UNITED STATES COPYRIGHT ROYALTY JUDGES

In the Matter of	)	
	)	
Distribution of the 2004 and 2005 Cable Royalty Funds	)	**Docket No. 2007-3 CRB CD 2004-2005**
	)	

DISTRIBUTION ORDER

I. BACKGROUND

On July 15, 2008, the Copyright Royalty Judges published in the **Federal Register** a notice announcing the commencement of a proceeding to determine the Phase I distribution of royalties collected from cable systems under the section 111 statutory license for the period 2004 and 2005.[1] 73 FR 40623. The notice also requested interested parties to submit their Petitions to Participate in the proceeding no later than August 18, 2008. Petitions to Participate, all of which were joint petitions, were received from the following claimants: Public Broadcasting Service for Public TV Claimants ("PTV"); National Public Radio ("NPR"); Joint Sports Claimants ("JSC"); Canadian Claimants Group ("Canadian Claimants"); Devotional Claimants; the Motion Picture Association of America, Inc. ("MPAA") for certain Program Supplier Claimants ("Program Suppliers"); Music Claimants;[2] and the National Association of Broadcasters for all U.S. commercial television broadcast stations retransmitted by cable operators as distant signals during 2004 and 2005 ("CTV"). The Judges accepted these petitions.

[1] For a discussion of the operation of the section 111 license and the establishment of the funds for distribution, see, *Distribution of 2000-2003 Cable Royalty Funds, Distribution order, in Docket No. 2008-2 CRB CD 2000-2003* ("*2000-03 Distribution Order*"), 75 FR 26798 (May 12, 2010).

[2] Music Claimants are comprised of the performing rights organizations ("PROs")—the American Society of Composers, Authors and Publishers ("ASCAP"), Broadcast Music, Inc. ("BMI"), and SESAC.

Order Announcing Negotiation Period, Docket No. 2007-3 CRB CD 2004-2005 (October 31, 2008).

After the expiration of the mandatory negotiation period, the parties were directed to submit their written direct statements on or before June 1, 2009.[3,4] The Judges received written direct statements from Canadian Claimants; Program Suppliers; Devotional Claimants; and JSC, CTV, PTV, and Music Claimants (collectively, the "Settling Parties"). Discovery in the direct phase of the proceeding was conducted throughout June and July, and the hearings were conducted from October 6-20, 2009. The Settling Parties presented the following witnesses: James M. Trautman, Managing Director of Bortz Media & Sports Media, Inc.; Dr. Robert W. Crandall, Senior Fellow in Economic Studies at the Brookings Institution; Judith Meyka, independent consultant with clients in the cable and satellite television industry; Linda McLaughlin, Special Consultant to National Economic Research Associates, Inc.; Dr. Richard V. Ducey, Chief Strategy Officer, BIA Advisory Services; Dr. Joel Waldfogel, Ehrenkranz Family Professor of Business and Public Policy at the Wharton School of the University of Pennsylvania; Jerald N. Fritz, Senior Vice President for Legal and Strategic Affairs, Allbritton Communications Company; Seth Saltzman, Senior Vice President of Member

[3] Prior to this deadline, the participants filed a stipulation of settlement as to NPR's claim to the 2004 and 2005 cable royalty funds and their agreement that NPR no longer needed to participate further in this Phase I proceeding. Upon notification to the Judges that all Phase II claims had been resolved, NPR moved for final distribution of their share to the 2004 and 2005 funds. The Judges granted the motion. *See Order Granting Motion for Final Distribution*, Docket No. 2007-3 CRB CD 2004-2005 (April 16, 2009). It is the funds remaining after this Order that are the subject of this determination.

[4] Hereinafter, references to the written direct testimony shall be cited as "WDT" preceded by the last name of the witness and followed by the exhibit number and the page or paragraph number. Similarly, references to the written rebuttal testimony shall be cited as "WRT" preceded by the last name of the witness and followed by the exhibit number and the page or paragraph number. References to the transcript shall be cited as "Tr." followed by the page number and the name of the witness. References to the proposed findings of fact and conclusions of law shall be cited as "PFF" or "PCL," respectively, preceded by the name of the party that submitted same (*i.e.*, Settling Parties ("SP"), Program Suppliers ("PS"), Canadian Claimants ("CCG") or Devotionals ("D")) and followed by the paragraph number.

Management in the Performing Rights Group, ASCAP; Michael O'Neill, Senior Vice President, Licensing, BMI; and William P. Zarakas, Principal, The Brattle Group.[5]

The Canadian Claimants presented Dr. Debra J. Ringold, Dean, Atkinson Graduate School of Management, Willamette University.[6]

The Devotional Claimants presented Dr. William Brown, Professor and Research Fellow, School of Communications and the Arts, Regent University.[7]

The Program Suppliers presented the following witnesses: Marsha E. Kessler, Vice President of Retransmission Royalty Distribution, the MPAA; John Mansell, Jr., President/Chief Executive Officer, John Mansell Associates, Inc.; Howard B. Homonoff, Director in the Entertainment, Media and Communications advisory practice, PricewaterhouseCoopers LLP; Dr. Arthur C. Gruen, Partner/Co-Founder, Wilkofsky Gruen Associates; Paul Lindstrom, Senior Vice President, The Nielsen Company ("Nielsen"); Bruce Hoynoski, Senior Vice President and Chief Research Officer, Global

[5] The Judges also admitted the testimony of the following witnesses for the Settling Parties without live testimony pursuant to the stipulation of all parties: Dr. Gregory M. Duncan, Professor, the University of California, Berkley, and Managing Director, Huron Consulting Group, Tr. at 36-37; John F. Wilson, Senior Vice President & Chief TV Programming Executive, Public Broadcasting Service, *id.* at 397-98; Jonda K. Martin, President of Cable Data Corporation ("CDC"), *id.* at 528-29; and Alexandra Patsavas, Owner, Chop Shop Music Supervision, *id.* at 1009.

[6] The Judges also admitted the testimony of the following witnesses for the Canadian Claimants without live testimony pursuant to the stipulation of all parties: Janice de Freitas, Manager of the Rights Management Unit, Canadian Broadcasting Corporation/Radio-Canada, Tr. at 1270-72; Alison Smith, correspondent for the Canadian Broadcasting Corporation, *id.* at 1272; and Joan Fisher, Legal Counsel, Decode Entertainment, Inc., *id.* at 1273.

[7] The Judges also admitted the testimony of the following witnesses for the Devotional Claimants without live testimony pursuant to the stipulation of all parties: Dr. Charles F. Stanley, Senior Pastor, First Baptist Church, Atlanta, Georgia, and President, In Touch Ministries, Tr. at 1393-94; and Bruce Johansen, former President and CEO, the National Association of Television Program Executives, *id.* at 1394-95.

Media for Nielsen; and Dr. George S. Ford, President, Applied Economics Studies, and Chief Economist, the Phoenix Center for Advanced Legal & Economic Policy Studies.[8]

A rebuttal phase to the proceeding was requested by the parties, and written rebuttal statements were submitted by December 11, 2009. As a result of discovery on the written rebuttal statements, the Settling Parties and Program Suppliers filed a motion for adoption of a joint stipulation[9] regarding certain programming on Station WGN-TV (Chicago, Illinois) during the years 1998-99 and 2004-05, the adoption of which would obviate the need for the testimony of two witnesses for the Settling Parties: Dan Derian, Vice President of Research and Strategic Planning for Major League Baseball, and Marc Schader, former Senior Vice President of Programming for Tribune Broadcasting. The Judges granted the motion, and the Settling Parties withdrew the testimony of Messrs. Derian and Schader. *See Order on Witnesses and Joint Stipulations*, Docket No. 2007-3 CRB CD 2004-2005 (January 27, 2010); *see also* Tr. at 2335-36.

Rebuttal hearings were conducted February 1-5, 2010. The Settling Parties presented the rebuttal testimony of: Dr. Gregory S. Crawford, Professor of Economics, University of Warwick, United Kingdom; Jeffrey S. Berman, Senior Partner & Executive Vice President, C&R Research; Dr. Duncan; Edward S. Desser, President/Founder, Desser Sports Media, Inc.; and Mr. Trautman.[10]

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[8] The Judges also admitted the testimony of the following witnesses for the Program Suppliers without live testimony pursuant to the stipulation of all parties: Alex Paen, President, Telco Productions, Inc., Tr. at 1529; Jonda K. Martin, *id.* at 1529-30; Dr. Martin R. Frankel, Professor of Statistics and Computer Information Systems, Baruch College, City University of New York, *id.* at 1530-31; and Dr. Alan M. Rubin, Professor Emeritus and Director Emeritus, School of Communication Studies, Kent State University, *id.* at 1531-32.

[9] Neither the Canadian Claimants nor the Devotional Claimants objected to the adoption of the stipulation.

[10] The Judges also admitted the rebuttal testimony of two witnesses for the Settling Parties without live testimony pursuant to the stipulation of all the parties: Michael D.Topper, Vice President & Head of the

The Devotional Claimants presented the rebuttal testimony of Dr. Michael Salinger, Professor of Economics, Boston University School of Management and Managing Director of LECG.

The Canadian Claimants presented the rebuttal testimony of: Ms. Martin; Dr. Gary T. Ford, Emeritus Professor of Marketing, the Kogod School of Business, American University; Dr. John E. Calfee, Resident Scholar, American Enterprise Institute; and Dr. Brian T. Ratchford, Charles and Nancy Davidson Professor of Marketing, University of Texas at Dallas.

Program Suppliers presented the rebuttal testimony of: Ms. Kessler; Dr. John R. Woodbury, Vice President, Charles River Associates; and Mr. Mansell.[11]

Proposed Findings of Fact and Conclusions of Law were submitted by the parties by March 17, 2010, and disputed findings were submitted by April 9, 2010. The parties also submitted Joint Agreed Findings of Fact and Conclusions of Law on April 19, 2010. Closing arguments were held on May 10, 2010, and the record to the proceeding was closed.[12]

Antitrust & Competition Practice, Cornerstone Research, Tr. at 2334-35; and Greg Stone, Owner/Chief Executive Officer, Greg Stone Media Consulting, *id.* at 2335.

[11] The Judges also admitted the rebuttal testimony of two witnesses of the Program Suppliers without live testimony pursuant to the stipulation of all the parties: Dr. Gruen, Tr. at 3238-39; and Dr. George Ford, *id.* at 3384-86.

[12] There remains an outstanding motion filed jointly by the parties requesting that the Judges adopt specific descriptions of the program categories at issue in this proceeding. However, at closing argument, the parties deemed the motion as no longer necessary. *See, e.g.*, 5/10/10 Tr. at 33, 94 (Closing Argument). Consequently, the motion is denied.

II. THE GOVERNING DISTRIBUTION STANDARD

Section 803(a)(1) of the Copyright Act provides:

> The Copyright Royalty Judges shall act in accordance with this title, and to the extent not inconsistent with this title, in accordance with subchapter II of chapter 5 of title 5, in carrying out the purposes set forth in section 801. The Copyright Royalty Judges shall act in accordance with regulations issued by the Copyright Royalty Judges and the Librarian of Congress, and on the basis of a written record, prior determinations and interpretations of the Copyright Royalty Tribunal, Librarian of Congress, the Register of Copyrights, copyright arbitration royalty panels (to the extent those determinations are not inconsistent with a decision of the Librarian of Congress or the Register of Copyrights), and the Copyright Royalty Judges (to the extent those determinations are not inconsistent with a decision of the Register of Copyrights that was timely delivered to the Copyright Royalty Judges pursuant to section 802(f)(1)(A) or (B), or with a decision of the Register of Copyrights pursuant to section 802(f)(1)(D)), under this chapter, and decisions of the court of appeals under this chapter before, on, or after the effective date of the Copyright Royalty and Distribution Reform Act of 2004.

17 U.S.C. § 803(a)(1).

All parties acknowledge that Congress did not set forth a statutory standard for cable royalty allocations. *See, e.g.*,, SP PCL at ¶ 6. Beginning with the Copyright Royalty Tribunal, standards were created to assist the distribution process, which changed through the years under the Tribunal and later under the Copyright Arbitration Royalty Panel ("CARP") system administered by the Librarian of Congress.[13] However, for purposes of this proceeding, the parties are all in agreement that the sole governing standard is the relative marketplace value of the distant broadcast signal programming

[13] For a more complete discussion of how the standards for distribution have changed throughout the course of the section 111 license, *see 2000-03 Distribution Order*, 75 FR at 26801-02 (May 12, 2010).

retransmitted by cable systems during 2004 and 2005. *See* CCG PCL at ¶ 9; DPCL at ¶ 2; SP PCL at ¶ 6; PS PCL at ¶ 9.

In applying the relative marketplace value standard to this proceeding, we are cognizant of the requirements of section 803(a)(1) described above. We have considered all of the evidence and the arguments presented by the parties. To the extent that they are incorporated into our determination as to the proper distribution of the cable funds, they are accepted. To the extent they are not, they are rejected.

III. JSC, CTV, PTV AND PROGRAM SUPPLIERS CLAIMANTS' AWARDS

Having carefully reviewed and considered all of the evidence in the record, the Judges find that the values of the program categories at issue among these contending claimants are most reasonably delineated by a range bounded by certain results indicated primarily by the Bortz constant sum survey, to a lesser extent by the Waldfogel regression analysis and, to a slight extent, by the Gruen constant sum survey. For the reasons discussed below, the Judges find that no single methodological approach, even when ostensibly adjusted to account for acknowledged shortcomings, persuasively obviates the need for relying, at least to some small extent, on other reasonable valuation approaches that offer additional perspective from a different methodological vantage point.

The market value of the non-network programming that appears on distant signal stations that are retransmitted by cable systems is not directly measurable. That is because the price charged to the cable system for the right to retransmit such programming is not determined in a free market, but rather is determined statutorily. Therefore, the evidence adduced in this proceeding aims to show how the programming

in question would be valued in a hypothetical free market that would exist but for the regulatory regime currently in place.

However, such a hypothetical free market value for non-network distant signal programming is also not directly observable, because cable operators purchase a bundle of programming when they purchase a distant signal's entire output. ["Q. And why didn't you ask them about actual expenditures by that cable system for programming? A. Well, that's not something that's really possible to do, because cable operators buy whole signals. They don't buy the individual–when they're buying distant signals, they buy entire signals that include, in–in most instances–instances, multiple types of programming or multiple categories of programming. And, therefore, they're not, in the distant signal purchase decisions, making expenditures for the–these particular categories of programming." Tr. at 78 (Trautman).] Ergo, various alternative explanations about what induces cable system operators (the buyers) in a hypothetical distant signal market to exhibit preferences for one type of programming relative to the other types of programming that form part of the bundle on a distant signal station are the focus in this proceeding. The inducement to buy distant signals in the cable market stems from the derived demand for such distant signals as inputs in the various cable systems' channel lineups. In other words, any cable operator's demand for the programming input reflected in distant signals is only valuable to the extent that the demand for the total output of any cable system (*i.e.*, bundles of service options) can be related to that particular input.

Analysis of the Settling Parties' Evidence

One approach to valuation, favored by the Settling Parties, explains the demand for distant signals by cable operators in terms of the strength of the cable system operators' expressed preferences for the types of programming that they identify with the distant signal. This is grounded in the notion that a cable operator's association of certain kinds of "signature programming" with a particular distant signal station tends to be the starting point for driving value. Tr. at 86 (Trautman). Thus, the Bortz survey is predicated on the notion that the cable operator respondents are focusing on "signature programming" that drives the value of the distant signal station *to the cable operator.* ["And I think what you're expressing there in that example is exactly what I'm talking about in terms of the dominant impression of value and the notion of signature programming. I think, on any of these distant signals, although it may--what constitutes signature programming could differ from one respondent to the next, they are, in fact, in answering this question, thinking exactly along the lines that you expressed." Tr. at 91 (Trautman).] Following this line of analysis, the Settling Parties offer the Bortz constant sum survey of cable operators' relative preferences among certain categories of programming identifiably present on distant signal stations as determinative of the relative value of most of the categories of programming represented by the claimants in this proceeding.

Yet, it is not clear from the preferences expressed by the cable system operators who answer the Bortz survey questions where the key relative value question is limited to defining worth only "in terms of attracting and retaining subscribers," whether the preferences so expressed would reflect actual demand in a more realistic view of a

hypothetical free market. That is, the purchase of one type of channel by cable operators (such as distant signal stations) and the programming it reflects would not occur in a vacuum to the exclusion of consideration of the remaining content to bundle with that distant signal channel in the product ultimately offered to subscribers. Underlying subscriber demand for the programming that appears on a particular distant signal station is only one part of a more complex decision facing cable operators as to whether the input in question is more attractive than a cable network alternative in terms of the net revenue or profit maximization goals of the buyers. This is not a trivial concern inasmuch as the buyers in this case (cable operators) are not participants in perfectly competitive input markets or in perfectly competitive output markets for their services. In the input market for cable channel programming as well as in the output market for providing consumer subscribers with cable television services, cable system operators exercise varying degrees of market power. Therefore, it is less than realistic to assume that cable operators' programming purchases are driven only by meeting their underlying subscriber programming preferences when a myriad of other net revenue considerations may be involved in any programming decision.[14]

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[14] In markets characterized by some degree of monopoly power, consumer preferences are not honored in the same manner as in perfectly competitive markets, resulting in higher prices being charged to consumers and lesser quantities of goods/services being sold at the market price. Firms in such markets are, to varying degrees, price-makers rather than price-takers as compared to firms operating in perfectly competitive markets. So while a perfectly competitive firm is motivated to sell as much as it can produce up to the point where its marginal costs equate with the market price established by the *market* demand curve, a firm with some monopoly power is only motivated to sell up to the point where its marginal costs equate with the marginal revenues associated with the higher price it influences or dictates as reflected in the *firm's* downward sloping demand curve.

Testimony such as that offered by Judith Meyka describing the *cable marketplace* as competitive and declaring that the value of any particular programming to a cable operator is derived from the perceived value to the subscriber (*see* Meyka WDT (SP Ex. 4) at 4) is simply not credible in the face of well-documented studies showing the exercise of pricing power based on single cable operator dominance in the *cable markets* serving most Americans and in light of the fact that cable operators restrict their channel offerings to subscribers to *bundles of channels*, not just to the channels subscribers typically view. *See*, for

One reason that more than just pure subscriber interests play a role in shaping the underlying demand for a cable operator's output is that the distant signal channels highlighted in this proceeding are not the subject of a direct choice by cable subscribers. Rather distant signal offerings are bundled together with non-distant signal broadcast channels, cable network channels and pay-per-view channels. Further, they are bundled into varying combinations of channels that are offered as different tiers of service for different prices. The bundles are packaged by the cable operator who selects the channel offerings, including any distant signal offerings. The rationale for the cable operator's decision concerning which channels to group in any tier offering and at what price, may depend not only on the impact on direct subscriber revenues, but also on such factors as advertising revenues associated with cable network channels, the relative license fee costs of various cable network channels, physical capacity constraints on the number of channels that can be transmitted over a particular cable system and even the direct ownership interests of the cable system in programming content on a given cable network.[15] In short, the preferences expressed by the cable system operators who answer the Bortz survey, where the key relative value question is limited to defining worth only

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example, U.S. General Accounting Office (GAO), *Issues Related to Competition and Subscriber Rates in the Cable Television Industry*, October, 2003 ("*October 2003 GAO Report*") at 30-31.

[15] *See*, for example, *October 2003 GAO Report* at 30-31. ["Most cable operators with whom we spoke provide subscribers with similar tiers of networks, typically the basic and expanded-basic tiers, which provide subscribers with little choice regarding the specific networks they purchase. . . . The manner in which cable networks are currently packaged has raised concern among policy makers and consumer advocates about the lack of consumer choice in selecting the programming they receive. Under the current approach, it is likely that many subscribers are receiving cable networks that they do not watch. In fact, a 2000 Nielsen Media Research Report indicated that households receiving more than 70 networks only watch, on average, about 17 of these networks. The current approach has sparked calls for more flexibility in the manner that subscribers receive cable service, including the option of à la carte service, in which subscribers receive only the networks that they choose and for which they are willing to pay."] *See also*, U.S. Government Accountability Office, *Media Programming: Factors Influencing the Availability of Independent Programming in Television and Programming Decisions in Radio*, March, 2010 at 1-24. *See also* the testimony by Dr. Crawford for the Settling Parties and Dr. George Ford for the Program Suppliers concerning some of the economic effects of bundling as summarized in SP PFF at ¶¶ 447-49, 534.

"in terms of attracting and retaining subscribers," either may implicitly reflect more than an actual underlying subscriber demand for the programming that appears on a particular distant signal station or, alternatively, unrealistically minimize factors such as whether the input in question is more attractive than a cable network alternative in terms of the net revenue or profit maximization goals of the buyers.

This is not to say that the Bortz constant sum cable operator preference survey is substantially flawed, but rather that, given the interplay of all of the other factors described above that may color a cable operator's decision concerning the purchase of a distant signal input in a hypothetical cable market where the reality of bundling is taken into account, the Bortz survey's resulting point estimates are not a *precise* measure of all of those factors that may shape cable operator demand for the programming on distant signal stations. And, the Bortz study is certainly not a fully equilibrating model of supply and demand in the relevant hypothetical market, but rather a market research survey of buyer (*i.e.*, cable operator) preferences in that market, characterized by a less than fully comprehensive explanation of what shapes those preferences. Therefore, for reasons discussed below, while the Judges find the Bortz study to be the most persuasive piece of evidence provided on relative value in this proceeding, the Bortz confidence intervals around each point estimate inspire more confidence than a strict adherence to the point estimates, particularly in relation to the larger claimants.

This is not to say that the Bortz survey should ignore the role of the subscriber growth factor in the demand for programming content or that subscriber growth is not a consideration facing cable operators in planning their programming decisions. To the contrary, as noted above, subscriber growth is one consideration facing cable operators in

making programming decisions; and, underlying subscriber demand was explicitly and properly a factor which the survey respondents were asked to consider. Moreover, that there are factors other than subscriber growth considerations which may also be at work in influencing the demand for distant signal stations, does not change our finding that the Bortz survey focuses on the appropriate buyer in the hypothetical market–*i.e.*, the cable operator.

Beyond the issue of the relevant contours of the hypothetical market, any study that purports to provide useful information on the relative value of the disparate categories of distant signal programming at issue in this proceeding must be reasonably well-founded methodologically. We find that the Bortz study is founded on a method–the constant sum survey–that has been long regarded as a recognized approach to market research. Tr. at 50 (Trautman), 1299 (Ringold), and 3007 (Gary Ford). Nevertheless, there are at least three aspects related to the execution of the Bortz survey methodology that we find additionally caution against regarding the Bortz point estimates as precise indicators of the relative value of the programming addressed in the record of this proceeding.

First, there *may* be bias introduced into the survey resulting from the respondents' potential misunderstanding of the exact parameters of the categories of programming they are being asked to compare in the key question (*i.e.*, question 4) addressing valuation in the survey. ["There are–there certainly is the potential that in–in some instances, on–I would say on the–on the fringes of these categories that a respondent might be thinking that one particular thing that is of value to them is in one category, when, in fact, for purposes of these proceedings, it should fit in another." Tr. at 83

(Trautman); and "Well, I think–first, I think that it's minor. I think that the program–there might be one or two exemptions, but the programs that are subject to miscategorization tend to be at the fringes and–and tend not to be things that drive substantial value in our service–in our survey. And, therefore, I think that the potential for spillover or for a change in result is–is limited." Tr. at 107-08 (Trautman).] However, although such bias may well be reflected in the Bortz survey point estimates, no one in the proceeding has precisely quantified the amount or direction of such bias. Therefore, we cannot say to what degree such bias may skew the Bortz point estimates. Moreover, we find no basis for concluding that such bias takes the true relative value numbers outside of range of the confidence intervals for the valuation estimates produced by the Bortz survey. ["Q. And have you considered whether your results are reliable in light of the possibility that there might be miscategorization in the response? A. I have considered that, and–and while I indicated that there's certainly some potential for spillover or miscategorization of certain types of programming, I think I have confidence that–that within the bounds of the estimation parameters that we set forth in the survey, that our results provide an accurate indication of relative value." Tr. at 107 (Trautman).]

Second, an acknowledged shortcoming of the Bortz survey valuations revolves around its handling of PTV and Canadian programming estimates. Because the Bortz methodology calls for surveying cable systems that contain at least one U.S. independent or network signal, cable systems which carry PTV-only or Canadian-only distant signals are excluded from the survey sample. The exclusion of such cable systems clearly biases the Bortz estimates downward for PTV and Canadian programming. The Bortz study seeks to excuse this bias on grounds that it is not possible to obtain an estimate of *relative*

value where the cable system carries only one type of distant signal programming. But this explanation fails to adequately consider the view that: (1) a cable system that chooses only PTV or Canadian programming may be *implicitly* making a choice in favor of a 100% relative value score for such programming; (2) an explicit 100% relative value score for the Movies category (and concomitant 0% score for the remaining programming categories) is regarded as acceptable by the Bortz methodology in the case of a U.S. commercial station; and, (3) the latter occurrence–a 100% relative value score for the Movies category–would be recorded by Bortz even in the absence of PTV or Canadian distant signals from the responding cable operator's system. While the Bortz report acknowledges this bias (Bortz Report (SP Ex. 2) at 8-9) and the Settling Parties offer additional adjustments to purportedly remedy the problem (*see infra* at 34-35), the proffered remedies are not wholly satisfactory and, more importantly, obscure the basic difficulty that stems from asking cable operators to compare five different categories of *programming* with two types of distant *signals*. CCG PFF at ¶¶ 112,120. The Bortz survey may well be improved in this regard, either through the reformulation of the questions asked in the survey and/or by revisiting the underlying survey sample plan. Tr. at 2996-98 (Gary Ford); CCG PFF at ¶¶ 154-55. Yet, while this bias is troubling and proposed post-survey remedies based on the current record are discussed *infra* at 36-37, it would be inappropriate to overstate the impact of this problem. No one in this proceeding maintains that it substantially affects more than a small portion of the total royalty pool (*i.e.*, the combined PTV-Canadian portion) under any of the competing theories of royalty distributions advanced in this proceeding. Nor has it been shown that the Bortz survey's remaining non-PTV-Canadian estimates were thrown outside the

parameters of their respective confidence intervals solely because of this problem. That is, the PTV-Canadian problem does not substantially affect any of the remaining categories in some disproportionate way.[16]

Third, another acknowledged problem with the Bortz study flows from its handling of compensable as compared to non-compensable programming. [". . . respondents to our survey are not informed that substantial portions of the movies and syndicated programming on Superstation WGN (the most widely carried distant signal) are not compensable in this proceeding because these programs are not broadcast by WGN on its over-the-air Chicago signal; thus the values that respondents to our survey attribute to these categories likely represent a 'ceiling' in that respondents are considering all programming on WGN rather than just the compensable programming on WGN." Bortz Report (SP Ex. 2) at 8.] The same issue affects the Devotional Claimants because of the presence of devotional programming on WGN that is also non-compensable. SP PFF at ¶ 686. (*See also infra* at 43-44).

The Settling Parties offer some additional adjustments to the Bortz point estimates to address this problem. *See* SP PFF at ¶¶ 347-48. However, the Settling Parties do not incorporate their proposed adjustments explicitly into their proposed awards. Rather, the Settling Parties simply note their view that with respect to the Program Suppliers, their proposed award should only be regarded as a "ceiling" from which the Program Suppliers share should be reduced by some amount to reflect the disproportionate effect of the non-compensable programming issue. The Settling Parties clearly cannot precisely quantify an adjustment to the Bortz numbers for Program Suppliers because they recognize that

[16] Indeed, even PTV does not object to the share accorded it under the Settling Parties' proposed shares which are based on the Bortz study as augmented by further adjustments.

> the specific amount of an appropriate reduction in the Program Suppliers' share would depend on how much of the value attributed by Bortz survey respondents to Program Suppliers programming categories was attributable to non-compensable programming on WGN, *as to which there is no direct evidence*, but it would be reasonable to expect that some portion of that value was attributed to non-compensable Program Suppliers programming.

SP PFF ¶ 348, n.802 (emphasis added). Further, with respect to the Devotional Claimants' share, the Settling Parties do not incorporate an explicit adjustment for this factor in their proposed award, being merely content to argue its relevance to adopting a prior lower award in place of its Bortz indicated share. *See* SP PFF at ¶¶ 686-87. Moreover, the method suggested by the Settling Parties for adjusting the Program Suppliers' share would produce no change in the Devotional Claimants' share–that is Dr. Waldfogel's comparison of implied royalty shares that resulted when all programming minutes on WGN were used in share calculations rather than just compensable programs showed no difference for the Devotional Claimants (a zero share in both cases). *See* SP PFF at ¶ 176 at Table 5. Thus, while we agree that some adjustment for this problem is reasonable, we find no reliably quantified adjustment on the record before us. However, because we focus on the confidence intervals for the Bortz estimates, rather than the Bortz point estimates themselves, we do not find that this issue alone so substantially affects the relative values of the programming so as to require us to discard those intervals as the best indicators in the record of the actual relative values of the programming of the larger claimants in this proceeding.

A number of other criticisms have been raised with respect to the Bortz survey by various claimants in this proceeding that suggest other shortcomings in terms of

economic theory, statistical analysis or survey methodology. Yet, whether taken individually or viewed as a group, we do not find these other criticisms to undermine the general usefulness of the Bortz survey for the purpose offered. Certainly, none of the criticisms raised by the contending parties persuade us to "throw out the baby with the bathwater," particularly when viewing the Bortz survey results in terms of the confidence intervals around the point estimates rather than strictly limited to the point estimates themselves. Instead, particularly in the case of the larger claimants such as JSC, CTV and Program Suppliers, we find the confidence intervals provided by the Bortz study the best starting point for evaluating an award, although we also recognize the need to give due consideration to the reasonability of adjustments to deal with acknowledged problems such as the undervaluation of PTV and Canadian programming. The Bortz intervals certainly mark the most strongly anchored range of relative programming values produced by the evidence in this proceeding. Still, other evidence produced in the record also helps to more fully delineate all of the boundaries of reasonableness with respect to the relative value of distant signal programming.

Another piece of evidence helpful to some degree in this regard is the Waldfogel regression analysis. Dr. Waldfogel's multiple regression analysis attempts to analyze the relationship between the total royalties paid by cable operators for the carriage of distant signals in 2004-05 and the quantity of programming minutes by programming category on those distant signals. In addition to considering the impact on the dependent variable (total royalties) of independent variables representing minutes of programming for eight category types, Dr. Waldfogel considered the following additional independent variables in his analysis: the number of subscribers to the cable system in the prior period, the

number of activated channels (*i.e.*, utilized capacity) for the cable system, average household income in the market in which the cable system was located, the number of channels originating locally, and dummy variables to indicate the presence of certain payment conditions (such whether a system pays any 3.75% fees or whether a system carries partially distant signals or whether a system imported only one DSE or whether a system imported less than one full DSE). *See* SP PFF at ¶ 156. Dr. Waldfogel's specification was similar in its choice of independent variables to a regression model utilized by Dr. Gregory Rosston to corroborate the Bortz survey results in the 1998-99 CARP proceeding. *See Report of the Copyright Arbitration Royalty Panel to the Librarian of Congress, in Docket No. 2001-8 CARP CD 98-99 ("1998-99 CARP Report")* at 46 (October 21, 2003). Dr. Waldfogel offered a total minutes (*i.e.*, compensable as well as non-compensable) version of his regression analysis as corroborative of the adjusted Bortz survey estimates. Tr. at 854 (Waldfogel).

Conceptually, the Waldfogel regression, with its focus on bundles of distant signals and inclusion of variables to capture both system capacity and the impact on the appetite for distant signals associated with the number of channels originating locally, may provide a richer look than the Bortz survey into factors that impact the purchasing decision of cable operators. Yet, unlike the Bortz survey, it does not purport to analyze data free from the strictures of the regulated market because the payment pools analyzed ultimately are impacted by the fee structure set in the regulated market. This raises the question of whether the Waldfogel analysis provides useful information on the key behavioral question or, alternatively, whether it merely mirrors the impact of the regulated market in its valuation. We agree with Dr. Waldfogel that the way to think

about the bundle of programming that is being considered by the cable operator is to focus on its incremental value. Tr. at 890, 921, 926, and 940-41 (Waldfogel). Under that theory, Dr. Waldfogel has conceptually sought to separate the market impact of incremental signal purchasing decisions from the minimum fee issue and some other regulated fee considerations through the use of the dummy variables specified in the regression. We find, that as a result of the manner in which he has conceptualized his model, Dr. Waldfogel's regression coefficients do provide some additional useful, independent information about how cable operators may view the value of adding distant signals based on the programming mix on such signals. Although the determinants of distant signal prices in a hypothetical free market are not necessarily identified as such, some indication of what the cable operator finds valuable may be obtained by observing the way cable operators' total spending relates to the content of the bundle of distant signals purchased. That is because the cable operators are free to decide how many distant signals to purchase and, therefore, whether the addition of the content of an incremental distant signal will contribute to the net revenues of the system.

At the same time, while the Waldfogel regression analysis provides useful information, we also find that there are limits to that usefulness in corroborating the Bortz survey, largely stemming from the wide confidence intervals for the Waldfogel coefficients. Thus, the implied share of royalties calculated by Dr. Waldfogel would change substantially if the true value of the variable was at one end of the confidence interval rather than at the point estimate value used by Dr. Waldfogel in his calculations. Given the size of the standard errors around his estimates, Dr. Waldfogel concedes this imprecision. SP PFF at ¶ 184. Nevertheless, while one may question the precision of the

results on this basis, it only cautions against assigning too much weight to its corroborative value.

As to the methodology employed, we find that Dr. Waldfogel employed generally reasonable methods to assure that the model's results were consistent in the face of changes in the model and that the parameter estimates did not vary in a statistically significant way across years. SP PFF at ¶¶167-68. The strident criticisms raised by Dr. Salinger and Dr. George Ford concerning the "instability" of the Waldfogel estimates over time are excessive. For example, there is no *a priori* reason why the two individual years examined by Dr. Salinger (by breaking the Waldfogel entire sample in two) should have exactly matching minutes coefficients. Lack of precision can result merely from the fact that all items in a population were not observed. The smaller the sample size, the fewer are the number of observations and, hence, the less precision. Then too, it is not unusual to observe the coefficients of independent variables in a model varying between two samples because all possible combinations of forces at work that result in these coefficients can seldom be fully encompassed in an efficient specification of a model. Finally, the "instability" suggested by Dr. Salinger does not extend to the signs of the coefficients–all of the minutes variables examined by Dr. Salinger continue to carry the same positive or negative sign in 2004 as they carried in 2005. Thus, any instability does not extend to the direction of the expected explanation–it is the same in both years. Dr. Salinger also raises the spectre of omitted variables with respect to the Waldfogel analysis. Tr. at 2873-74 (Salinger). But there is no evidence that the inclusion of any particular additional independent variable would improve the explanatory power of the Waldfogel regression. Nor is there any evidence in the record that the independent

variables in the Waldfogel regression are correlated within an important omitted variable thereby leading to an unreliable estimate of the regression coefficients for the included variables. Without such evidence, this criticism should not be overstated because an omitted variable criticism may always be raised, since there are an almost limitless number of potential variables that may be considered for inclusion in any model of some complexity. SP PFF at ¶186.

Having carefully considered the Waldfogel analysis and various criticisms of that analysis raised by the contending parties, we find the results of this regression analysis useful in two ways–(1) to, at least in some rough way, corroborate the augmented Bortz survey results and (2) to provide an independent reasoned basis for considering movement away from the augmented Bortz point estimate for the Devotional category toward, or even beyond, either boundary of the Bortz confidence interval for that category. First, we find that, when applied to all program minutes to match the scope of the programming covered by the Bortz surveys, and when the resulting shares are compared to Bortz survey results that have been augmented to match the scope of the systems covered by the regression analysis, Dr. Waldfogel's regression analysis coefficients produce comparable share numbers for all categories except Devotional. Second, to the extent that there is imprecision in the augmented Bortz estimates, the Waldfogel regression analysis may help to identify the most imprecise point estimates and suggest a direction in which they may be adjusted further to bring them in line with what is occurring where actual decisions have been implemented. In this case, the Waldfogel analysis suggests the augmented Bortz point estimates for the Devotional category cannot be corroborated and, further, the value of the Devotional coefficient