data* utilized to prepare the 1999 HHVH Report was not as granular as he would have preferred. Specifically, Mr. Sanders explained that the 1999 HHVH Report was imperfect because it was based upon a ''very, very thin slice'' of the broader broadcasting or programming field. 9/3/14 Tr. at 519. When such an extremely narrow ''slice'' of the market is the subject of the analysis, according to Mr. Sanders, it is preferable to obtain a ''niche'' Nielsen report that focuses on the narrow market that is the subject of the study. 9/3/14 Tr. at 514–15 (Sanders). In this particular case, Mr. Sanders acknowledged therefore that, because ''it is distant signal viewing that is the actual focus of the project, [this] would be an example where *a customized report would be done.*'' 9/3/14 Tr. at 485 (Sanders) (emphasis added).

Furthermore, the SDC did not disclose the margins of error or the levels of confidence associated with the data underlying the HHVH Report. Without this information, the Judges cannot assess the reliability of any statistical sample. The Judges infer that, had the SDC possessed such information, or if such information underscored the reliability of the Nielsen data, the SDC would have produced it. Further, in the 2000–03 proceeding, Paul Lindstrom, one of the two Nielsen witnesses whose prior testimony the SDC designated for consideration in this proceeding, acknowledged that the size of the samples used by Nielsen to measure distant retransmissions are relatively small, and therefore do not measure viewership as accurately as a larger sample. Accordingly, Mr. Lindstrom acknowledged that ''[t]he relative error on any given quarter-hour for any given station . . . would be very high,'' 6/3/13 Tr. at 303 (Lindstrom). Despite these shortcomings, the SDC relied upon Mr. Whitt's HHVH Report, in lieu of investing in a ''niche'' Nielsen report, 9/3/14 Tr. at 514 (Sanders),[46] and without providing information regarding the levels of confidence and margins of error associated with the HHVH Report upon which it has relied.

In an attempt to minimize the impact of the thinness of this slice of data, Mr. Sanders shifted the focus, distinguishing ''fully informed'' market participants from ''all-knowing'' participants. In his opinion, willing sellers and willing buyers in the marketplace for television program copyright licenses would consider themselves ''fully informed'' if they had access merely to the information upon which he relied, even if they lacked the more granular data of a special ''niche'' Nielsen report of distant viewing of the devotional programming at issue. 9/3/14 Tr. 474–75 (Sanders). As Mr. Sanders added, ''fully informed'' in the context of the licensing of television programs

> simply means having adequate knowledge of the relevant facts and circumstances to the issue or the proposed transaction at hand. . . . I don't think in any engagement I've ever been involved in . . . we have had all the information we would like to have. Typically, a valuation exercise is endeavoring to reach a conclusion based upon the information that is available.

9/3/14 Tr. 474–75 (Sanders).

Additionally, in economic terms, Mr. Sanders's testimony is consistent with the concept of ''bounded rationality.'' Willing buyers and willing sellers in any market[47] are unlikely to have complete information regarding all of the variables that could contribute to the setting of a market price. It would be humanly impossible to calculate all the relevant economic variables, and it would be economically inefficient to expend the time sufficient to make such calculations even if they were possible. Thus, economists recognize that willing buyers and willing sellers are *bounded* by the ''external constraint[ ] . . . [of] the cost of searching for information in

[46] Mr. Sanders had informed the SDC that any attempt to obtain superior data would have been cost-prohibitive, *i.e.,* subjecting the SDC to ''hundreds of thousands of dollars of additional costs,'' for an amount at stake of ''somewhere north of a million dollars,'' and that the SDC agreed not to invest additional sums to acquire more data. 9/3/14 Tr. at 469–72 (Sanders). He also speculated that it might have been impossible to acquire better data, but the anticipated expense apparently foreclosed any attempts to learn if superior data could be acquired or developed. *Id.* In any event, Mr. Sanders conceded on cross-examination that he never attempted to contact anyone at MPAA (or apparently anyone else) to determine if better data could be acquired. 9/3/14 Tr. at 591–92 (Sanders).

[47] The Judges note that the economic experts for willing buyers and willing sellers likewise are subject to inevitable constraints.

the world . . . [and they] attempt to make optimal choices given the demands of the world leading to the notion of optimization under constraints.'' G. Gigerenzer, *Is the Mind Irrational or Ecologically Rational?* in F. Parisi & V. Smith, *The Law and Economics of Irrational Behavior* at 38 (2005). Thus, ''[t]he focus on the constraints in the world has allowed economists to equate bounded rationality with optimization under constraints.'' *Id.* at 40.

Finally, IPG leveled a broad criticism of the SDC Methodology, asserting that it is ''the product of several degrees of projection.'' Robinson AWDT at 7 n.10. That is, the SDC derived its royalty distribution by analyzing the viewership of a few sampled individual airings projected over the population of a Nielsen Designated Market Area during ''sweeps'' weeks, and then projected over the entire year, for only a relatively small (nonrandom) set of stations projected to represent all retransmitted stations. *Id.* The Judges recognize the validity of this criticism. However, the nature of viewership-type estimates is to engage in such sampling and extrapolation. Thus, the SDC Methodology may be compromised, but it is not subject to outright disqualification.

(4) The Incidence of Zero Viewing

IPG criticizes the SDC Methodology because it is based on what IPG characterizes as a ''disproportionately large number of '0' entries'' [*i.e.,* zero viewing sampling points] in the Nielsen data for distant viewing.'' IPG PFF at 38. More particularly, IPG notes that the Nielsen Data include a recorded ''0'' for 72% of all quarter-hours of broadcasts measured by the 1999 Nielsen Data, and recorded a ''0'' for 91.2% of all quarter-hours of devotional broadcasts. *Id.*

Zero viewing sampling points represent the quarter-hour sampling points at which no sample households recorded that they were viewing that station. *See 2000–03 Determination,* 78 FR at 64995. IPG criticized the incidence of zero viewing sampling points in the 2000–03 proceeding, and the Judges addressed the issue in their Determination in that proceeding.

> [T]he Judges agree with Mr. Lindstrom that these ''zero viewing'' sampling points can be considered important elements of information, rather than defects in the process. As Mr. Lindstrom testified, when doing sampling of counts within a population, it is not unusual for a large number of zeros to be recorded, 6/4/13 Tr. at 391–93, 410 (Lindstrom), and those ''zero viewing'' sample points must be aggregated with the non-zero viewing points. 6/3/13 Tr. at 323 (Lindstrom).
>
> . . . .
>
> [A]s Mr. Lindstrom testified, distantly retransmitted stations typically have very small levels of viewership in a television market fragmented (even in the 2000–2003 period) among a plethora of available stations. 6/4/13 Tr. at 393 (Lindstrom). Thus, it would be expected, not anomalous, for Nielsen to record some zero viewing for any given quarter-hour period within the diary sampling (sweeps) period.

Id.[48]

In the present proceeding, Mr. Sanders offered the following practical reasons why zero viewing would be recorded for these retransmitted programs: (1) There is much less viewing of out-of-market signals, (2) the lion's share of viewing in any market is going to be viewing of the local stations, (3) stations within a market tend to have a long legacy and a history in the market, (4) stations within a market have preferred dial positions, and (5) local television stations devote incredible resources to promoting themselves. 9/4/14 Tr. at 681–83 (Sanders). This testimony was not rebutted by any IPG witness.

Despite these seemingly reasonable and credible explanations of ''zero viewing'' sampling points, the probative force of these ''zero viewing'' data points, as a general matter, is not without doubt. As the Judges also noted in the *2000–03 Determination* regarding Nielsen sampling:

> The sample size is not sufficient to estimate low levels of viewership as accurately as a larger sample. Mr. Lindstrom acknowledged that ''[t]he relative error on any given quarter-hour for any given station . . . would be very high,'' 6/3/13 Tr. at 303 (Lindstrom).
>
> Furthermore, Mr. Lindstrom acknowledged that he had not produced the margins of error or the levels of confidence associated with the Nielsen viewership data, despite the fact that such information could be produced. 6/3/13 Tr. at 391–93, 410 (Lindstrom). Without this information, the reliability of any statistical sample cannot be assessed. (The Judges infer that, had such information underscored the reliability of the Nielsen data, it would have been produced by MPAA.)

78 FR at 64995. The Judges note that the evidence in the present proceeding does not resolve these issues regarding sample size, margins of error and levels of confidence.

Nonetheless, the Judges concluded in the *2000–03 Determination* that ''viewership as measured after the airing of the retransmitted programs is a reasonable, though imperfect proxy for the viewership-based value of those programs.'' *Id.* at 64995. IPG has not provided record evidence or testimony in this proceeding that would persuade the Judges to depart from the conclusion reached in the *2000–03 Determination.* In light of the reasonable and credible explanations offered by the SDC for the ''zero viewing'' sampling points, and the absence of any persuasive evidence or testimony to the contrary, the Judges again find and conclude that the incidence of such zero viewing points does not invalidate a viewership-based valuation study such as utilized in the SDC Methodology.

IPG did introduce in this proceeding evidence that it did not introduce in the 2000–03 proceeding regarding the incidence of ''zero viewing'' sample points *for individual programs* (rather than for the aggregate of quarter-hours). *Compare 2000–03 Determination,* 78 FR at 64995 (finding that IPG had failed to introduce evidence that the Nielsen data revealed *particular programs* with ''zero viewing'') *with* Ex. IPG–R–011 (analyzing zero viewing by title). As the Judges noted in the *2000–03 Determination,* the distinction between ''zero viewing'' overall and ''zero viewing'' for individual programs or titles is important because ''under the hypothetical market construct, royalties would accrue on a program-by-program basis to individual copyright owners, not to the distantly retransmitted stations.'' *2000–03 Determination,* 78 FR at 64995. However, an analysis of the evidence upon which IPG relied does not support its assertion that ''zero viewing'' for individual programs was particularly pervasive among the SDC or IPG programs, or that the incidences of ''zero-viewing'' that did occur were disproportionately harmful to IPG.

First, the incidence of ''zero viewing'' for individual, retransmitted SDC and IPG programs was no more than 15.8%, according to IPG's own economics expert witness, Dr. Robinson. *See* Ex. IPG–R–011. This 15.8% figure represented only three of the 19 programs believed at issue in this proceeding or, alternatively stated, 16 of the 19 programs (84.2%) did not have ''zero viewing'' throughout the sample.[49]

Second, of the three programs with ''zero viewing'' throughout the sample, two were SDC programs (''700 Club Super Sunday'' and ''James Kennedy''), whereas only one of the three programs

[48] The SDC designated Mr. Lindstrom's testimony in the 2000–03 cable distribution proceeding for consideration in this present proceeding.

[49] Before submitting her final recommendation, Dr. Robinson amended her program count to conform to the Judges' rulings and to capture data that she (apparently inadvertently) omitted in her first analysis. *See* notes 6, 7, *supra,* and accompanying text; note 57, *infra,* and accompanying text.

(''Creflo A. Dollar Jr. Weekly'') was an IPG program. *See* Ex. IPG–R–013. Further, the IPG program was retransmitted only three times and represented less than one-tenth of one percent (.097%) of both the total quarter-hours and the number of retransmitted broadcasts of IPG programs at issue in this proceeding. *Id.* Similarly, the two SDC retransmitted programs with ''zero viewing'' throughout the sample represented a *de minimis* percent of the SDC's total devotional programming at issue in this proceeding (for ''700 Club Super Sunday,'' four retransmitted broadcasts, representing less than .25% of the total SDC quarter-hours and programs retransmitted and, for ''James Kennedy,'' approximately 1% of total SDC quarter-hours and programs retransmitted). *Id.* Moreover, the copyrights for all three of the above-identified programs with supposed zero viewing throughout the sample were owned by respective claimants who also owned the copyrights for programs with virtually identical or similar names, *viz.,* ''Creflo A. Dollar,'' ''700 Club,'' and ''James Kennedy'', none of which had zero viewing sample points for all retransmitted broadcasts of their programs. *Id.* Based on these facts, Dr. Robinson acknowledged at the hearing, that, in her view, she ''would not say that for the IPG and the SDC titles that we have *any* that we have 100 percent zero viewing.'' 9/4/14 Tr. at 827–28 (Robinson) (emphasis added).[50]

For all of the foregoing reasons, the Judges find and conclude that there was not persuasive or sufficient evidence of ''zero viewing'' for individual SDC and IPG programs to invalidate any reliance on the SDC Methodology.[51]

3. Viewership as an *Ex Ante* or *Ex Post* Measure of Value

IPG asserts that viewership and ratings cannot form a measure of relative market value because the extent of viewership and the ratings measuring viewership are not available until *after* the programs have been retransmitted. Thus, IPG argues, the hypothetical willing buyer and willing seller could not utilize this viewership data *ex ante* to negotiate a license. Galaz AWDT at 9; Ex. IPG–D–001 at 9.

Although IPG's premise is literally correct, it does not preclude the use of such viewership data to estimate the value of the hypothetical licenses. As Mr. Sanders testified, this problem can be overcome—and indeed is overcome in the industry—by the use of a ''make good'' provision in the contracts between program copyright owners and licensees. That is, program copyright licenses in the television industry are established based upon an *ex ante* prediction of viewership as measured by ratings. If the *ex post* ratings reveal that the program's measured viewership was less than predicted and set forth in the license agreement, the licensor must provide compensatory value to the licensee. 9/4/14 Tr. at 685–95 (Sanders).[52] In this manner, such a rational measure of viewership can also be expressly incorporated into the bargain in the hypothetical market constructed by the Judges.[53]

The Judges also agree with Mr. Sanders that the programs within the Devotional Claimants category on the surface appear to be more homogeneous *inter se* than they are in comparison with programs in either the Sports Programming or the Program Suppliers' claimant categories. Sanders WDT at 6. This relative homogeneity suggests that a rational CSO would not be as concerned with whether different programs would attract different audience segments (compared with more heterogeneous programming) and therefore the CSO would rely to a greater extent on absolute viewership levels.

For these reasons, the record testimony supports the conclusion that viewership data is a useful metric in determining relative market value, in the absence of optimal data that would permit a precise or an estimated Shapley value.[54] Accordingly, the Judges reject IPG's argument that household viewing cannot constitute a measure of value in this proceeding.

IPG notes, though, that even assuming *arguendo* the SDC's viewership analysis is probative of value, the SDC's own ''reasonableness'' check demonstrates a significant disparity between the results derived from the HHVH Report (81.5%:18.5% in favor of the SDC) and the results from the ''reasonableness'' check of local viewing for the SDC and IPG programs at issue in this proceeding (71.3%:28.7% in favor of the SDC). The Judges agree with IPG that this is an important disparity, suggesting that IPG may well be entitled to a larger distribution than indicated by the SDC's HHVH Report. Because of the importance of this point, the Judges discuss its significance in their analysis set forth in Part VI, *infra,* synthesizing and reconciling the parties' positions.

B. The IPG Methodology

1. The Details of the IPG Methodology

IPG proffered its distribution methodology (the IPG Methodology) through its expert witness, Dr. Laura Robinson, whom the Judges qualified to testify as an expert in economics, data analysis, and valuation. 9/2/14 Tr. at 87 (Robinson).[55] Through her application

[50] IPG attempts to deflect attention from the paucity of the relevant evidence regarding the programs at issue in this proceeding by noting a higher incidence of ''zero viewing'' for programs in other categories, such as *Alfred Hitchcock Presents* and *Today's Homeowner.* Ex. IPG–R–012; IPG PFF at 44. However, data sample points in other categories of programming are not relevant because they do not address the issues relating to the Devotional category and, further, there is no evidence to place such data in an appropriate context.

[51] IPG notes that the SDC could have improved its analysis to attempt to attribute value to the distant ''zero viewing'' data points, as performed by experts in prior proceedings. Although such improvements might have permitted the Judges to give more weight to the HHVH Report, the absence of such improvements did not invalidate the HHVH Report.

[52] Dr. Robinson was unfamiliar with the industry's use of a ''make good'' provision as a tool to account for viewership levels. 9/3/14 Tr. at 270 (Robinson).

[53] The Judges anticipated the existence of such ''post-viewing adjustments'' in their 2013 determination. *See 2000–03 Determination, supra,* at 64995, n.48 (''Since it is a *hypothetical* market we are constructing, it also would not be unreasonable to hypothesize that the CSO and the Copyright Owner might negotiate a license that would contain a provision adjusting the value of the license, post-viewing, to reflect actual viewership. . . . In that regard, the Judges refer to one of the preconditions for relative market value—reasonable knowledge of relevant facts. Actual viewership would be a 'relevant fact' that could be applied if post-viewing adjustments to the license fees were hypothetically utilized by the bargaining parties.'').

[54] Interestingly, Dr. Erdem explained that, as between two programs with overlapping viewership, the program with higher viewership would have *a greater proportionate Shapley value* than the less viewed program; the difference would be even greater than the difference between the two programs based strictly on relative viewership. 9/8/14 Tr. at 1082–83 (Erdem). Given the relative homogeneity of devotional programming (compared to the apparent relative heterogeneity between and among other Phase II category programs), viewership overlaps between and among the SDC and IPG programs are likely. Therefore, because the SDC programs had higher overall ratings than IPG programs and because the SDC Methodology is based solely on ratings, the SDC's percentage distribution (if accurately measured) could in fact *understate* the SDC percentage and *overstate* the IPG percentage, compared to percentages based on potential Shapley values. *See supra* note 36, and accompanying text.

[55] IPG initially asked the Judges to qualify Dr. Robinson as a testifying expert ''regarding the value of the programming issue in this matter for IPG and for the SDC,'' or, as alternatively stated by IPG's counsel, as an expert ''valuing the relative value of these programs to these royalties.'' 9/2/14 Tr. at 73–74, 80. However, SDC's counsel objected, and the Judges then qualified Dr. Robinson as an expert in the areas of knowledge listed in the text, *supra.* IPG's counsel did not renew his request that Dr. Robinson be qualified as an expert in the areas set forth in this footnote. Even if Dr. Robinson had been qualified as an expert in the areas originally identified by IPG, that would not have made any difference in the Judges' findings and conclusions in this determination.

of the IPG Methodology, Dr. Robinson set forth her opinion of the relative market value of the retransmitted broadcasts of the compensable copyrighted program titles represented by IPG and the SDC and estimated the share attributable to both parties. Robinson AWDT at 14, 25; Ex. IPG–D–001 at 14, 25.

Consistent with the conclusions of the Judges in this and other determinations, Dr. Robinson identified the ''willing sellers'' in the hypothetical market to be the owners of the copyrights to the programs subject to retransmission and the ''willing buyers'' to be the CSOs that would acquire the license to retransmit the program. 9/2/14 Tr. at 92 (Robinson). However, Dr. Robinson defined the hypothetical marketplace in a manner different from that of the Judges in this proceeding and in the *2000–03 Determination.* Dr. Robinson defined the hypothetical marketplace as equivalent to the actual marketplace in which the CSO is required to acquire the retransmitted programs in the same bundle as created by the station that the CSO retransmits. *See, e.g.,* 9/4/14 Tr. at 782 (Robinson) (''[I]t is certainly the case that when a cable system operator is actually making the decision about whether or not to retransmit a broadcast, that comes within their decision whether or not to retransmit the station, which is a little bit at odds with this whole notion of a hypothetical negotiation over an individual broadcast. . . . They don't have the choice to broadcast a particular program.'').[56]

Dr. Robinson identified the following ''obtainable data'' that she claimed to comprise ''various indicia of value of the retransmitted broadcasts'':

- The length of the retransmitted broadcasts.
- The time of day of the retransmitted broadcasts.
- The fees paid by CSOs to retransmit the stations carrying the broadcasts.
- The number of persons distantly subscribing to the station broadcasting the IPG-claimed program.

Robinson AWDT at 17; Ex. IPG–D–001 at 17.

Dr. Robinson relied upon four sets of data. First, she utilized data from the Cable Data Corporation (CDC). This data included information on more than 2,700 cable systems regarding:

- The stations transmitted by each CSO.
- The distant retransmission fees paid by each CSO.
- The number of distant subscribers to each CSO.

For each *station* distantly retransmitted by these CSOs, the CDC data also included:

- The number of CSOs retransmitting each station.
- The number of distant subscribers to the CSOs retransmitting the station.
- The *average* number of distant subscribers to the CSOs retransmitting the station.
- The distant retransmission fees paid by the CSOs to retransmit each station.
- The *average* distant retransmission fees paid by the CSOs to retransmit each station.

Id. at 21.

Second, Dr. Robinson relied on TMS Data (the same source as that relied upon by the SDC). The TMS data provided the following information for the IPG and the SDC programs represented in this proceeding:

- The date and time each broadcast was aired.
- The station call sign.
- The program length in minutes.
- The program type (*e.g.,* Devotional).
- The program title.

Id. at 21–22.

Third, Dr. Robinson relied upon the following information from Nielsen:

- Data reporting *1997* viewing, segregable according to time period of the measured broadcast.
- Reports reflecting the long-run stability of day-part (time period) viewing patterns.

Id. at 22.

Applying this data, Dr. Robinson made several computations and observations, as summarized in Tables 1 and 2 below:

TABLE 1—DATA ON IPG AND NON-IPG CLAIMED TITLES 1999

	IPG	SDC
Number of distantly retransmitted broadcasts of claimed titles	12,017	6,558
Number of hours of distantly retransmitted broadcasts of claimed titles	6,010	5,856
Number of quarter-hours of distantly retransmitted broadcasts of claimed titles	24,040	23,423

TABLE 2—RELATIVE MARKET VALUE

	IPG (percent)	SDC (percent)
Hours of claimed distantly retransmitted broadcasts	51	49
Time of day of distantly retransmitted broadcasts	46	54
Fees Paid by CSOs distantly retransmitting devotional broadcasts	>50	<50
Number of distant subscribers to CSOs distantly retransmitting devotional broadcasts	51	49

Id. at 26–27.

Dr. Robinson stressed repeatedly that the Judges should not consider the above measures of value individually. Rather, she testified that the Judges should consider the several approaches as a whole, with any weakness in one approach offset by the other approaches that do not suffer from that weakness. *See, e.g.,* 9/3/14 Tr. at 243, 326, 329, 403 (Robinson); 9/4/14 Tr. at 775 (Robinson). Dr. Robinson also testified that this approach was an important method of analysis because her multiple valuation methods all tended toward a similar result—approximately a 50:50 distribution—despite any weaknesses or limitations in any one method. *See* 9/2/14 Tr. at 90 (Robinson) (''In summary, I looked at four different measures of value, of the relative value. And the IPG versus SDC are roughly equal.''); 9/3/14 Tr. at 245 (Robinson) (''since everything came out roughly equal, all the indicators pointed to a roughly 50/50 split.''). Based upon these calculated percentages, Dr. Robinson concluded

[56] In the hypothetical marketplace the terrestrial stations' *initial bundling* of programs does not affect the marginal profit-maximizing decisions of the hypothetical buyers and sellers.

that the proper allocation of royalties should be in a range from 54%:46% favoring the SDC to 51%:49% favoring IPG. *Id.* at 25.

With regard to the particular factors Dr. Robinson applied, she noted that her first measurement—of total broadcast time—was essentially identical for both the IPG and the SDC programs when measured by quarter-hour segments. 9/2/14 Tr. at 90–91 (Robinson). Second, with regard to her ''time of day'' analysis, Dr. Robinson testified that ''certain times of days are associated with different amounts of viewership [a]nd everything else equal, it would be reasonable to think that higher viewership might be associated with a higher value.'' 9/2/14 Tr. at 93 (Robinson). Dr. Robinson concluded that this time-of-day measurement, like the first measurement (total broadcast time) revealed a ''roughly similar'' value measurement for the IPG programs and the SDC programs. 9/2/14 Tr. at 94 (Robinson).

With regard to the third factor—the fees paid by the CSOs to distantly retransmit the broadcasts—Dr. Robinson found that ''on average, IPG broadcast quarter hours are shown on stations that are retransmitted by CSOs who pay relatively more in distant retransmission fees than do the CSOs who retransmit the stations with the SDC broadcasts.'' Ex. IPG–D–001 at 31. From this metric, Dr. Robinson concluded ''the IPG broadcasts have more value than the [SDC] broadcasts.'' *Id.* at 32.

Finally, with regard to her fourth factor—the number of subscribers to the cable systems—Dr. Robinson found that when considering the average number of subscribers to the cable systems on which the IPG and the SDC programs are retransmitted, ''the IPG distantly retransmitted broadcasts are retransmitted by CSOs on stations with approximately 6% more distant subscribers than [the SDC] distantly retransmitted broadcasts.'' *Id.* at 33. Based upon this final metric, Dr. Robinson opined: ''To the extent the value of the broadcast relates to the number of distant subscribers to the CSOs retransmitting the station, this metric indicates that IPG-distantly-retransmitted broadcasts have more value than [the SDC]-distantly-retransmitted broadcasts.'' *Id.* at 34.

Dr. Robinson corrected her analyses before and during the hearing to reflect changes in the program titles that she could allocate to IPG and to the SDC. First, she *removed* from her analyses the several IPG programs that the Judges had concluded at the preliminary claims hearing were not properly subject to representation by IPG. 9/2/14 Tr. at 146 (Robinson). Second, Dr. Robinson *added* several program titles that were properly subject to representation by the SDC but had not been included in her original analyses. 9/2/14 Tr. 181–84 (Robinson). *See also* 9/8/14 Tr. at 1016 (Robinson) (confirming that she made these program inclusions and exclusions in her amended analysis). With these adjustments, Dr. Robinson modified her conclusions as set forth on Table 3 below:

TABLE 3

	IPG (percent)	Non-IPG (percent)	Total (percent)
Hours of claimed distantly retransmitted broadcasts	48	52	100
Time of day of distantly retransmitted broadcasts	46	54	100
Fees paid by CSOs distantly retransmitting devotional broadcasts	41	59	100
Number of distant subscribers to CSOs distantly retransmitting devotional broadcasts	52	48	100

Ex. IPG–D–013.

Dr. Robinson acknowledged that the data available to her was incomplete, in that she did not have information regarding all of the fees, cable systems and stations that retransmitted the programs of IPG and the SDC. Moreover, she acknowledged that the sample of CSOs and, derivatively, the sample of stations retransmitted by those CSOs, were not random samples. Accordingly, Dr. Robinson undertook what she described as a ''sensitivity analysis'' to adjust for the missing data. Robinson AWDT at 34–36; Ex. IPG–D–001 at 34–36.

Specifically, Dr. Robinson noted that she did not have data regarding 29% of the total fees paid by all the CSOs that distantly retransmit stations. Rather, she had information from CSOs who in the aggregate had paid only 71% of the total fees paid in 1999 to distantly retransmit stations. Dr. Robinson acknowledged that she also lacked full information or a random sampling of CSOs and of stations (in addition to her lack of full information or a random sampling of the fees paid by CSOs to distantly retransmit stations). However, Dr. Robinson did not attempt to adjust her original results to compensate for the missing information or the fact that the data set was not random.

Accordingly, in her ''sensitivity analysis,'' Dr. Robinson adjusted all of her metrics by assuming that she was missing 29% of the data in all of her valuation data categories (even though only one of her metrics was calculated based on fees). By this ''sensitivity analysis,'' Dr. Robinson first calculated how her allocations would change if all of the assumed missing 29% of fees paid by CSOs to distantly retransmit stations were allocated (in each of the categories in Table 3) to IPG and, conversely, how her allocations would change if all of the assumed missing 29% of such fees instead was allocated (in each of the categories in Table 3) to the SDC. *Id.* Dr. Robinson initially applied this sensitivity analysis to her original allocations and, subsequently (at the request of the Judges), applied this sensitivity analysis to her adjusted analyses that took into account the (1) removal of certain IPG programs that had been eliminated by the Judges in the preliminary hearing and (2) addition of certain SDC programs that Dr. Robinson had overlooked in her initial report. Ex. IPG–R–16 (revised). The application of this ''sensitivity analysis'' to Dr. Robinson's adjusted analyses [57] resulted in the proposed allocations set forth on Table 4 below:

[57] Because Dr. Robinson's adjusted analyses supersede her original analyses (they admittedly included IPG programs that should have been excluded and omitted SDC programs that should have been included), the Judges choose not to clutter this determination with the details of those now irrelevant calculations.

TABLE 4

	IPG high (percent)	IPG low (percent)	Non-IPG high (percent)	Non-IPG low (percent)
Hours of claimed distantly retransmitted broadcasts	63	34	66	37
Time of day of distantly retransmitted broadcasts	62	33	67	38
Fees paid by CSOs distantly retransmitting devotional broadcasts	58	29	71	42
Number of distant subscribers to CSOs distantly retransmitting devotional broadcasts	66	37	63	34

Ex. IPG–D–014.

2. Evaluation of the IPG Methodology

The SDC have raised the following specific criticisms of the IPG Methodology. First, the SDC critiqued each of the four purported measures of value presented by Dr. Robinson. *See* SDC PFF at ¶¶ 10–13 (regarding volume); ¶¶ 14–17 (regarding time of day); ¶¶ 18–24 (regarding fee generation); and ¶¶ 26–27 (regarding subscribership). Second, the SDC noted that the sensitivity analysis undertaken by Dr. Robinson revealed that SDC programming had an eighteen percentage point higher value than IPG programming. SDC PFF at ¶ 25. Before undertaking an analysis of the *specific* elements of the IPG Methodology or the SDC's critiques thereof, it is important to consider several important overarching defects in the approach undertaken by IPG.

a. General Deficiencies in the IPG Methodology

It bears repeating that a fundamental problem with the IPG Methodology is that it is based on a decision by Dr. Robinson to presume the existence of the compulsion arising from the pre-bundled status of the retransmitted programs as it existed in the actual compulsory-license market, rather than the compulsion-free hypothetical fair market consistently applied by the Judges. *See, e.g.,* Tr. 9/4/14 at 781–82 (Robinson) (quoted *supra*); *see* also 9/2/14 Tr. at 175–76 (Robinson) (acknowledging that the IPG Methodology does not address the relationship between value and bundling).

A second problem with the IPG Methodology is that, although it ostensibly is *intended* to eschew viewership as a primary measure of program value, IPG's Methodology implicitly uses indicia of viewership to measure program value. In particular, IPG's Methodology considers and values programs based on their indirect contribution to viewership: The duration of a program serves as an indicium of value (a program of relatively longer duration would be more valuable because of its *viewership* over a longer period), as does the time of day a program is aired (there are *more viewers* at some times of day than others), and the number of subscribers (*potential viewers*) to CSOs retransmitting the program. Simply put, IPG's Methodology is not true to its own critique of valuing programs based on viewership. Thus, the IPG Methodology fails to address either the initial necessity of considering absolute viewership or the subsequent necessity of undertaking a Shapley type of measurement or estimation in order to create a ''bundle'' of programs.

The Judges also find that Dr. Robinson did not truly undertake her own independent inquiry and develop her own methodology, because she worked solely with the data IPG, through Mr. Galaz, provided her. *See* 9/2/14 Tr. at 110–11 (Robinson); IPG PFF at 11. The type of data that Mr. Galaz supplied to Dr. Robinson was the same type he utilized in the 2000–03 proceeding, when he presented his own methodology on behalf of IPG. Mr. Galaz's response to a question from the Judges confirmed this point:

> Q. [I]n constructing the methodology that you relied on in the 2000–2003 proceeding, you used certain data from the CDC, from Tribune, or whatever it was called at the time, and so forth. Is that—were those types of data essentially the same as the types of data that were provided to Dr. Robinson for purposes of this proceeding?
>
> Mr. Galaz: I would say it was essentially the same.

9/8/14 Tr. at 997 (Galaz).

It is not surprising, therefore, that Dr. Robinson conditioned her analysis and conclusions by noting that she was only able to express an opinion as to relative market value ''given the data that are available in this matter.'' Ex. IPG–D–001 at 20. In fact, Dr. Robinson premised her analysis on the fact that it was based upon the limited data available to her. *See, e.g.,* 9/2/14 Tr. at 111 (Robinson) (''I looked at the data, looked at what I could do with them, and this is what I could do.'').

Indeed, Mr. Galaz's methodology in the 2000–03 proceeding and Dr. Robinsons' methodology in the present proceeding overlap. *Compare 2000–03 Determination,* 78 FR at 64998 (''The weight that IPG accorded to any given compensable broadcast was the product of (*x*) a 'Station Weight Factor' [based on subscriber or fee levels], (*y*) a 'Time Period Weight Factor,' and (*z*) the duration of the broadcast . . . .) *with* Robinson AWDT at 28; Ex. IPG–D–001 at 28 (''[T]he indicia of the economic value of the retransmitted broadcasts . . . are: The length of the retransmitted broadcasts, the time of day of the retransmitted broadcast, the fees paid by cable system operators to retransmit the stations carrying the devotional broadcasts, and the number of persons distantly subscribing [to] the stations broadcasting the devotional programs.'').

Dr. Robinson clearly was straitjacketed in attempting to devise an appropriate methodology by the limited data she received from Mr. Galaz. In this regard, it is important to note that Mr. Galaz is not an economist, statistician, econometrician or an expert in the field of valuation of television programs or other media assets, and that he therefore had no particular expertise that would permit him to select or approve the use of appropriate data, especially when that selection dictated the construction of a methodology to establish ''relative market value'' in a distribution proceeding.[58] The Judges therefore

[58] *See 2000–03 Determination,* 78 FR at 65000. By contrast, the SDC's expert witness, Mr. Sanders, *was* qualified as ''an expert in the valuation of media assets, including television programs.'' 9/3/14 Tr. at 463–64, and, in that capacity, he testified that the broadcast industry relied on Nielsen viewing data as the ''best and most comprehensive'' basis for valuing programs, 9/3/14 Tr. at 480–81 (Sanders). Thus, Mr. Sanders was qualified to testify as to the actual commercial use of a viewership-based valuation methodology. Mr. Galaz, on the other hand, was not qualified to testify as to the appropriateness of the data he selected for use in the IPG Methodology and, it should be noted, neither he nor Dr. Robinson testified that the factors relied upon in the IPG Methodology had ever been relied upon commercially. *See* Tr. 9/3/14 at 348–49 (Robinson).

Not only did Mr. Galaz lack the expertise to approve or select the type of data necessary to construct a persuasive methodology, his credibility has been seriously compromised by his prior fraud and criminal conviction arising from his misrepresentations in prior distribution proceedings. *See* 78 FR at 6500 (''Mr. Galaz was conclude that the overall IPG Methodology carries no more weight than IPG's methodology did in the 2000–03 proceeding. *See 2000–03 Determination,* 78 FR at 65002 (while IPG Methodology ''cannot be applied to establish the basis for an allocation'' it can be used to adjust ''marginally'' an allocation derived from other evidence).

Finally, IPG contends that the purpose of the IPG Methodology is to compensate every claimant, even if there is no evidence of viewership of the claimant's program. *See* Galaz AWDT at 8; Ex. IPG–D–001 at 8. The Judges find no basis for that purpose to guide the methodology. Even if viewership as a metric for determining royalties theoretically would be subject to adjustment to establish or estimate a Shapley valuation, there is certainly no basis to allow for compensation of a program in the absence of *any* evidence of viewership.

b. Specific Deficiencies in the IPG Methodology

In addition to the foregoing overarching criticisms of the IPG Methodology, the Judges note the following more particular deficiencies in that methodology.

As a preliminary matter, Dr. Robinson acknowledged that IPG's sample of stations had not been selected in a statistically random manner. 9/2/14 Tr. at 155 (Robinson). Thus, the sample upon which Dr. Robinson relied suffered from the same infirmity as the Kessler Sample relied upon in part by the SDC. Moreover, each prong of the IPG Methodology raised its own concerns.

(1) Broadcast Hours

Dr. Robinson acknowledged that the number of hours of broadcasts is not actually a measure of value; rather it is a measure of volume. 9/3/14 Tr. at 243–51 (Robinson). ''Volume'' fails to capture the key measure of whether anyone is actually viewing the retransmitted program. *See* 9/3/14 Tr. at 247 (Robinson); SDC PFF ¶ 12. Further, ''volume'' *i.e.,* number of hours of air time, does not even reflect how many subscribers have access to the programs. 9/8/14 Tr. at1085–86 (Erdem).

(2) Time of Day of Retransmitted Broadcasts

IPG's second measure of value compares the time of day viewership of IPG and SDC programs. Using 1997 Nielsen sweeps data produced by the MPAA in a previous proceeding, Dr. Robinson estimates the average number of total television viewers for each quarter-hour when IPG or SDC programs were broadcast according to the Tribune Data analyzed by Dr. Robinson. 9/3/14 Tr. at 254–55 (Robinson).

Dr. Robinson's time-of-day measure does not measure the value of the individual programs that are retransmitted. The proper measure of value for such individual programs, when considering ratings, would hold the time of day constant, and then consider relative ratings within the fixed time periods. To do otherwise—as Dr. Robinson acknowledged—absurdly would be to give equal value to the Super Bowl and any program broadcast at the same time. 9/3/14 Tr. at 264 (Robinson).

Further, Dr. Robinson's analysis does not show, as she asserted, that the SDC and IPG programs are broadcast at times of day that have approximately equal viewership. Rather, her time-of-day analysis pointed to a 54%:46% distribution in favor of the SDC.[59]

Finally, IPG utilized 1997 data to estimate the level of viewing throughout the broadcast day, rather than data that was contemporaneous with the 1999 royalty distribution period at issue in this proceeding. 9/3/14 Tr. at 229, 255 (Robinson).[60]

(3) Fees Paid

Dr. Robinson's third metric is derived from an analysis of fees paid by CSOs per broadcast station. That is, several CSOs might pay royalty fees to retransmit the same over-the-air station. Dr. Robinson testified that stations generating relatively greater fees could be presumed to have higher value programs in their respective station bundles. 9/3/14 Tr. at 406–07 (Robinson). To measure this factor, Dr. Robinson combined CDC data on royalty fees the CSOs paid (on a per-station basis) and TMS data on broadcast hours by station in order to compare the fees paid for retransmission of stations carrying SDC and IPG programs. 9/3/14 Tr. at 229, 271 (Robinson).

In Phase I of this proceeding, the Librarian adopted the use of a fees-paid metric for value, where that measure appeared to be the best alternative valuation approach. *See Distribution of 1998 and 1999 Cable Royalty Funds,* 69 FR 3606, 3609 (January 24, 2004). The use of a fee-based attempt at valuation is particularly problematic, however, for a niche area such as devotional programming, which constitutes only a small fraction of total station broadcasting. *See* 9/8/14 Tr. at 1087–88 (Erdem). Because of the tenuous nature of this approach to valuation, a royalty allocation based on a fees-paid metric might serve as, at best, a ''ceiling'' on a distribution in favor of the party proposing that approach. *See Distribution of the 2004 and 2005 Cable Royalty Funds,* 75 FR 57063, 57073 (September 17, 2010). That being said, when Dr. Robinson adjusted her fees-paid based valuation by applying her sensitivity analysis, she calculated a value ratio of *71%:29% in favor of the SDC.* As the SDC noted, this appears to be ''a fact that Dr. Robinson had tried hard to obscure.'' SDC PFF ¶ 25.

(4) Subscribership Levels

Dr. Robinson's final metric measures the average number of distant subscribers per cable system retransmitting IPG programming versus SDC programming. 9/3/14 Tr. at 311–12 (Robinson). This metric measures average subscribers *per cable system,* without taking into account the number of cable systems retransmitting a station. Therefore, this metric is of no assistance in measuring the total number of distant subscribers even *receiving* a program, let alone the number of distant subscribers who watch the program.

As Dr. Erdem demonstrated—and as Dr. Robinson admitted—this subscribership metric can actually *increase* when a program is *eliminated,* if the program had been retransmitted by a cable system with lower than average numbers of subscribers. Erdem WRT at 8–9 (Redacted); Ex. SDC–R–001 at 8–9 (Redacted); 9/3/14 Tr. at 331–45 (Robinson). Indeed, this metric actually *increased in favor of IPG* after the dismissal of two of IPG's claimants—Feed the Children and Adventist Media Center. Ex. SDC–R–001 at 7–10; 9/3/14

previously convicted and incarcerated for fraud in the context of copyright royalty proceedings—a fraud that caused financial injury to MPAA. In connection with that fraud, Mr. Galaz also admittedly lied in a cable distribution proceeding much like the instant proceeding. Mr. Galaz's fraud conviction and prior false testimony compromises his credibility.'') Further, in the present case, the Judges carefully observed that Mr. Galaz testified that ''what we gave to Dr. Robinson was everything that we had in our possession that *we* thought might affect . . .'' before catching himself and stating instead ''or would—I should say with which [s]he could work.'' 9/8/14 Tr. at 996 (Galaz) (emphasis added). In any event, the Judges recognize that even a party that does not have such a checkered history has an inherent self-interest in selecting the types of data for use by its expert that is inconsistent with the independence of the expert in identifying his or her own categories of data.

[59] When Dr. Robinson adjusted for the proper addition of SDC programs and deletion of IPG programs, and then applied her sensitivity analysis, she changed this allocation to 67%:33% in favor of SDC (not giving IPG any credit for the assumed 29% of the data it declined to obtain).

[60] Mr. Galaz asserted that information subsequently published by Nielsen confirmed that ''there had been virtually no change'' in day-part viewing between 1997 and 1999. 9/8/14 Tr. at 984 (Galaz). However, IPG presented no evidence to support that assertion.

Tr. at 329–30 (Robinson). Simply put, when a purported measure of program value can move inversely to the addition or subtraction of a claimant, the measure is, at best, of minimal assistance in determining relative market value.

Dr. Robinson suggests that the Judges nonetheless should rely on her opinion as to relative market value because all of her alternative measures resulted in similar proportionate valuations. 9/2/14 Tr. at 102–03 (Robinson) (''[B]y coming at this with four different metrics . . . the fact that the estimates all came out quite similarly gives me some comfort that the numbers are reasonable.''); *see also id.* at 170 (Robinson) (emphasizing that she was ''looking at all of these factors in combination''). However, if four measures of value are individually untenable or of minimal value, they do not necessarily possess a synergism among them that increases their collective probative value.

VI. Judges' Determination of Distribution

A. The Judges' Distribution of Royalties Is Within the Zone of Reasonableness

As the foregoing analysis describes, the evidence submitted by the two parties is problematic. First, the optimal measure or approximation of relative value in a distribution proceeding—the Shapley valuation method—was neither applied nor approximated by either party. Second, the methodologies proposed by both parties have significant deficiencies.

As between the parties' competing methodologies, however, the Judges conclude that the approach proffered by the SDC is superior to that proffered by IPG. The SDC Methodology, consistent with measures of value in the television industry, relies on viewership to estimate relative market value. The Judges conclude that in constructing a hypothetical market to measure the relative market values of distantly retransmitted programs viewership would be a fundamental metric used to apply a Shapley valuation model. Therefore, a methodology that uses viewership as an indicium of program value is reasonable, appropriate, and consistent with recent precedent in distribution proceedings.

IPG's expert, Dr. Robinson, agreed that viewership is relevant to the determination of program value. IPG's own methodology uses viewership as a valuation proxy, although it does so in a much less direct and transparent way than does the SDC Methodology. Further, the SDC presented unrebutted testimony that estimating relative market value based on viewership data alone when considering homogeneous programming, as the Devotional Claimants category, might actually understate the value of the more highly viewed programs vis-à-vis a Shapley valuation of the same programs. Because the SDC programs had higher ratings, the Judges conclude that the SDC Methodology, *ceteris paribus,* may well tend to understate the SDC share of the royalties in this proceeding.

By contrast, the IPG Methodology is reliant on data that does not focus on the property right the Judges must value—the license to retransmit individual programs in a hypothetical market that is unaffected by the statutory license. Moreover, the IPG Methodology fails to value the retransmitted programs in the hypothetical market as applied by the Judges in this and prior proceedings. Rather, IPG has assumed tacitly that the valuation of the individual programs has been compromised by the preexisting bundling of the programs in the actual market, and therefore all programs must be subject to *common measurements,* based on broadcast hours, time of day, subscriber fees, and subscriber levels. The Judges conclude, as they did in the *2000–03 Determination,* that this failure to value programs individually is erroneous. Accordingly, at best, as stated in the *2000–03 Determination,* the IPG Methodology can serve as no more than a ''crude approximation'' of value that may have some ''marginal'' impact on the determination of relative market value. *See 2000–03 Determination,* 78 FR at 78002.

The Judges' preference for the valuation concept of the SDC Methodology does not mean that the Judges find the SDC's *application* of that concept to be free of problems or unimpeachably persuasive in its own right. The application of the theoretically acceptable SDC Methodology is inconsistent as regards its probative value.

The Judges' task in this and every distribution determination is to establish a distribution that falls within a ''zone of reasonableness.'' *See Asociacion de Compositores y Editores de Musica Latino Americana* v. *Copyright Royalty Tribunal,* 854 F.2d 10, 12 (2d Cir. 1988); *Christian Broadcasting Network, Inc.* v. *Copyright Royalty Tribunal,* 720 F.2d 1295, 1304 (D.C. Cir. 1983). Based on the entirety of the Judges' analysis in this determination, the Judges find that the SDC's proposed royalty distribution of 81.5%:15.5% in favor of the SDC can serve only as a guidepost for an upper bound of such a zone of reasonableness. The Judges decline to adopt the 81.5%:15.5% split as the distribution in this proceeding, however, because the Judges conclude that the several defects in the application of the SDC Methodology render the 81.5%:15.5% split too uncertain. That is, the defects in the application of the SDC Methodology require the Judges to examine the record for a basis to establish a distribution that acknowledges both the merits and the imperfections in the SDC Methodology.

To that end, the Judges look to the alternative confirmatory measure of relative market value utilized by Mr. Sanders in his report and testimony. More particularly, the Judges look to his analysis of the viewership data for the SDC and IPG programs in the local market, one that served as an ''analogous'' market by which to estimate the distribution of royalties in this proceeding. The allocation of royalties suggested by that confirmatory analysis was a 71.3%:28.7% distribution in favor of the SDC.

On behalf of the SDC, Mr. Sanders testified that this analogous body of data ''is potentially *very relevant and should not, in my opinion, be ignored.''* 9/3/14 Tr. at 503 (Sanders) (emphasis added). The Judges agree. That distribution ratio arises from the Nielsen local viewership ratings over a three-month period in 1999 and covers all of the programs represented in this proceeding. Importantly, that approach does not suffer from the uncertainty created by the selection and use of the Kessler Sample of stations, nor any of the other serious potential or actual deficiencies in the application of the SDC Methodology, as discussed in this determination.

There was no sufficiently probative evidence in the record for the Judges to establish a lower bound to a zone of reasonableness. That being said, it is noteworthy that even under IPG's Methodology the relative market valuations of the SDC and IPG programs would be no more favorable to IPG than roughly a 50/50 split. Under at least two prongs of IPG's Methodology, Dr. Robinson acknowledged that an adjusted allocation would likely be closer to a 67/33 split (based on time of day of retransmitted broadcasts) or a 71/29 split (based on fees paid) in SDC's favor.

Further, as IPG correctly argued, the 71.3%:28.7% distribution is significantly different (to the benefit of IPG) compared with the uncertain results derived by the SDC Methodology. Given that the 81.5%:18.5% allocation derived by the

SDC Methodology represents a guidepost to the upper bound of a zone of reasonableness, the ''very relevant'' (to use Mr. Sanders's characterization) 71.3%:28.7% distribution has the added virtue of serving as a rough proxy [61] for the need to reflect the imperfections in the application of the SDC Methodology.

Accordingly, the Judges find and conclude that a distribution ratio of 71.3%:28.7% in favor of the SDC lies within the zone of reasonableness.

B. The Judges' Distribution is Consistent With a Valuation Derived From an Application of the IPG Methodology

The Judges also note a consensus between this 71.3%:28.7% distribution and the least deficient of IPG's proposed valuations—the ''fees-paid'' valuation. More particularly, Dr. Robinson made ''sensitivity'' adjustments to all her values to account for the incompleteness of her data. However, her only adjustment was to multiply all her alternative value measures by 71% to adjust for the 29% of fees paid that her data set did not include. The Judges find and conclude that Dr. Robinson could adjust only her fees-paid valuation approach in this manner because the ''missing 29%'' only pertained to that data set. In the other categories, Dr. Robinson (to put it colloquially) was subtracting apples from oranges.

When Dr. Robinson made her adjustment in the fees-paid category (and properly accounted for all programs), she changed her valuation and distribution estimate to 71%:29% in favor of the SDC. *See* Table 4 *supra.*[62] Moreover, Dr. Robinson testified that her sensitivity analysis resulted in values that she would characterize as within an economic *''zone of reasonableness.''* 9/2/14 Tr. at 158 (Robinson) (emphasis added).

Thus, not only do the Judges independently find that a 71.3%:28.7% distribution in favor of the SDC proximately adjusts the distribution within the zone of reasonableness, there is also a virtual overlap between what can properly be characterized as the worst case distribution scenarios that the parties' own experts respectively acknowledge to be ''very relevant'' and falling within a ''zone of reasonableness.'' [63] Accordingly, given that IPG's expert witness testified explicitly that a 71%:29% distribution in favor of the SDC was within the ''zone of reasonableness'' and that the SDC's expert witness testified explicitly that a 71.3%:28.7% distribution in favor of the SDC was ''reasonable'' and ''should not . . . be ignored,'' such a distribution is also consonant with the parties' understanding of a reasonable allocation.

C. The Judges' Distribution Is Consistent With the Parties' Economic Decisions Regarding the Development and Presentation of Evidence

The parties admittedly proffered their respective worst-case scenarios because each had chosen not to obtain data that are more precise—because each party deemed the cost of acquiring additional data to be too high relative to the marginal change in royalties that might result from such additional data (and perhaps the overall royalties that remain in dispute in the current proceeding). The parties' independent yet identical decisions in this regard underscore the Judges' reliance on the parties' worst-case scenarios in establishing relative market value. When a party acts, or fails to act, to cause evidentiary uncertainty as to the quantum of relief, the party that created the uncertainty cannot benefit from its own decision in that regard. As one commentary notes:

> Factual uncertainty resulting from missing evidence is a salient feature of every litigated case. Absolute certainty is unattainable. Judicial decisions thus always involve risk of error. This risk cannot be totally eliminated. However, it is sought to be minimized by increasing the amount of probative evidence that needs to be considered by the triers of fact. *Missing evidence should therefore be perceived as a damaging factor.*

A. Porat and A. Stein, *Liability for Uncertainty: Making Evidential Damage Actionable,* 18 Cardozo L. Rev. 1891, 1893 (1997) (emphasis added). Alternatively stated, the SDC and IPG have failed to satisfy their respective evidentiary burdens to obtain anything above the minimum values indicated by their evidence, by failing to obtain random samples, full surveys, the testimony of television programmers, or other more probative evidence or testimony to support their respective arguments for a higher percentage distribution.

Although the SDC and IPG each had an incentive to procure and proffer additional evidence, that incentive existed only if the additional evidence would have advanced the offering party's net economic position. As the parties acknowledged at the hearing, the amount at stake simply did not justify their investment in the discovery, development, and presentation of additional evidence.[64] When a party makes the choice to forego the expense of producing more precise evidence, that party has implicitly acknowledged that the value of any additional evidence is less than the cost of its procurement. As Judge Richard Posner has noted: ''The law cannot force the parties to search more than the case is worth to them merely because the additional search would confer a social benefit.'' R. Posner, *An Economic Approach to Evidence,* 51 Stan. L. Rev. 1477, 1491 (1999).

VII. Conclusion

Although there is a virtual overlap between the worst-case scenarios of both parties, the Judges adopt the SDC's distribution proposal, in light of the more fundamental deficiencies in the IPG Methodology. Accordingly, based on the analysis set forth in this Determination, the Judges conclude that the distribution at issue in this proceeding shall be:

SDC: 71.3%

IPG: 28.7%

This Final Determination determines the distribution of the cable royalty funds allocated to the Devotional Claimants category for the year 1999, including accrued interest. The Register of Copyrights may review the Judges' final determination for legal error in resolving a material issue of substantive copyright law. The Librarian shall cause the Judges' final determination, and any correction thereto by the Register, to be published in the **Federal Register** no later than the conclusion of the Register's 60-day review period.

January 14, 2015.

SO ORDERED.

Suzanne M. Barnett,

Chief United States Copyright Royalty Judge.

David R. Strickler,

United States Copyright Royalty Judge.

Jesse M. Feder,

United States Copyright Royalty Judge.

[61] As noted *supra,* the Judges may rely on the evidence presented by the parties to make a distribution within the zone of reasonableness, and, in so doing, mathematical precision is not required. *See Nat'l Ass'n of Broadcasters,* 140 F.3d at 929*; Nat'l Cable Television Ass'n,* 724 F.2d at 182.

[62] The fact that Dr. Robinson's adjustment was based on multiplying her allocations by 71% (to account for the missing 29%) and that the adjustment led to a recommended distribution to the SDC of 71% is only coincidental.

[63] The Judges' acknowledgement that IPG's worst-case scenario (arising out of its fees-paid approach) overlaps with the SDC's worst case scenario constitutes the extent to which the Judges credit the IPG Methodology.

[64] As noted previously, IPG criticized the SDC Methodology for failing to utilize better data. That criticism applies equally to both parties and reflects their respective decisions not to invest additional resources to obtain more evidence. *See supra* notes 46–47 and accompanying text.

Dated: January 14, 2015.

Suzanne M. Barnett,

Chief United States Copyright Royalty Judge.

Approved by:

James H. Billington,

Librarian of Congress.

[FR Doc. 2015–05777 Filed 3–12–15; 8:45 am]

BILLING CODE 1410–72–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: 15–008]

NASA Advisory Council; Aeronautics Committee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92–463, as amended, the National Aeronautics and Space Administration announces a meeting of the Aeronautics Committee of the NASA Advisory Council (NAC). This Committee reports to the NAC. The meeting will be held for the purpose of soliciting, from the aeronautics community and other persons, research and technical information relevant to program planning.

DATES: Thursday, March 26, 2015, 9:00 a.m. to 5:00 p.m., Local Time.

ADDRESSES: NASA Headquarters, Room 6E40, 300 E Street SW., Washington, DC 20546.

FOR FURTHER INFORMATION CONTACT: Ms. Susan L. Minor, Executive Secretary for the NAC Aeronautics Committee, NASA Headquarters, Washington, DC 20546, (202) 358–0566, or *susan.l.minor@nasa.gov.*

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the capacity of the room. Any person interested in participating in the meeting by WebEx and telephone should contact Ms. Susan L. Minor at (202) 358–0566 for the web link, toll-free number and passcode. The agenda for the meeting includes the following topics:

- NAC Aeronautics Committee Work Plan.
- NASA Aeronautics Budget Discussion.
- Safety Program Reorganization Implementation.
- Aeronautics Research Mission Directorate Investment Strategy.
- Innovation in Commercial Supersonic Aircraft Thrust Overview.

Attendees will be requested to sign a register and to comply with NASA security requirements, including the presentation of a valid picture ID to Security before access to NASA Headquarters. Foreign nationals attending this meeting will be required to provide a copy of their passport and visa in addition to providing the following information no less than 10 working days prior to the meeting: Full name; gender; date/place of birth; citizenship; visa information (number, type, expiration date); passport information (number, country, expiration date); employer/affiliation information (name of institution, address, country, telephone); title/position of attendee; and home address to Susan Minor, NAC Aeronautics Committee Executive Secretary, fax (202) 358–4060. U.S. citizens and Permanent Residents (green card holders) are requested to submit their name and affiliation 3 working days prior to the meeting to Susan Minor at (202) 358–0566. It is imperative that this meeting be held on this date to accommodate the scheduling priorities of the key participants.

Harmony R. Myers,

Acting Advisory Committee Management Officer, National Aeronautics and Space Administration.

[FR Doc. 2015–05702 Filed 3–12–15; 8:45 am]

BILLING CODE 7510–13–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: 15–009]

NASA Advisory Council; Institutional Committee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92–463, as amended, the National Aeronautics and Space Administration announces a meeting of the Institutional Committee of the NASA Advisory Council (NAC). This Committee reports to the NAC.

DATES: Thursday, March 26, 2015, 9:00 a.m. to 5:00 p.m., Local Time, and Friday, March 27, 2015, 9:00 a.m. to 4:00 p.m., Local Time.

ADDRESSES: NASA Headquarters, Room 9H40 [Program Review Center (PRC)], 300 E Street SW., Washington, DC 20546.

FOR FURTHER INFORMATION CONTACT: Mr. Todd Mullins, Executive Secretary for the NAC Institutional Committee, NASA Headquarters, Washington, DC 20546, (202) 58–3831, or *todd.mullins@nasa.gov.*

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the seating capacity of the room. This meeting is also available telephonically and by WebEx. You must use a touch tone phone to participate in this meeting. Any interested person may dial the toll free access number 844–467–6272 or toll access number 720–259–6462, and then the numeric participant passcode: 180093 followed by the # sign. To join via WebEx on March 26, the link is *https://nasa.webex.com/,* the meeting number is 990 778 028 and the password is Meeting2015! (Password is case sensitive.) To join via WebEx on March 27, the link is *https://nasa.webex.com/,* the meeting number is 999 775 359 and the password is Meeting2015! (Password is case sensitive.) **Note:** If dialing in, please ''mute'' your telephone. The agenda for the meeting will include the following:

—NASA Human Capital Culture Strategy
—NASA Leadership Development Programs
—NASA Export Control Program
—NASA Space Act Agreements Process

Attendees will be requested to sign a register and to comply with NASA Headquarters security requirements, including the presentation of a valid picture ID before receiving access to NASA Headquarters. Foreign nationals attending this meeting will be required to provide a copy of their passport and visa in addition to providing the following information no less than 10 working days prior to the meeting: Full name; gender; date/place of birth; citizenship; passport information (number, country, telephone); visa information (number, type, expiration date); employer/affiliation information (name of institution, address, country, telephone); title/position of attendee. To expedite admittance, attendees with U.S. citizenship and Permanent Residents (green card holders) can provide full name and citizenship status 3 working days in advance by contacting Ms. Mary Dunn, via email at *mdunn@nasa.gov* or by telephone at 202–358–2789. It is imperative that the meeting be held on this date to accommodate the scheduling priorities of the key participants.

Harmony R. Myers,

Acting Advisory Committee Management Officer, National Aeronautics and Space Administration.

[FR Doc. 2015–05768 Filed 3–12–15; 8:45 am]

BILLING CODE 7510–13–P