# Before the COPYRIGHT ROYALTY JUDGES Washington, D.C.

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

# WRITTEN REBUTTAL STATEMENT OF PROGRAM SUPPLIERS

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**December 11, 2009** 

Attorneys for Program Suppliers

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#### WRITTEN REBUTTAL STATEMENT OF PROGRAM SUPPLIERS

The Motion Picture Association of America, Inc. ("MPAA"), its member companies and other producers and/or syndicators of syndicated movies, series and specials broadcast by television stations ("Program Suppliers"), in accordance with the November 16, 2009 Order of the Copyright Royalty Judges ("Judges"), hereby submit their Written Rebuttal Statement in the consolidated 2004 and 2005 Cable Royalty Distribution Proceeding. Program Suppliers are submitting this introductory memorandum in order to summarize the rebuttal evidence presented in this phase of the proceeding.

#### I. INTRODUCTION

Program Suppliers' Written Rebuttal Statement focuses on the testimony offered by the Settling Parties in the direct phase of this proceeding. First, Program Suppliers present evidence that the Settling Parties' proffered methodology for allocating royalties

<sup>&</sup>lt;sup>1</sup> A listing of MPAA-represented Program Suppliers was submitted with the direct testimony of Marsha Kessler (PS Exhibit 5).

to the Music Claimants overstated the Music Claimants' share. Program Suppliers then provide an analysis of the quantity of sports programming on the distant signals carried by respondents to the 2004 and 2005 cable operator survey conducted by Bortz Media & Sports, Inc. ("Bortz"). Next, Program Suppliers offer direct evidence of the decline in live team sports programming specifically on distant signals. Also, Program Suppliers provide an analysis of their 2004 and 2005 Cable Subscriber Surveys comparing respondents who received only one distant signal to respondents who received multiple signals. Finally, Program Suppliers offer testimony demonstrating that the Bortz survey is not evidence of relative market value. Program Suppliers further show that the other supposed measure of relative market value offered by the Settling Parties, the regression analysis, is conceptually flawed, mis-specified, and unreliable.

#### II. REBUTTAL TESTIMONY SUBMITTED BY PROGRAM SUPPLIERS

Program Suppliers present the following witnesses, each of whom sponsor his or her written testimony and accompanying exhibits (copies of which are contained in Program Suppliers' Written Rebuttal Statement):

John R. Woodbury is a Vice President at Charles River Associates, an economics and business consulting firm. Dr. Woodbury provides testimony responding to William Zarakas' determination of the share of distant signal royalties attributable to the Music Claimants. His testimony proposes an alternative methodology for calculating the share of distant signal royalties due to the Music Claimants based on music rights payments made by all broadcast stations and networks as a percentage of total payments by broadcast stations and networks for programming and music rights. Dr. Woodbury's

approach is consistent with the approach for determining the Music Claimants' share taken by the Copyright Arbitration Royalty Panel and the Copyright Royalty Tribunal in past proceedings. Dr. Woodbury explains why his approach, which is based on actual rights payments received by the music performing rights organizations, is preferable to that proffered by Mr. Zarakas. Dr. Woodbury also examines Mr. Zarakas' methodology and concludes that Mr. Zarakas' calculation overstates the Music Claimants' share and is unreliable.

Marsha E. Kessler is the Vice President, Retransmission Royalty Distribution, of the Motion Picture Association of America, Inc. Ms. Kessler reviews and quantifies sports programs aired on stations distantly-retransmitted by cable operators responding to the 2004 and 2005 Bortz surveys. Her analysis concludes that almost 90% of the sports programs on such stations either were non-compensable under Section 111 or, if compensable, belonged to a program category other than the Joint Sports Claimants. Her analysis further shows that most of the compensable sports programs (about 70%) belong to claimants other than the Joint Sports Claimants.

John Mansell, Jr., is President of John Mansell Associates, Inc. He addresses, in part, the testimony presented by James M. Trautman regarding the consistency of the Bortz survey results over time. Mr. Mansell presents testimony documenting the decline in live professional team sports programming on distant signals carried by the Bortz survey respondents from 1998 until 2005. Mr. Mansell's testimony demonstrates that the amount of Major League Baseball ("MLB"), National Basketball Association ("NBA"), and National Hockey League ("NHL") games on these distant signals declined

dramatically over this time period. Mr. Mansell performs a similar analysis of the number of MLB, NBA, and NHL games on the distant signals included in the Nielsen Viewing Studies' samples for 1998, 1999, 2004, and 2005 and obtains similar results. He also examines subscriber instance data for these stations, and concludes that while the number of professional live team sports games has declined dramatically, the number of subscribers receiving these signals remained flat.

Arthur C. Gruen, Ph.D., is a partner of Wilkofsky Gruen Associates, Inc. Dr. Gruen responds to questions he received from Judge Roberts during his oral testimony regarding whether the valuation responses of respondents to the 2004 and 2005 Cable Subscriber Surveys who subscribed to cable systems with one distant signal as compared with respondents who subscribed to cable systems with multiple distant signals. Dr. Gruen analyzes these valuation responses and concludes, with a few exceptions, that there are no wide variations between overall valuation responses of single distant signal respondents and multiple distant signal respondents. Dr. Gruen reaches the same conclusion with respect to the two groups when analyzed by demographic groups. In both analyses, Program Suppliers remained by far the dominant program category among all survey respondents in both 2004 and 2005. Moreover, Program Suppliers receive higher valuation responses in the 18-49 demographic group that is most coveted by advertisers.

George S. Ford, Ph.D., is the President of Applied Economic Studies, Inc., and Chief Economist, Phoenix Center for Advanced Legal & Economic Policy Studies. Dr. Ford responds to the economic analysis offered by Dr. Robert Crandall in support of the

Bortz survey as a measure of relative market place value for distant signals and also the regression analysis presented by Dr. Joel Waldfogel. Dr. Ford concludes that the neither the Bortz survey nor the Waldfogel regression analysis provides an estimate of relative market value. Additionally, Dr. Ford identifies conceptual flaws in both Dr. Crandall and Dr. Waldfogel's analyses that warrant their rejection by the Judges.

#### III. PROGRAM SUPPLIERS' PHASE I CLAIMS

Based on the evidence submitted to the Judges in this proceeding, Program Suppliers continue to seek the following percentage shares of the 2004 and 2005 cable royalty funds:

Royalty Year	Basic Fund (%)	3.75% Fund (%)	Syndex Fund (%)
2004	68.283	74.412	96.000
2005	74.961	78.011	96.000

Program Suppliers reserve the right to change their Phase I claims in light of the evidence presented by other claimants in this proceeding.

Respectfully submitted,

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December 11, 2009

# Before the COPYRIGHT ROYALTY JUDGES Washington, D.C.

In the Matter of

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

OF
JOHN R. WOODBURY

December 11, 2009

#### REBUTTAL TESTIMONY OF JOHN R. WOODBURY

#### I. Qualifications

- 1. My name is John R. Woodbury and I am a vice president at Charles River Associates, an economics and business consulting firm, where I have been employed since 1992. I received my B.A. from the College of the Holy Cross (*summa cum laude*) and my M.A. and Ph.D. in Economics from Washington University (St. Louis). Among other positions, I have served as a Brookings Economics Policy Fellow at the Civil Aeronautics Board, as a Senior Economist on the Network Inquiry Special Staff of the Federal Communications Commission, as Vice President for Research and Policy Analysis at the National Cable Television Association (now the National Cable and Telecommunications Association), and as Associate Director for Special Projects in the Bureau of Economics of the Federal Trade Commission.
- 2. I have been involved in numerous matters regarding intellectual property. During my tenure at the National Cable Television Association, I served as staff liaison to the Association's Copyright Committee, charged with overseeing economic initiatives and proceedings before the Copyright Royalty Tribunal. In that capacity, I was responsible for analyzing the empirical basis for the then 3.75% distant signal compulsory license fee and for estimating the appropriate inflation adjustment for distant signal payments made by cable operators and for presenting those findings to various claimant groups. In addition, I was part of a small negotiating team that included the Association's President and the Chairman of its Executive Committee whose purpose was to determine whether an agreement could be reached with the Motion Picture Association of America ("MPAA") on simplifying the copyright royalty payment scheme.
- 3. I have testified a number of times before the Copyright Royalty Tribunal and before the Copyright Arbitration Royalty Panel ("CARP") as a rebuttal witness on behalf of MPAA addressing issues dealing with the distribution of distant signal license payments. I provided both direct and rebuttal testimony on behalf of Music Choice (formerly known as DCR) and DMX in the first CARP under the Digital Performance Right in Sound Recordings Act of 1995. I, along with my colleague, Jane Murdoch, also provided written direct and rebuttal testimony on behalf of the Corporation for Public Broadcasting and National Public Radio addressing reasonable license fees for the public performance of sound recordings by public radio entities on their Internet sites. In addition, I provided both direct and rebuttal testimony on behalf of Music Choice regarding the appropriate rate to be paid to BMI for performances of musical compositions. Most recently, I submitted direct and rebuttal testimony to the Copyright Royalty Board on behalf of XM and Sirius in assessing the appropriate fees to be paid by XM and Sirius for sound recording performance rights. My curriculum vita is attached as Appendix 1 to this report.

#### II. Introduction

- 4. I have been retained by Program Suppliers to evaluate the share of distant-signal royalties attributable to the Music Claimants (comprised of ASCAP, BMI, and SESAC) as estimated by William Zarakas. For reasons discussed below, Mr. Zarakas chose not to rely on the method used in previous proceedings that looks to actual payments made by broadcast stations and networks for music rights as a percentage of total payments by stations and networks for programming and music rights.
- 5. In my judgment, Mr. Zarakas' concerns about replicating that analysis, while not without some basis, are not sufficiently important to disregard this approach. Indeed, his approach almost certainly overstates the payments Music Claimants could expect to receive. In this report, I adopt an approach that is generally consistent with the reliance on actual music rights payments in previous distribution proceedings. That approach provides a more reasonable basis for determining the royalty share attributable to the Music Claimants—2.04% of the 2004 royalty pool and 1.94% of the 2005 royalty pool.
- 6. The materials I have relied on are reported in Appendix 4 to this report.

# III. The Approach Used In Prior Proceedings Is a Straightforward Method to Estimate the Music Claimants' Share of Royalties

- 7. In previous distribution proceedings, I understand that one basis for the ultimate determination of the Music Claimants' royalty share has been the calculation of actual music rights payments made by all broadcast stations and networks as a percentage of total payments by broadcast stations and networks for programming and music rights. For example, in the 1998-99 Cable Distribution Proceeding, the CARP found that this approach was "reasonable and worthy of some weight in determining the relative value of Music in [that] proceeding." The CARP also recognized that in both the 1978 and 1979 distribution proceedings, the Copyright Royalty Tribunal adopted a similar approach to the calculation of the share of royalties due the Music Claimants.<sup>3</sup>
- 8. In his written testimony, Mr. Zarakas notes that the "music ratio approach used by the CARP in the 1998-99 distribution proceeding is a reasonable method to approximate

<sup>&</sup>lt;sup>1</sup> SP Exhibit 27.

<sup>&</sup>lt;sup>2</sup> In the Matter of Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, Report of the Copyright Arbitration Royalty Panel To The Librarian of Congress (October 21, 2003) ("CARP Report") at 86-87. Among other reasons, the CARP did not rely solely on this estimated ratio because it believed that the "inclusion of network data may have the effect of somewhat artificially decreasing the percentage of music license fees compared to [all] broadcast rights expenses...." Id. at 87 (note omitted).

<sup>&</sup>lt;sup>3</sup> Id. at 86-87.

the value of music in the local over-the-air broadcast market relative to the value of the works of the other copyright holders...."

- 9. When asked during the hearing why he did not replicate the calculations relied on by the CARP in the 1998-99 distribution proceeding for 2004 and 2005, Mr. Zarakas explained that that earlier calculation was based on data provided by the U.S. Bureau of the Census which included separate "line" items for music royalties paid by broadcast stations (and the three networks ABC, CBS, and NBC) and for other broadcast rights payments. However, the Bureau of the Census no longer reports data distinguishing between music rights payments and broadcast rights payments. Now, those payments are combined into a single line item. As a result, one cannot tell from the Census data alone what the actual music rights payments have been.<sup>5</sup>
- 10. Mr. Zarakas was also asked about the possible use of the actual payments recorded by ASCAP and BMI as a substitute for actual music payments that, in years prior to 1999, had been reported separately by the Census. Mr. Zarakas responded that those actual payments to ASCAP and BMI would understate the total music royalty payments made by the broadcast networks and stations because they would exclude direct licensing by those networks and stations. That is, if the station or network negotiated with and paid the composer or publisher directly for the music rights, those payments would not be reflected in the ASCAP or BMI revenues.
- 11. As a substitute for the actual music rights payments made by broadcast networks and stations, Mr. Zarakas chose to rely on the blanket license fees negotiated between the Television Music License Committee—representing a variety of network and nonnetwork broadcast stations—and each of the Performing Rights Organizations ("PROs")—ASCAP, BMI, and SESAC. As he notes:

[B]lanket music license fees are the only available measures of total market based prices....[The] negotiated, annual PRO blanket license fee, applicable to all local television stations, is an accurate and reliable measure of the market price of music licenses in the local over-the-air-broadcast market.<sup>8</sup>

<sup>&</sup>lt;sup>4</sup> SP Exhibit 27 at ¶26.

<sup>&</sup>lt;sup>5</sup> Tr.1169:9-1172:15 (Zarakas). Mr. Zarakas did agree that the combined total reported by the Census for 2004 and 2005 corresponded conceptually to the right absolute amount of music and broadcast rights payments. Tr. 1177:4-1177:13 (Zarakas).

<sup>&</sup>lt;sup>6</sup> SESAC only offered blanket licenses to local stations in 2004 and 2005. Tr. 1107:2-3 (O'Neill). As a result, SESAC's blanket license fees correspond with actual license fees for these years.

<sup>&</sup>lt;sup>7</sup> SP Exhibit 27 at ¶33; Tr. 1175:10-1176:5 (Zarakas).

<sup>&</sup>lt;sup>8</sup> SP Exhibit 27 at ¶33.

- 12. However, there is no reason to believe that the use of the blanket license fees is in fact a more "accurate and reliable" measure of the actual music rights payments made by broadcast stations than the payments actually recorded by the PROs. In particular, the use of the blanket license fee payment estimates does not measure what stations actually paid for their music rights. Indeed, estimates based on the blanket license fee cannot satisfy Mr. Zarakas' own criterion for a value measure: "the dollars <u>paid</u> by local broadcast television stations for music license fees is a measure of the value that these stations place upon access to music included in their programming." (Emphasis added.)
- 13. Specifically, Mr. Zarakas' reliance on the blanket license fee payments negotiated between the Television Music License Committee and the PROs may have overstated—perhaps substantially—the total payments actually made by licensees to the PROs. At best, those blanket license fees are an upper bound on the actual payments made by broadcast stations for at least two reasons.
- 14. First, to the extent that stations opt for a direct license rather than the blanket license, the payments made by the broadcast stations in the aggregate to the PROs will be less than the negotiated fee amounts used by Mr. Zarakas, which assumes that all stations opted for the blanket license. If a station opts to choose a direct license, then presumably it is doing so because the payments associated with the direct license are less than those associated with a blanket license. If direct licensing occurs very infrequently, then the actual payments to the PROs will not in any significant way understate the total music rights payments. In any event, I am not aware of any evidence offered by Mr. Zarakas that suggests that direct licensing is so prevalent that the actual payments to the PROs would not serve as a reasonable proxy for the total music rights payments. <sup>10</sup>
- 15. Second, in addition to direct licensing as a substitute for the blanket license, the broadcast stations and networks can opt for a per-program license from the PROs. While the fees for such licenses are apparently based in part on the blanket license fee, a station (or network) that opts for a per-program license does so because it is less expensive than the blanket license. As those per-program fees are paid directly to the PROs, they will be included in the reported actual music payments to the PROs. To be sure, some stations that have opted for a direct license for some of their music may now find a per-program license fee more attractive than a blanket license.

<sup>&</sup>lt;sup>9</sup> Id. at ¶26.

<sup>&</sup>lt;sup>10</sup> As a matter of economics, one would expect that the fees generated by direct licensing will reflect the incremental music value resulting from the programming on stations retransmitted as distant signals by the cable operators. That is, in their negotiations with individual stations for a direct license, music copyright holders would recognize that there is some distant signal carriage of the station and the fee charged by the copyright holders would reflect that incremental viewer exposure. One would expect that to be the case, given the uncertainties as to what fraction of the allocated royalties to music they would actually receive. One would expect this to be particularly true of any direct licensing associated with widely-carried stations like WGN.

- But other stations may opt for a per-program license fee simply because their programming tends not to include music in the BMI and ASCAP repertories.
- 16. In summary, there is no particular reason to believe that the <u>assumed</u> payments specified in the blanket license agreement are more accurate or reliable than the <u>actual</u> payments received by the PROs as a proxy for the amounts actually paid for the music rights. To the extent that per-program licenses are prevalent and used by stations to reduce aggregate music payments to the PROs relative to the amounts that were negotiated under a blanket license, Mr. Zarakas' use of the blanket license as a proxy for actual payments made by stations and networks for the music rights may substantially exceed those actual payments. This overstatement will also be amplified to the extent that stations rely on direct licensing to reduce their music payments below those that would have to be paid under a blanket license. In fact, one would expect this result because the direct licensing fees and per-program fees paid by individual stations are presumably less than what their share of the negotiated blanket license fees would be. At best, the estimate offered by Mr. Zarakas is no more than an upper bound on the total payments made by the broadcast stations for the use of the music.

# IV. Estimating Actual Music Rights Payments as a Percentage of Total Rights Payments

- 17. In what follows, I rely on the evidence produced during the course of this proceeding to estimate the percentage of total (broadcast and music) rights payments accounted for by music rights payments in a manner consistent with previous distribution proceedings. To estimate this percentage requires two inputs: music rights payments made by broadcast stations and networks and total rights payments (music rights payments plus broadcast rights payments) made by broadcast stations and networks. I report the calculation for 1998 cable royalties provided to the CARP in the 1998-99 Cable Distribution Proceeding and then calculate the music percentage share in 2004 and 2005.
- 18. The data for the 1998 calculation are provided by Dr. George Schink in his testimony before the CARP. In his report, Dr. Schink relies on 1998 data tabulated by the U.S. Bureau of the Census. As noted above, that report identifies both the total music license fee payments and the broadcast rights payments (including payments by the three networks). In 1998, the total rights payments (music plus broadcast rights) were \$9,799 million while total music rights payments were \$228 million. Thus, music rights accounted for 2.33% (*i.e.*, \$228 million/\$9,799 million) of total rights payments by broadcast stations and networks in 1998. As noted above, the CARP found that this approach was "reasonable and worthy of some weight in determining the relative

<sup>&</sup>lt;sup>11</sup> In the Matter of Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, *Testimony of Dr. George R. Schink* (June 20, 2003) ("Schink"), Appendix F.

<sup>&</sup>lt;sup>12</sup> Schink at ¶28.

value of Music in [that] proceeding." Mr. Zarakas agreed with the CARP in his report, stating that this approach "is a reasonable method to approximate the value of music in the local over-the-air broadcast market relative to the value of the works of the other copyright holders...."<sup>13</sup>

- 19. For 2004 and 2005, the data for total rights (*i.e.*, music plus broadcast rights) payments by broadcast stations and networks are those reported by the Bureau of the Census. For 2004, the payments reported by the Census were \$11,710 million. For 2005, the corresponding payments were \$12,036 million.
- 20. For 2004 and 2005, I used, for the reasons discussed above, the actual payments received by the PROs in my calculation. The data on actual music rights payments are based on the submissions by ASCAP and BMI as compiled by Mr. Zarakas in discovery document Music 10574, "Pro Info Request" tab. That spreadsheet provides the actual payments made by the stations and networks to ASCAP and BMI, but not for SESAC, which did not offer a per-program license to local stations in 2004 and 2005. <sup>15</sup> I understand that the actual payments to SESAC were the same as the blanket license fees, also reported in that same spreadsheet.
- 21. Appendix 2 (attached) lists the payments by the three broadcast networks, Univision and all stations for 2004 and 2005. For 2004, the total music rights payments received by the PROs are estimated as \$239 million for 2004 and \$234 million for 2005.
- 22. Using these data, music rights payments accounted for 2.04% (*i.e.*, \$239 million/\$11,710 million) of all rights payments (*i.e.*, music rights plus broadcast rights) in 2004 and 1.94% (*i.e.*, \$234 million/\$12,036 million) in 2005. Appendix 3 reports the results for all three years: 1998, 2004, and 2005.
- V. Additional Adjustments by Mr. Zarakas to the Music Rights Percentage Appear to be Without Any Sound Economic Basis
- 23. For reasons discussed above, the overall percentage of total rights payments accounted for by music rights payments using the blanket license fees as proposed by Mr. Zarakas does not rely on actual payments and, thus, almost certainly overstates what that percentage would be using actual payments. The approach that I have adopted in the previous section may to some extent understate the actual overall percentage, but my approach is tied to the underlying reality of what stations actually pay for music rights.

<sup>&</sup>lt;sup>13</sup> SP Exhibit 27 at ¶26.

<sup>&</sup>lt;sup>14</sup> U.S. Census Bureau, Service Annual Survey 2006, Table 3.3.3.

<sup>&</sup>lt;sup>15</sup> Tr. 1107:2-3 (O'Neill).

- 24. In his testimony, Mr. Zarakas does not rely on an overall blanket license fee-based music rights percentage to estimate the Music Claimants' proposed share of the copyright royalty pool. Instead, he notes that the mix of stations carried as distant signals may differ from those available over the air. Thus, he attempts to account for this mix difference by weighting various station types (*e.g.*, ABC affiliates, NBC affiliates, WB affiliates, Independents) by the fraction of cable subscribers having distant-signal access to the number of stations of each type. <sup>16</sup>
- 25. Mr. Zarakas offers no justification for using subscriber instances to weigh station types. What Mr. Zarakas may be implicitly assuming is that the number of music performances on a distant signal is directly proportional to the number of subscribers that have access to that signal. Obviously, there is no reason to believe that is the case. (Nor, as I note below, is that the basis for determining individual station payments under the blanket licensing fee approach.)
- 26. For example, system A with 1000 subscribers may have 100 (or 10% of its subscribers) who view distant signal X for some part of the time. Mr. Zarakas appears to be assuming that a system B with 2000 subscribers would have the same proportion of subscribers (200) who view distant signal X. But Mr. Zarakas offers no evidence that such proportionality holds from one cable system to the next. Indeed, one would not expect such proportionality. Cable systems vary substantially in terms of the program services offered to subscribers, the extent to which the services are offered in high-definition, and the tiering of those services, among other factors. Those differences will in turn likely cause the attractiveness of distant signals to cable operators and subscribers to vary widely across systems—even for systems with the same number of subscribers. In assuming proportionality, Mr. Zarakas fails to control for any of these differences.
- 27. Thus, there is no reason to believe that Mr. Zarakas' approach of weighting each distant signal by subscriber access to distant signals provides any meaningful estimate of the actual music payments associated with the mix of distant signals carried.
- 28. As Mr. Zarakas acknowledges, a viewership weighting, not the number of households to which a station is available, is the scheme used by the TLMC to allocate the payments due to the PROs by individual stations. Yet, Mr. Zarakas did not even consider such an approach.<sup>17</sup> There is absolutely no reason to believe that there is any one-to-one relationship between the actual viewership of distant signals and the number of subscribers having access to those distant signals. Indeed, one can easily imagine circumstances where there is no statistically important relationship between

<sup>&</sup>lt;sup>16</sup> SP Exhibit 27 at ¶¶51-52. For purposes of this discussion, I am assuming that accounting for any mix differences is acceptable. However, I am also aware that the cable payment for the carriage of a distant signal does not depend on whether or not the station has an affiliation with a non-Big 3 (*i.e.*, ABC, NBC, CBS) network. If the payment by cable operator does not depend on the station type, it is not obvious why the estimated share of the royalty pool due the Music Claimants should depend on the station type.

<sup>&</sup>lt;sup>17</sup> Tr. 1228:4-17 (Zarakas).

the two.<sup>18</sup>

- 29. Another "adjustment" made by Mr. Zarakas is to treat WGN as an independent rather than a WB affiliate for purposes of assigning a percentage music royalty due to the carriage of WGN. Mr. Zarakas testified that he did so because as a distant signal, WGN does not include WB programming in its transmission. The effect of this reclassification appears to have dramatically increased the weight on the percentage music rate of independent stations because WGN is apparently one of the most widely—if not the most widely—carried distant signal. <sup>20</sup>
- 30. But WGN is clearly not like other independent television stations (*i.e.*, stations not affiliated with any broadcast network). As Mr. Zarakas notes, WGN transmits two signals, "one for its local market in Chicago...and one designed for distant carriage." I am not aware of any other independent station identified by Mr. Zarakas that operates in the same fashion as WGN. Mr. Zarakas provides no justification for the assumption that WGN's nationally distributed distant signal should be treated as a "typical" local independent station for purposes of estimating the Music Claimants' proposed share of the royalty pool. Mr. Zarakas has offered no reason to believe that the music percentage paid by the nationally-distributed WGN mirrors the music percentage actually paid by locally-distributed independent stations.<sup>22</sup>

#### VI. Conclusion

- 31. I conclude that the degree of confidence that an economist would place on Mr. Zarakas' estimate of the royalty share due the Music Claimants is quite low. His overstatement of actual royalty payments by using the blanket license fee, his flawed scheme for weighting the royalty importance of a distant signal type by cable subscriber instances, and his implicit assumption that the nationally-distributed distant signal WGN is analogous to a locally-distributed independent broadcast station all cast considerable doubt on the accuracy of Mr. Zarakas' estimate.
- 32. A better starting point for estimating what relative share Music Claimants should receive is the set of calculations I performed above: the ratio of actual music payments to the PROs divided by the total rights payments as reported by the U.S.

<sup>&</sup>lt;sup>18</sup> For example, system A with 1000 subscribers may have 100 who view the distant signal. System B with 2000 subscribers may have 110 who view the distant signal.

<sup>&</sup>lt;sup>19</sup> SP Exhibit 27 at note 30.

<sup>&</sup>lt;sup>20</sup> Tr. 1235:16-18 (Zarakas).

<sup>&</sup>lt;sup>21</sup> SP Exhibit 27 at note 30.

<sup>&</sup>lt;sup>22</sup> Note that to the extent there is no (or significantly less) local programming on WGN's distant-signal transmission, Mr. Zarakas' "local programming" adjustment should not be applied to WGN. *See* SP Exhibit 27 at ¶¶41-46 (Mr. Zarakas' discussion of this adjustment).

Bureau of the Census. While this approach may understate the music fees, it has the advantage of relying on actual payments made.

## APPENDIX 1

REBUTTAL TESTIMONY OF

JOHN WOODBURY, Ph.D.



# JOHN R. WOODBURY Vice President

Ph.D. Economics, Washington University

M.A. Economics, Washington University

B.A. Economics, College of the Holy Cross

#### PRIOR PROFESSIONAL EXPERIENCE

1989-1992

*Principal*, Microeconomic Consulting and Research Associates, Inc. (formerly Competitive Analysis Group, ICF Consulting Associates)

Responsible for providing antitrust and regulatory advice to clients.

1989

Research Associate, Analysis Group

Responsible for providing antitrust and regulatory advice to clients.

1985-1989

**Federal Trade Commission** 

Associate Director for Special Projects, Office of the Bureau Director, Bureau of Economics

 Responsible for initiating, conducting, and reviewing economic studies on Commission and other regulatory policies (including telecommunications); drafting speeches for the chairman; and reviewing Bureau participation in Federal Trade Commission cases.

Assistant Director for Rulemaking, Division of Policy and Evaluation, Bureau of Consumer Protection

 Responsible for managing the Commission's rulemaking agenda and drafting recommendations to the Commission from the Bureau director. Rules reviewed include holder-in-due-course, vocational schools, cooling-off, and funeral rules. Deputy Assistant Director, Regulatory Analysis, Bureau of Economics

 Responsible for conducting or supervising studies or filings before regulatory agencies, including the Federal Communications Commission, the International Trade Commission, and the National Highway Traffic Safety Administration.

1983–1985 *Vice President*, Department of Research and Policy Analysis, National Cable Television Association

 Responsible for conduct or supervision of studies related to cable television, including consumer costs of the franchising process, deregulation of cable prices, effects of copyright fees on consumers, and the extent of competition with cable television.

1982–1983 Senior Economist, Regulatory Analysis Division, Bureau of Economics, Federal Trade Commission

Responsible for broadcasting and telecommunications.

1979–1982 Federal Communications Commission

Chief, Economics Division, Common Carrier Bureau

Senior economic advisor to Bureau and Commission on common carrier policy.
 Directed 25 subordinates in policy analysis.

Industry Economist, Network Inquiry Special Staff

 Responsible for the analysis of the program supply industry and the competitive impact of new broadcast technology.

1978–1979 Assistant Chief, Policy Analysis Division, Brookings Economic Policy Fellow, assigned to Office of Economic Analysis, Civil Aeronautics Board

 Responsible for the development of merger policy, international aviation policy, and service to small communities.

1977–1978 Assistant Professor of Economics, State University of New York at Albany

1975–1977 Economist, International Research Department, Federal Reserve Bank of New York

 Responsible for assessing bank-reported capital flows and exchange-rate movements.

1974–1975 Lecturer, Southern Illinois University, Carbondale

#### **EXPERT WITNESS ACTIVITIES**

Expert witness, Determination of Reasonable Royalties for the Digital Transmission of Sound Recordings, Before the Copyright Arbitration Royalty Panel, direct and rebuttal written, deposition, and trial testimony, on behalf of XM and Sirius (Hearing: June and August, 2007).

Expert witness, Northern PCS Services v. Sprint Nextel Corporation, Circuit Court of Cook County, Illinois, on behalf of Sprint Nextel Corporation, November 2006 (Deposition testimony and written direct report and draft rebuttal report).

Expert witness, <u>iPCS Wireless Inc. v. Sprint Corporation</u>, Circuit Court of Cook County, Illinois, on behalf of Sprint Nextel Corporation, January 2006 (deposition testimony, written direct and rebuttal reports, trial testimony).

Expert witness, Horizon Personal Communications and Bright Personal Communications v. Sprint Corporation and UbiquiTel Inc. v. Sprint Corporation, Court of Chancery of the State of Delaware In and For New Castle County Testimony on behalf of Sprint Nextel Corporation, April-May 2006 (deposition testimony, written direct and rebuttal reports, trial testimony).

Expert witness in a BMI rate setting proceeding on behalf of Music Choice, Second District Court of New York (expert report, supplemental report, direct case report, data affidavit, deposition testimony, and trial testimony), November 2003-April 2004.

Expert witness in a conspiracy/monopolization matter on behalf of IBEW Local No. 3. Expert report and deposition testimony. October-December 2002.

Expert witness before the Copyright Arbitration Royalty Panel, Direct and rebuttal testimony, regarding the determination of reasonable license fees for digital performance right in sound recordings and ephemeral recordings of music performed on public radio websites. Prepared on behalf of National Public Radio/Corporation for Public Broadcasting. April and October 2001.

Expert witness before the Illinois Commerce Commission, regarding the proposed SBC/Ameritech merger. Prepared on behalf of Sprint Communications Company, L.P. July 1999.

Expert witness before the Commonwealth of Virginia State Corporation Commission, regarding the proposed Bell Atlantic/GTE merger. Prepared on behalf of Sprint Communications Company, L.P. March 1999.

Expert witness before the Ohio Public Utilities Commission, regarding the proposed SBC/Ameritech merger. Prepared on behalf of Sprint Communications Company, L.P. December 1998.

Expert witness before the Illinois Commerce Commission, regarding the proposed SBC/Ameritech merger. Prepared on behalf of Sprint Communications Company, L.P. October and December 1998.

Expert witness to Copyright Arbitration Royalty Panel, Direct and Rebuttal Testimony, regarding the determination of reasonable rates for the digital performance of sound recordings. Prepared on behalf of Music Choice and DMX. June and July 1997.

Expert witness to Copyright Arbitration Royalty Panel, Rebuttal Testimony, regarding the shares of royalties due copyright claimants. Prepared on behalf of the Motion Picture Association of America. March 1996.

Expert witness before the Copyright Royalty Tribunal, rebuttal testimony on the value of distant signal sports programming. Prepared on behalf of the Motion Picture Association of America, December 1991.

Expert witness preparation in five antitrust investigations, 1988–1992, on behalf of the FTC.

Expert witness, <u>FTC</u> v. <u>Elders Grain</u>, Preliminary Injunction Proceeding, Sixth District Court. Testimony prepared on behalf of the FTC, June 1988.

Expert witness before the International Trade Commission and Department of Commerce, imports of Japanese semiconductors. Testimony prepared on behalf of the FTC, 1986.

Expert witness, Texas International/National/Pan American Acquisition Case and Continental/Western acquisition case. Testimony prepared on behalf of the Civil Aeronautics Board, 1978–1979.

#### OTHER SELECTED CONSULTING ACTIVITIES

Provided an evaluation of price-fixing claims against a defendant provider of LBO services, on behalf of the defendant, 2009.

Provided an assessment of vertical issues raised by an music-related merger, 2009.

Assisted in the preparation of expert reports in the EC investigation of Intel, on behalf of Intel, 2009.

Provided an assessment of the antitrust risk for a number of transportation-related mergers, 2009.

Provided an assessment of the competitive effects of a number of broadcast station mergers, 2008-2009.

Provided economic analysis of the competitive effects of the Miller-Coors joint venture on behalf of Miller, 2007-2008.

Provided economic analysis of the merger between Galileo and Worldspan, on behalf of Galileo, 2006-2007.

Submitted a report, Declaration of Stanley M. Besen and John R. Woodbury filed before the Federal Communications Commission on behalf of the National Cable & Telecommunications Association, March 28, 2006. *In the Matter of Implementation of Section 621 (a) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992, MB Docket No. 05-311.* 

Submitted a report on behalf of Sprint, Joint declaration of Stanley M. Besen, Steven C. Salop and John R. Woodbury; Attachment B to, In re Applications of Nextel Communications, Inc., Transferor, and Sprint Corporation, Transferee, for Consent to the Transfer of Control of Entities Holding Commission Licenses and Authorizations Pursuant to Sections 214 and 310 (d) of the Communications Act, Before the Federal Communications Commission, February 8, 2005.

Submitted a report, "Economic Analysis of the DOT's NPRM Proposals—Reply Comments." With Professor Steven C. Salop. To the Department of Transportation on behalf of Sabre, Inc., 2003.

Submitted a report, "Economic Analysis of DOT's NPRM Proposals." With Professor Steven C. Salop. To the Department of Transportation on behalf of Sabre, Inc., 2003.

Submitted a report, "Cable Television Subscriber Limits: A Critique." With Carl Shapiro. To the Federal Communications Commission on behalf of National Cable and Telecommunications Association, 2002.

Submitted a report to the Justice Department regarding unilateral effects related to a merger in the personal care industry, 2001.

Submitted a report to the European Commission on the effect of partial ownership interests in the luxury goods industry, 2001.

Submitted a report, "The Incentives of Cable Operators to Carry Multiple ISPs." With Stanley M. Besen and Patrick J. DeGraba. To the Federal Communications Commission on behalf of The National Cable Television Association, 2000.

Submitted a report on a media merger to the European Commission, 2000.

Submitted a report, "The Staff's Flawed Economic Analysis of Harm from Control Over 'Inactive' Programs" With Steven C. Salop. To the Federal Communications Commission on behalf of CBS Corporation and Viacom, Inc., 2000.

Submitted a report, "An Economic Analysis of the Effects of the AT&T-MediaOne Merger on Competition in the Supply and Distribution of Video Program Services: Response to the Critics." With Stanley M. Besen and Serge X. Moresi. To the Federal Communications Commission on behalf of AT&T, 1999.

Submitted a report, "An Economic Analysis of the proposed Bell Atlantic/GTE Merger." With Stanley M. Besen and Padmanabhan Srinagesh. To the Federal Communications Commission on behalf of Sprint Communications Company, L.P., 1998.

Submitted a report, "An Economic Analysis of the proposed SBC/Ameritech Merger." With Stanley M. Besen and Padmanabhan Srinagesh. To the Federal Communications Commission on behalf of Sprint Communications Company, L.P., 1998.

Submitted a report, "An Economic Analysis of the FCC's Cable Ownership Restrictions." With Stanley M. Besen. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1998.

Submitted a report, "Comments on Dertouzos and Wildman, 'Programming Access and Effective Competition in Cable Television." With Stanley M. Besen. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1998.

Submitted a report, "An Economic Analysis of the Effects of Partial Ownership Interests in Cable Systems." With Stanley M. Besen, Daniel P. O'Brien, and Serge X. Moresi. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1998.

Submitted a report, "A Response to Ameritech's New Media's 'Allegations of a Price Squeeze' by Vertically Integrated Cable Operators." With Stanley M. Besen. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1998.

Submitted a report, "A Further Analysis of the Effects of Cable Diversion, Premium Service Buy Rates, and Volume Discounts on Primestar's Competitive Incentives: A Response to Dr. Rosston." With Steven C. Salop, Stanley M. Besen, and E. Jane Murdoch. To the Federal Communications Commission on behalf of PRIMESTAR Partners, L.P., 1998.

Submitted a report, "An Economic Analysis of the Impact of the WorldCom-MCI Merger on the Provision of Internet Backbone Services." With Stanley M. Besen and Padmanabhan Srinagesh. To the Federal Communications Commission and the European Commission on behalf of Sprint Corporation, 1998.

Submitted a report, "A Comparison of Primestar's Costs with Those of a Standalone Entrant." With Steven C. Salop, Stanley M. Besen, and E. Jane Murdoch. To the Federal Communications Commission on behalf of PRIMESTAR Partners, L.P., 1998.

Submitted a report, "An Economic Analysis of Primestar's Competitive Behavior and Incentives: Reply to the Oppositions." With Steven C. Salop, Stanley M. Besen, and E. Jane Murdoch. To the Federal Communications Commission on behalf of PRIMESTAR Partners, L.P., 1998.

Submitted a report, "An Economic Analysis of Primestar's Competitive Behavior and Incentives." With Steven C. Salop, Stanley M. Besen, and E. Jane Murdoch. To the Federal Communications Commission on behalf of PRIMESTAR Partners, L.P., 1998.

Conducted statistical and other analyses of anticompetitive allegations surrounding a major media merger and submitted to the Federal Trade Commission, 1996.

Submitted a report, "Competitive Market Considerations in the Licensing of the 37-40 GHz Band." With Steven R. Brenner. To the Federal Communications Commission on behalf of WinStar Wireless, Inc., 1996.

Conducted statistical and other analyses of anticompetitive allegations surrounding a major media acquisition and submitted to the Justice Department, 1995.

Assisted in the preparation of testimony for the D.C. District Court regarding the competitive effects of the "must-carry" rules imposed on cable systems, 1996.

Submitted a report, "A Competitive Markup Approach to Establishing Rates When Adding Cable Program Services." With Stanley M. Besen. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1994.

Submitted a report, "Exclusivity and Differential Pricing for Cable Program Services." With Stanley M. Besen and Steven R. Brenner. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1993.

Submitted a report, "An Analysis of Cable Television Rate Regulation." With Stanley M. Besen and Steven R. Brenner. To the Federal Communications Commission on behalf of Tele-Communications, Inc., 1993.

Evaluated the prospects for Direct Broadcast Satellites on behalf of a potential investor, 1992.

Assisted in the preparation of testimony on the value of distant signal programming to earth station owners on behalf of the Motion Picture Association of America, 1992.

Prepared estimates of the supply elasticity of crude oil production and a paper, with F. Warren-Boulton and K. Baseman, on the alternatives to traditional pipeline regulation for a pipeline client, 1991–1992.

Prepared analyses of liability and damage estimates, with F. Warren-Boulton, on behalf of NEC in a bid-rigging allegation and presented those analyses to Justice Department officials, 1991.

Prepared a report, "Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule." With F. Warren-Boulton. On behalf of the Motion Picture Association of America, 1990.

Submitted a report, "Assessing The Effect of Rate Deregulation on Cable Subscribers." With Sherman and Baseman. To the Federal Communications Commission on behalf of the National Cable Television Association, 1990.

Submitted an affidavit, "Economic Implications of the Pac Tel/Chicago Waiver Request." To the Department of Justice on behalf of the National Cable Television Association, January 1990.

Submitted an analysis of sham litigation allegations to the Justice Department on behalf of a software client, 1989.

#### **PUBLICATIONS**

Numerous discussions of working papers and other papers, "Paper Trail," *Antitrust Source* (2001-present).

"Repositioning and the Revision of the Horizontal Merger Guidelines." (With Peter Boberg.) *Antitrust Source* (forthcoming).

"Implementing the Hypothetical Monopolist SSNIP Test with Multi-Product Firms" (with Serge Moresi and Steven Salop), *Antitrust Source* (February 2008).

"Analyzing Vertical and Horizontal Cross Ownership in Cable Television: the Time Warner–Turner Merger (1996)," in J.E. Kwoka and L.J. White, *The Antitrust Revolution: Economics, Competition, and Policy,* Scott, Foresman. With S. Besen, E. Murdoch, D. O'Brien, and S. Salop. Third Edition, Oxford University Press, 1999.

"Telecommunications in the U.S.: Evolution to Pluralism." With S. Besen and S. Brenner. In B. Lange (ed.), *ISDN in the USA, Japan, Singapore and Europe*, 1996.

"Market Structure, Program Diversity, and Radio Audience Size." With R. Rogers. *Contemporary Economic Policy* 1996.

"Rate Regulation, Effective Competition, and the Cable Act of 1992." With S. Besen. *Hastings Communications and Entertainment Law Journal*, 1994.

"Assessing Competition and Deregulation in Telecommunications: Some Observations on Methodology." In B. Cole (ed.), *After the Breakup: Assessing the New Post-AT&T Divestiture Era*. New York: Columbia University Press, 1991.

"Deterrence and Justice." With J. Bilmes. Research in Law and Economics, 1991.

"The First Amendment, Cable MTV, and the Must-Carry Rule: Towards a Cost-Benefit Analysis." Proceedings of the Airlie House Conference on Telecommunications, 1987.

"Video Competition and Consumer Welfare." In E. Noam (ed.), *Proceedings of the Arden House Conference on Video Competition*. New York: Columbia University Press, 1986.

*Misregulating Television*. With S. Besen, R. Metzger, and T. Krattenmaker. Chicago: University of Chicago Press, 1984.

"Regulation, Deregulation, and Antitrust in Telecommunications." With S. Besen. *Antitrust Bulletin*, Spring 1983.

"Determinants of Network Television Program Prices: Implicit Contracts, Regulation, and Bargaining Power." With S. Besen and G. Fournier. *Bell Journal of Economics*, Autumn 1983.

"Advertising, Price Competition, and Market Structure." With A. Arterburn. Southern Economic Journal, January 1981.

"Exchange Rate Stability and Monetary Policy." With B. Putnam. Albany Discussion Paper #95 in Review of Economics and Business Research, Winter 1980.

"Capital Market Integration Under Fixed and Floating Exchange Rates: An Empirical Analysis." *Journal of Money, Credit, and Banking,* May 1980.

#### OTHER COMPLETED RESEARCH

"Empirical Evidence on Efficiencies in the Common Ownership of Broadcast Stations." With K. Anderson. Comments on FCC Proceeding, 1991.

"Do Government-Imposed Ownership Restrictions Inhibit Efficiency?" Working Paper of the Bureau of Economics, No. 169, 1988.

"Over-the-Air Television and Cable Prices: An Econometric Inquiry." With M. Bykowsky. Served as basis of FCC decision deregulating cable prices, 1985.

"The Effect of Rate Regulation and Franchise Delay on Program Availability." With D. Koran. Comments on FCC Proceeding, 1985.

"Pricing Flexibility and Consumer Welfare: The Deregulation of Basic Cable Rates." NCTA White Paper, 1984.

"Economic Assessment of the Financial Interest and Syndication Rules." With K. Anderson. Comments on FCC Proceeding, 1983.

"Domestic Fixed Satellite Transponders Sales." Comments on FCC Proceeding, 1982.

An Analysis of Television Program Production, Acquisition, and Distribution. With R. Metzger. Network Inquiry Special Staff, Preliminary Report, Federal Communications Commission, June 1990.

"Production Abroad: Theoretical Considerations and Empirical Analysis." Mimeo, 1978.

"Scale Economies in the Airline Industry: A Survey." Mimeo, 1978.

#### PRESENTED PAPERS

"Market Structure, Program Diversity, and Radio Audience Size." With R. Rogers. Meetings of the Western Economics Association, July 1993.

"The Effects of Rate Deregulation on Cable Subscribers." With K. Baseman. Policy Approaches to the Deregulation of Network Industries: An American Enterprise Institute Conference, October 1990.

"Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule." Telecommunications Policy Research Conference, Airlie House, October 1990.

"The Design and Evaluation of Competitive Rules Joint Ventures for Mergers and Natural Monopolies." With F. Warren-Boulton. American Economic Association Meetings, December, October 1990.

"Do Media Ownership Restrictions Reduce Economic Efficiency?" Telecommunications Policy Research Conference, Airlie House, November 1989.

"The Conflict Between Spectrum Efficiency and Economic Efficiency." With R. Rogers. Telecommunications Policy Research Conference, Airlie House, November 1989.

"Regulation versus Antitrust." Annenberg Conference: The Divestiture Five Years Later." March 1989.

"Regulating Cable Television." Telecommunications Policy Research Conference, Airlie House, September 1987.

"An Empirical Analysis of Television Program Prices." With S. Besen and G. Fournier. Meetings of the Southern Economic Association, November 1981.

"Flexible Exchange Rates and Market Integration." With B. White. Federal Reserve System Conference on Financial Market Research, June 1979.

"Advertising, Price Competition, Market Structure." With A. Arterburn. Meetings of the Southern Economic Association, November 1978.

"The Effects of Exchange Rate Systems on International Capital Market Integration." With B. White. Federal Reserve System Conference on International Research, November 1977.

#### OTHER PROFESSIONAL ACTIVITIES

Editorial Board, Antitrust Source (since 2001).

Referee: Antitrust Law Journal, Journal of Media Economics, Review of Industrial Organization, RAND Journal of Economics, Southern Economics Journal, Harvard University Press

Chair, "Competition between Cable Television and Telephone Companies." Telecommunications Policy Research Conference, September 1991.

*Discussant*, "Competition and Ownership in the Media." Telecommunications Policy Research Conference, September 1991.

Chair, "Spectrum Management Session." Telecommunications Policy Research Conference, Airlie House, September 1988.

Book Review, Productivity in the United States by John Kendrick and Elliot Grossman, Southern Economic Journal, April 1981.

*Discussant*, "Deregulation of Telecommunications." Meetings of the Western Economic Association, July 1981.

#### **AWARDS**

- Award for Excellence in Economics (FTC), 1988
- Competition Advocacy Award (FTC), 1987
- Brookings Economic Policy Fellow, 1978–1979
- SUNY Faculty Research Grant, 1978
- NSF Traineeship, 1973–1974
- Finalist, Woodrow Wilson Fellowship Competition, 1971

### **APPENDIX 2**

REBUTTAL TESTIMONY OF

JOHN WOODBURY, Ph.D.

### Actual Music License Fees (\$ millions)\*

		2004	2005
	Big 3 Networks	\$36.808	\$37.417
ASCAP	Univision	\$2.800	\$3.000
	Stations	\$68.082	\$62.814
	Big 3 Networks	\$42.650	\$43.400
BMI	Univision	\$2.400	\$2.600
	Stations	\$69.386	\$65.033
	Big 3 Networks	\$3.250	\$3.425
SESAC	Univision	\$0.110	\$0.120
	Stations	\$13.500	\$16.000
TOTAL		\$238.986	\$233.809

<sup>\*</sup> SESAC figures represent Blanket Music License Fees.

Source: "Music 10574.xls"

### **APPENDIX 3**

REBUTTAL TESTIMONY OF

JOHN WOODBURY, Ph.D.

## Music Rights Payments as a Percentage of Total (Music plus Broadcast) Rights Payments

	Schink Data [1]	PRO plus US Census Data [2]	
	1998	2004	2005
Actual Music License Fees Paid	\$228	\$239	\$234
Broadcasting Rights Music License Fees Combined	\$9,799	\$11,710	\$12,036
Music Rights Percentage	2.33%	2.04%)	1.94%

Sources:

[1] 1998: Testimony of Dr. George R. Schink at ¶ 28 [2] 2004-5: *Service Annual Surveys: 2006;* and "Music 10574.xls"

## **APPENDIX 4**

REBUTTAL TESTIMONY OF

JOHN WOODBURY, Ph.D.

### LIST OF DOCUMENTS AND DATA RELIED UPON

DocumentIData	Format
In the Matter of Distribution of 1998 and 1999 Cable Royalty Funds, Docket No. 2001-8 CARP CD 98-99, Report of the Copyright Arbitration Royalty Panel To The Librarian of Congress (October 21, 2003)	Report
In the Matter of Distribution of 2004 and 2005 Cable Royalty Funds, Docket No. 2007-3 CRB CD 2004-2005, Testimony of William P. Zarakas	Report
In the Matter of DISTRIBUTION OF 1998 AND 1999 CABLE ROYALTY FUNDS, Docket No. 2001-8 CARP CD 98-99, Testimony of Dr. George R. Schink (June 20, 2003)	Report
Trial Testimony of Michael O'Neill (October 13, 2009)	Transcript
Trial Testimony of William Zarakas (October 13, 2009)	Transcript
U.S. Census Bureau, Current Business Reports, Service Annual Survey, 2006	Report
"Music 10574.xls"	Excel Workbook

#### **DECLARATION OF JOHN R. WOODBURY**

I declare under penalty of perjury that the foregoing rebuttal testimony is true and correct and of my personal knowledge.

Executed on December 11, 2009.

John R. Woodbury

#### Rebuttal Testimony of Marsha E. Kessler

My name is Marsha E. Kessler and I am Vice-President,
Retransmission Royalty Distribution at Motion Picture Association of
America ("MPAA"). I provided direct testimony in this proceeding on
behalf of Program Suppliers concerning how Section 111 works and my role
in the development of 2004 and 2005 Nielsen Viewing Studies and the 2004
and 2005 Cable Subscriber Surveys.<sup>1</sup>

#### I. Purpose of Testimony

In his direct testimony, Mr. James Trautman of Bortz Media & Sports Group "acknowledge[d] the potential for certain 'fringe' programming to be interpreted as belonging to one category when for the purposes of these proceedings it may belong in another." In light of that statement, for these rebuttal proceedings, counsel asked me to review sports programs aired on stations distantly-retransmitted by cable operator respondents to Settling Parties' 2004 and 2005 Bortz surveys.

My testimony examines sports programming that was on the air in 2004 and 2005, the periods addressed in the Bortz surveys. In particular, with respect to stations distantly-retransmitted by respondents to the 2004 and 2005 Bortz surveys, I quantify the following: (1) all sports available on those stations; (2) the amount of compensable and non-compensable sports

<sup>&</sup>lt;sup>1</sup> PS Exhibit 5.

<sup>&</sup>lt;sup>2</sup> SP Exhibit 2 at 30; Tr. at 83:15-21, 107:14-22-108-1-5 (Trautman).

programming broadcast on those stations; (3) the distribution of compensable programming among several Phase I claimant groups; and (4) the availability of JSC sports programming in comparison to all sports programming available on those stations.

#### II. The Analysis

The process consisted of (1) identifying the commercial stations ("Bortz stations") distantly-retransmitted by cable operators included in the Bortz 2004 and 2005 surveys; (2) isolating all sports programs on those stations; (3) calculating the percentage of sports programs that were and were not compensable under the cable statutory license; and (4) allocating the broadcast time (in minutes) among the Phase I claimant groups to which each program belonged.

The following is the process by which I calculated these results:

## a. Identification of the Bortz Stations

In the direct phase of these proceedings, the Settling Parties provided in discovery the distant stations retransmitted by the cable respondents in the Bortz 2004 and 2005 surveys. A listing of those stations is shown in Appendix A.

## b. Definition of "Sports" and "Sports-like" Programming

Next, I defined two types of programs broadcast by the Bortz stations and called the programs "sports" and "sports-like" programming. By "sports" I meant programming considered to be in the JSC category, *i.e.*, live, play-by-play team professional and collegiate sports. By "sports-like," I meant all other programming that one thinks of as sports in the non-statutory license world, *i.e.*, non-JSC programs. Such programs include golf, ice skating, the Olympics, wrestling, boxing, poker, fishing, hunting, bowling, volleyball, bicycle riding, gymnastics, sports talk shows, motorcycle racing, triathlons, tennis, horseracing, diving, high school sports, and the like. In this testimony, I will refer to both categories combined simply as "sports."

## c. Identification of Sports Programs

In order to identify sports programs on the air in 2004 and 2005, I referred to a file of television station programs the Settling Parties provided during discovery in the direct phase of these proceedings. It is my understanding that the data were prepared by Tribune Media ("Tribune") and that Tribune categorized each program in the file so that the program could be assigned to one of the Phase I groups in these proceedings.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> SP Exhibit 8 at 5.

For each program aired, the Tribune data report multiple data fields, one of which is "prog\_type" (Program Type). In order to cull out sports programs, I filtered the data in the "prog\_type" field for the following program types, the definitions of which Settling Parties provided in discovery:

PS – Pseudo Sports

SE – Sporting Event

SP – Special

SR – Sports Related

TM – Team vs. Team

The SP (Special) group included many programs that clearly did not belong in the sport group like "Dr. Phil Primetime Special: Romance Rescue" and a Billy Graham special, so I reviewed the SP category and deleted all such programs. Additionally, I eliminated programs such as "NBA All-Star Reading Rally" because the focus of the program was on encouraging children to read rather than on sports. The remaining group of programs thus created became my database of sports programs.

## d. Compensable and Non-compensable Sports

Under the cable statutory license, programming broadcast on the ABC/CBS/NBC networks is not compensable, so I next determined which of the sports programs on the Bortz stations were not compensable because they were network programs. I did that by sorting the Tribune data

according to the "claim\_cat" (claim category) field, which contained various designations for network programming.

The remaining programs were compensable under the statutory license.

## e. Allocation of compensable programming among Phase I claimants

Relying on Tribune categorizations in the "claim\_cat" field, I sorted each sport program on the Bortz stations according to a Phase I claimant group.

## f. Calculations

I based the calculations on minutes per Tribune data, which reported the duration in minutes for each program. For 2004 and 2005, I summed the total minutes for all sports programs. Next, I backed out minutes attributable to network programming. Then, I allocated the remaining compensable minutes to the various Phase I claimants who had sports programming in the database, and calculated the percentage for each category. I expressed the allocations as percentages of compensable sports programming.

#### III. Results

The results of my calculations are detailed in Appendix B of this testimony. In sum, cable operators retransmitted a plethora of sports programming during 2004 and 2005. In both years, about 60% of such programs were non-compensable for the purposes of this proceeding.

For the remaining 40% of the sports programs that were compensable, approximately two-thirds did not belong in the JSC category, but instead were programs associated either with Program Suppliers or with claimants other than JSC.

In other words, almost 90% of the sports programs on the Bortz stations either were non-compensable under Section 111 or, if compensable, belonged to a program category other than JSC.

Given that the vast majority of the sports programming shown on the Bortz stations did not fall in the JSC category, it is unclear how such a large majority of the sports programming available can be considered "fringe" to the JSC category, as suggested by Mr. Trautman.

Thank you for this opportunity to provide additional information to the Panel.

## APPENDIX A

## REBUTTAL TESTIMONY OF

MARSHA KESSLER

APPENDIX A 2004 Bortz Stations									
ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE			
20041	CBET	ON	WINDSOR	09	l				
20041	CBLT	ON	TORONTO	05	l				
20041	CBMT	QU	MONTREAL	06	l				
20041	CFTO	ON	TORONTO	09	<u>l</u>				
20041	CHCH	ON	HAMILTON	11	l				
20041	CIII	ON	TORONTO	06	I				
20041	CKSH	QU	SHERBROOKE	09	ı	S			
20041	KABB	TX	SAN ANTONIO	29	l	F			
20041	KAET	AZ	PHOENIX	08	E				
20041	KAJB	CA	CALIPATRIA	54	l				
20041	KARE	MN	MINNEAPOLIS	11	N	N			
20041	KATV	AR	LITTLE ROCK	07	N	Α			
20041	KAWB	MN	BRAINERD	22	E	A TOP TO THE TOP TO TH			
20041	KCAL	CA	LOS ANGELES	09	I				
20041	KCCO	MN	ALEXANDRIA	07	N	С			
20041	KCEB	TX	LONGVIEW	54	l	Р			
20041	KCEN	TX	TEMPLE	06	N	N			
20041	KCET	CA	LOS ANGELES	28	E				
20041	KCNC	СО	DENVER	04	N	С			
20041	KCOP	CA	LOS ANGELES	13	1	Y			
20041	KCRG	IA	CEDAR RAPIDS	09	N	Α			
20041	KCSO-	CA	SACRAMENTO	33	L				
20041	KCWC	WY	LANDER	04	E				
20041	KDEB	MO	SPRINGFIELD	27	l	F			
20041	KDKA	PA	PITTSBURGH	02	N	С			
20041	KENS	TX	SAN ANTONIO	05	N	C			
20041	KERA	TX	DALLAS	13	E				
20041	KET	KY	LEXINGTON	09	E				
20041	KGAN	IA	CEDAR RAPIDS	02	N	С			
20041	KLRN	TX	SAN ANTONIO	09	E				
20041	KLSB	TX	NACOGDOCHES	19	N	N			
20041	KMGH	co	DENVER	07	N	Α			
20041	KMIZ	МО	COLUMBIA	17	N	A			
20041	KMSP	MN	MINNEAPOLIS	09	1	F			
20041	KMWB	MN	MINNEAPOLIS	23	1	С			
20041	KNLJ	MO	JEFFERSON CITY	25	<u> </u>	В			
20041	KNME	NM	ALBUQUERQUE	05	E				
20041	KNXT	CA	VISALIA	49	E	R			
20041	KNXV	AZ	PHOENIX	15	N	A			
20041	KOLR	MO	SPRINGFIELD	10	N	C			
				05	N	C			
20041	KPIX KPLR	CA MO	SAN FRANCISCO ST LOUIS	11	IN	С			

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20041	KPXM	MN	ST CLOUD	41	ı	X
20041	KQED	CA	SAN FRANCISCO	09	E	
20041	KRWG	NM	LAS CRUCES	22	E	
20041	KSAT	TX	SAN ANTONIO	12	N	Α
20041	KSAX	MN	ALEXANDRIA	42	N	Α
20041	KSDK	МО	ST LOUIS	05	N	N
20041	KSPR	МО	SPRINGFIELD	33	N	Α
20041	KSTC	MN	MINNEAPOLIS	45	1	
20041	KTCA	MN	ST PAUL	02	E	
20041	KTCI	MN	ST PAUL	17	E	
20041	KTEL	NM	CARLSBAD	25	I	S
20041	KTNC	CA	CONCORD	42	1	S
20041	KTVD	со	DENVER	20	1.	Y
20041	KTVK	AZ	PHOENIX	03		
20041	KTVU	CA	OAKLAND	02		F
20041	KTXA	TX	FT WORTH	21		Р
20041	KUHT	TX	HOUSTON	08	E	:
20041	KUID	ID	MOSCOW	35	E	
20041	KUSA	СО	DENVER	09	N	N
20041	KVIA	TX	EL PASO	07	N	Α
20041	KVRR	ND	FARGO	15	<u> </u>	F
20041	KWBM	AR	HARRISON	31	<u> </u>	Y
20041	KWGN	CO	DENVER	02		С
20041	KWTX	TX	WACO	10	N	С
20041	KWWL	IA	WATERLOO	07	N	N
20041	KXAS	TX	FT WORTH	05	N	N
20041	KXTX	TX	DALLAS	39	1	
20041	KYTV	MO	SPRINGFIELD	03	N	N
20041	KYW	PA	PHILADELPHIA	03	N	С
20041	W31BP	NY	BURLINGTON	31	L	
20041	WAAY	AL	HUNTSVILLE	31	N	Α
20041	WACY	WI	APPLETON	32	I :	Y
20041	WAFF	AL	HUNTSVILLE-DECATUR	48	N	N
20041	WAGA	GA	ATLANTA	05	<u> </u>	F
20041	WAMI	FL	HOLLYWOOD	69	l	S
20041	WAND	IL IL	DECATUR	17	N	Α
20041	WAQP	MI	SAGINAW	49	l	R
20041	WAXN	NC	KANNAPOLIS	64	l	
20041	WBAL	MD	BALTIMORE	11	N	N
20041	WBAY	WI	GREEN BAY	02	N	A
20041	WBDC	DC	WASHINGTON	50	ı	С
20041	WBGH-	NY	BINGHAMTON	20	N	N
20041	WBGN-	PA	PITTSBURGH	59	L	
20041	WBKB	MI	ALPENA	11	N	С
20041	WBKP	MI	CALUMET	05	N	A

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20041	WBNS	ОН	COLUMBUS	10	N	С
20041	WBOY	w	CLARKSBURG	12	N	N
20041	WBQC-	ОН	CINCINNATI	25	L	Р
20041	WBRE	PA	WILKES-BARRE	28	N	. N
20041	WBTV	NC	CHARLOTTE	03	N	С
20041	WBZ	MA	BOSTON	04	N	С
20041	WBZL	FL	MIAMI	39	ı	С
20041	WCAU	PA	PHILADELPHIA	10	N	N
20041	WCAX	VT	BURLINGTON	03	N	С
20041	WCCB	NC	CHARLOTTE	18	ı	F
20041	WCEU	FL	NEW SMYRNA BEACH	15	Е	
20041	WCFE	NY	PLATTSBURGH	57	Е	
20041	WCFN	IL	SPRINGFIELD	49	l	Υ
20041	WCGV	WI	MILWAUKEE	24	l	Υ
20041	WCHS	w	CHARLESTON	08	N	A
20041	WCIA	IL	CHAMPAIGN	03	N	С
20041	WCML	MI	ALPENA	06	E	
20041	WCMU	MI	MT PLEASANT	14	E	
20041	WCNY	NY	SYRACUSE	24	E	
20041	WCTI	NC	NEW BERN	12	N	Α
20041	WCVB	MA	BOSTON	05	N	A
20041	WCWB	PA	PITTSBURGH	22	1	Y
20041	WDBJ	VA	ROANOKE	07	N	C
20041	WDCA	DC	WASHINGTON	20		Р
20041	WDCQ	MI	BAD AXE	35	E	
20041	WDIV	MI	DETROIT	04	N N	N
20041	WDJT	WI	MILWAUKEE	58	N	С
20041	WDLI	OH	CANTON	17	1	R
20041	WDRL	VA	DANVILLE	24	1	Р
20041	WDSE	MN	DULUTH-SUPERIOR, WI	08	E	1
20041	WDTA-	GA	FAYETTEVILLE	53	L	
20041	WDWB	MI	DETROIT	20	l	В
20041	WEAO	OH	AKRON	49	E	
20041	WECT	NC	WILMINGTON	06	N	N
20041	WEDH	CT	HARTFORD	24	E	
20041	WEKW	NH	KEENE	52	E	
20041	WENH	NH	DURHAM	11	E	
20041	WENY	NY	ELMIRA	36	N	Α
20041	WETK	VT	BURLINGTON	33	E	
20041	WETM	NY	ELMIRA	18	N	N
		WI	CHIPPEWA FALLS	48		F
20041	WEUX			45		C
20041	WEWB	NY	SCHENECTADY			
20041	WEYI	MI	SAGINAW	25	N N	N A
20041	WFAA	TX	DALLAS	08	N	<u>A</u>
20041	WFFF	VT	BURLINGTON	44	<u> </u>	F

ſ	ACCT DD	CALL DEPORTED	CALL STATE	CALL CITY	СН	STATION-TYPE	STATION-SUBTYPE
.	ACCT-PD	CALL-REPORTED		CALL-CITY		STATION-TIPE	F
	20041	WFLX	FL	WEST PALM BEACH	29	1	F
	20041	WFQX	MI	CADILLAC	33	<u> </u>	-
	20041	WFRV	WI	GREEN BAY	05	N	С
	20041	WFSB	СТ	HARTFORD	03	N .	C
I	20041	WFTC	MN	MINNEAPOLIS	29	<u> </u>	Υ
I	20041	WFUM	MI	FLINT	28	E	
I	20041	WFXP	PA	ERIE	66	AMERICAN STATE OF THE STATE OF	F
ı	20041	WFXS	WI	WITTENBERG	55	<u> </u>	F
I	20041	WFXT	MA	BOSTON	25	l	F
	20041	WFXV	NY	UTICA	33	1	F
Ì	20041	WGBA	WI	GREEN BAY	26	N	N
ı	20041	WGME	ME	PORTLAND	13	N	С
ı	20041	WGN	IL	CHICAGO	09		
ı	20041	WGNT	VA	PORTSMOUTH	27	l	С
l	20041	WGPX	NC	BURLINGTON	16	ŀ	X
ı	20041	WGRZ	NY	BUFFALO	02	N	· N.
	20041	WGTU	MI	TRAVERSE CITY	29	N	Α
ı	20041	WGTV	GA	ATHENS	08	E	
١	20041	WHAG	MD	HAGERSTOWN	25	N	N
	20041	WHAM	NY	ROCHESTER	13	N	Α
Ì	20041	WHDH	MA	BOSTON	07	N.	N
Ì	20041	WHEC	NY	ROCHESTER	10	N	N
Ì	20041	WHNT	AL	HUNTSVILLE	19	N	С
I	20041	WHRO	VA	HAMPTON	15	E	
l	20041	WHYY	DE	WILMINGTON	12	E	
I	20041	WICU	PA	ERIE	12	N	N
	20041	WICZ	NY	BINGHAMTON	40	<u> </u>	F
	20041	WIS	SC	COLUMBIA	10	N	N
	20041	WISF-	NY	ONEONTA	15	L	
	20041	WISN	WI	MILWAUKEE	12	N	A
	20041	WITF	PA	HARRISBURG	33	E	
	20041	WITI	WI	MILWAUKEE	06	<u> </u>	F
	20041	WITN	NC	WASHINGTON	07	N	N
	20041	WIWB	WI	SURING	14	1	С
ļ		WIXT	NY	SYRACUSE	09	N	A
	20041				06	N	N
	20041	WJAC	PA	JOHNSTOWN HAGERSTOWN	68	IN I	В
	20041	WJAL	MD		02	ı	F
	20041	WJBK	MI	DETROIT		N1	
	20041	WJET	PA	ERIE	24	N	Α
	20041	WJLA	DC	WASHINGTON	07	N	A
	20041	WJMN	MI	ESCANABA	03	N	С
	20041	WJRT	MI	FLINT	12	N .	A
	20041	WJW	OH	CLEVELAND	08	<u> </u>	F
	20041	WJZ	MD	BALTIMORE	13	N	С
	20041	WJZY	NC	BELMONT	46	l	С

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20041	WKAR	MI	EAST LANSING	23	<b>E</b> .	
20041	WKBD	MI	DETROIT	50		С
20041	WKBT	WI	LA CROSSE	08	N	С
20041	WKMJ	KY	LOUISVILLE	68	E	
20041	WKRN	TN	NASHVILLE	02	N	Α
20041	WKYT	KY	LEXINGTON	27	N	С
20041	WLAJ	MI	LANSING	53	N	Α
20041	WLEX	KY	LEXINGTON	18	N .	N
20041	WLNS	MI	LANSING	06	N	С
20041	WLRN	FL	MIAMI	17	E	
20041	WLUK	WI	GREEN BAY	11		F
20041	WLVI	MA	CAMBRIDGE	56		С
20041	WLXI	NC	GREENSBORO	61		R
20041	WMAR	MD	BALTIMORE	02	N	Α
20041	WMCN	NJ	ATLANTIC CITY	53		
20041	WMHT	NY	SCHENECTADY	17	Е	
20041	WMLW-	WI	MILWAUKEE	41	L	
20041	WMPB	MD	BALTIMORE	. 67	E	
20041	WMQF	MI	MARQUETTE	19		М
20041	WMUR	NH	MANCHESTER	09	N	Α
20041	WMVS	WI	MILWAUKEE	10	E	
20041	WMVT	WI	MILWAUKEE	36	E	
20041	WNAB	TN	NASHVILLE	58	<u> </u>	С
20041	WNBC	NY	NEW YORK	04	N	N
20041	WNCT	NC NC	GREENVILLE	09	N	C
20041	WNDS	NH	DERRY	50		
20041	WNDU	IN	SOUTH BEND	16	 N	N
20041	WNED	NY	BUFFALO	17	E	
	WNEG	GA	TOCCOA	32	N	С
20041			BAY CITY	05	N	C
20041	WNEM	MI PA	SCRANTON	16	N	A
20041	WNEP			13	E	
20041	WNET	NY	NYC-NEWARK	60		S
20041	WNEU	NH	MERRIMACK	13	<u> </u>	3
20041	UMMW	MI	MARQUETTE			С
20041	WNPA	PA	JEANNETTE	19	1	
20041	WNPB	WV	MORGANTOWN	24	E	
20041	WNPT	TN	NASHVILLE	80	E .	
20041	WNYA	MA	PITTSFIELD	51	1	Y
20041	WNYO	NY	BUFFALO	49	1	Y
20041	WNYT	NY	ALBANY	13	N .	N
20041	WNYW	NY	NEW YORK	05	<u> </u>	F
20041	WOAI	TX	SAN ANTONIO	04	N	N .
20041	WOKR	NY	ROCHESTER	13	N	A
20041	WOUB	ОН	ATHENS	20	Ε .	
20041	WOWK	WV	HUNTINGTON	13	N	C

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20041	WPBN	MI	TRAVERSE CITY	07	N	N
20041	WPBS	NY	WATERTOWN	16	Е	
20041	WPBT	FL	MIAMI	02	E	
20041	WPBY	WV	HUNTINGTON	33	E	
20041	WPCB	PA	GREENSBURG	40	l	R
20041	WPDE	SC	FLORENCE	15	N	Α
20041	WPGH	PA	PITTSBURGH	53		F
20041	WPHL	PA	PHILADELPHIA	17		Υ
20041	WPIX	NY	NEW YORK	11	l	С
20041	WPMT	PA	YORK	43	ļ	F
20041	WPNE	WI	GREEN BAY	38	E	
20041	WPSG	PA	PHILADELPHIA	57	I	С
20041	WPSX	PA	CLEARFIELD	03	Е	
20041	WPTO	ОН	OXFORD	14	E	
20041	WPVI	PA	PHILADELPHIA	06	N	Α
20041	WPXD	MI	ANN ARBOR	31	l	X
20041	WPXI	PA	PITTSBURGH	11	N	N
20041	WPXP	FL	LAKE WORTH	67	l	X
20041	WPXV	VA	NORFOLK	49		X
20041	WQED	PA	PITTSBURGH	13	E	
20041	WQEX	PA	PITTSBURGH	16	1	Н
20041	WQLN	PA	ERIE	54	Е	
20041	WQOW	WI	EAU CLAIRE	18	N	Α
20041	WRC	DC	WASHINGTON	04	N	N
20041	WRGB	NY	SCHENECTADY	06	N	С
20041	WRIC	VA	PETERSBURG	08	N	Α
20041	WROC	NY	ROCHESTER	08	N:	C
20041	WSAW	WI	WAUSAU	07	N	С
20041	WSAZ	W	HUNTINGTON	03	N	N
20041	WSB	GA	ATLANTA	02	N	Α
20041	WSBK	MA	BOSTON	38	l	
20041	WSBT	IN	SOUTH BEND	22	N	С
20041	WSEE	PA	ERIE	35	N	С
20041	WSKG	NY	BINGHAMTON	46	E	
20041	WSKY	NC	MANTEO	4	1	
20041	WSMH	MI	FLINT	66	1	F
20041	WSMV	TN	NASHVILLE	04	N	N
20041	WSOC	NC	CHARLOTTE	09	N	Α
20041	WSPA	SC	SPARTANBURG	07	N	С
20041	WSYX	ОН	COLUMBUS	06	N	Α
20041	WTAE	PA	PITTSBURGH	04	N	Α
20041	WTAJ	PA	ALTOONA	10	N	С
20041	WTCE	FL	FT PIERCE	21	E	
20041	WTCN-	FL	PALM BEACH	43	L	Υ
20041	WTEN	NY	ALBANY	10	N	A

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20041	WTMJ	WI	MILWAUKEE	04	N	N
20041	WTRF	w	WHEELING	07	N	C
20041	WTTG	DC	WASHINGTON	05	1	F
20041	WTVF	TN	NASHVILLE	05	N	C
20041	WTVI	NC	CHARLOTTE	42	Е	
20041	WTVP	IL	PEORIA	47	E	
20041	WTVQ	KY	LEXINGTON	36	N	Α
20041	WTVS	MI	DETROIT	56	Е	
20041	WTVZ	VA	NORFOLK	33		В
20041	WTWB	NC	LEXINGTON	20	1.	С
20041	WTXF	PA	PHILADELPHIA	29	1	F
20041	WUAB	ОН	LORAIN	43	1	Y
20041	WUHF	NY	ROCHESTER	31	l	F
20041	WUPN	NC	GREENSBORO	48	l	Y
20041	WUSA	DC	WASHINGTON	09	N	С
20041	WUTF	MA	MARLBOROUGH	66	<u> </u>	S
20041	WUTR	NY	UTICA	20	N	Α
20041	WUTV	NY	BUFFALO	29	l	F
20041	WUVP	NJ	VINELAND	65		S
20041	WUXP	TN	NASHVILLE	30		Υ
20041	WAH	W	CHARLESTON	11		F
20041	WVBK-	VT	MANCHESTER	49	L	
20041	WVBT	VA	VIRGINIA BEACH	43		F
20041	WIA	PA	SCRANTON	44	E	
20041	WVIZ	ОН	CLEVELAND	25	E	
20041	WNY	VT	BURLINGTON	22	N	Α
20041	WVTV	WI	MILWAUKEE	18	1	С
20041	WWBT	VA	RICHMOND	12	N	N
20041	WWCP	PA	JOHNSTOWN	08	1	F
20041	WWDP	MA	NORWELL	46		
20041	WWJ	MI	DETROIT	62	N	С
20041	WWOR	NJ	SECAUCUS	09		Υ
20041	WWPX	w	MARTINSBURG	60		
20041	WWSI	NJ	ATLANTIC CITY	62		S
20041	WWTV	MI	CADILLAC	09	N	С
20041	WWWB	SC	ROCK HILL	55		В
20041	WXEL	FL	WEST PALM BEACH	42	E	
20041	WXIA	GA	ATLANTA	11	N	N
20041	WXII	NC	WINSTON-SALEM	12	N	N
20041	WXXA	NY	ALBANY	23	I	F
20041	WXXI	NY	ROCHESTER	21	E	7 (A)
20041	WXYZ	MI	DETROIT	07	N	Α
20041	WYBE	PA	PHILADELPHIA	35	E	
20041	WYDN	MA	WORCESTER	48	E	
20041	WYDO	NC	GREENVILLE	14	1	F

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20041	WYOU	PA	SCRANTON	22	N	С
20041	WYPX	NY	AMSTERDAM	55		X
20041	WZPX	MI	BATTLE CREEK	43	I	X
20041	WZTV	TN	NASHVILLE	17	I	F
20041	WZZM	MI	GRAND RAPIDS	13	N	Α

		· · · · · · · · · · · · · · · · · · ·	APPENDIX A			
			2005 Bortz Stations			
ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	CBET	ON	WINDSOR	09		
20051	CBFT	QU	MONTREAL	02	l	S
20051	CBMT	QU	MONTREAL	06		
20051	CBUT	BC	VANCOUVER	02		
20051	CBWT	MB	WINNIPEG	06		
20051	CFCF	QU	MONTREAL	12		
20051	CHLT	QU	SHERBROOKE	07	l	S
20051	CJOH	ON	OTTAWA	13	1	
20051	CKSH	QU	SHERBROOKE	09	ĺ	S
20051	CKWS	ON	KINGSTON	11	1	
20051	K53EG	SD	SIOUX FALLS	53	L	
20051	KABB	TX	SAN ANTONIO	29		F
20051	KAET	AZ	PHOENIX	08	E	
20051	KAIT	AR	JONESBORO	08	N	Α
20051	KARK	AR	LITTLE ROCK	04	N	N
20051	KATU	OR	PORTLAND	02	N	Α
20051	KATV	AR	LITTLE ROCK	07	N	Α
20051	KAUN	SD	SIOUX FALLS	36		С
20051	KBHK	CA	SAN FRANCISCO	44	1	C
20051	KBSI	MO	CAPE GIRARDEAU	23		F
20051	KBTC	WA	TACOMA	28	E E	
20051	KBYU	UT	PROVO	11	E	
20051	KCAL	CA	LOS ANGELES	09	<u>-</u>	
20051	KCCI	IA	DES MOINES	08	N	С
20051	KCET	CA	LOS ANGELES	28	E	
20051	KCNC	co	DENVER	04	N N	С
20051	KCPT	MO	KANSAS CITY	19	E	
20051	KCRA	CA	SACRAMENTO	03	N	N
20051	KCRG	IA	CEDAR RAPIDS	09	N	A
20051	KCTS	WA	SEATTLE	09	E	
20051	KDKA	PA	PITTSBURGH	02	N	C
20051	KDLT	SD	SIOUX FALLS	46	N	N
20051	KDSM	IA	DES MOINES	17		F
20051	KENS	TX	SAN ANTONIO	05	N	C
20051		MO	ST LOUIS	09	E	
20051	KETC KEVN	SD	RAPID CITY	07	l l	F
20051	KFPX	IA	NEWTON	39	<u> </u>	X
	KFVS	MO	CAPE GIRARDEAU	12	<u>'</u> N	C
20051 20051		IA	CEDAR RAPIDS	02	N	C
20051	KGAN KGO	CA	SAN FRANCISCO	02	N N	A
	KGW	OR	PORTLAND	08	N	N
20051		WY	CASPER	14	N	C
20051	KGWC		IOWA CITY	12	E	
20051	KIIN	IA N/A	SEATTLE	05	N	N
20051	KING	WA		13	E	IV
20051	KIPT	ID	TWIN FALLS	07		С
20051	KIRO	WA	SEATTLE		N	Y
20051	KJZZ	UT	SALT LAKE CITY	14	l N1	C
20051	KLAS	NV	LAS VEGAS	80	N	<u> </u>
20051	KLRN	TX	SAN ANTONIO	09	E	
20051	KLVX	NV	LAS VEGAS	10	E	

	CALL-REPORTED	CALL-STATE_	CALL-CITY	CH	STATION-TYPE	STATION-SUBTYPE
20051	KMBC	МО	KANSAS CITY	09	N	Α
20051	KMIZ	MO	COLUMBIA	17	N	Α
20051	KMOV	МО	ST LOUIS	04	N	С
20051	KMSP	MN	MINNEAPOLIS	09	!	F
20051	KNLJ	MO	JEFFERSON CITY	25	l	В
20051	KNTV	CA	SAN JOSE	11	N	N
20051	KNXT	CA	VISALIA	49	E	R
20051	KNXV	AZ	PHOENIX	15	N	Α
20051	KOIN	OR	PORTLAND	06	N	С
20051	KOLN	NE	LINCOLN	10	N	С
20051	KOLR	MO	SPRINGFIELD	10	N	C
20051	KOMO	WA	SEATTLE	04	N	Α
20051	KOMU	MO	COLUMBIA	08	N	N
20051	KOPB	OR	PORTLAND	10	E	
20051	KPDX	WA	VANCOUVER	49	1 .	Y
20051	KPIX	CA	SAN FRANCISCO	05	N	С
20051	KPLR	MO	ST LOUIS	11	1	С
20051	KPNZ	UT	OGDEN	24		Р
20051	KPTV	OR	PORTLAND	12	ı	F
20051	KPXR	IA	CEDAR RAPIDS	48		X
20051	KQED	CA	SAN FRANCISCO	09	E	
20051	KRMA	СО	DENVER	06	E	
20051	KRWG	NM	LAS CRUCES	22	E	
20051	KSAT	TX	SAN ANTONIO	12	N	Α
20051	KSAW-	ID	TWIN FALLS	06	N	Α
20051	KSDK	MO	ST LOUIS	05	N	N
20051	KSFX	MO	SPRINGFIELD	27		F
20051	KSIN	IA	SIOUX CITY	27	Ë	
20051	KSL	ÜT	SALT LAKE CITY	05	N	N
20051	KSLA	LA	SHREVEPORT	12	N	C
20051	KSMQ	MN	AUSTIN	15	E	
20051	KSPR	MO	SPRINGFIELD	33	N	Α
20051	KSTC	MN	MINNEAPOLIS	45		
20051	KSTW	WA	TACOMA	11	<u> </u>	С
20051	KTBY	AK	ANCHORAGE	04		F
20051	KTCA	MN	ST PAUL	02	E	
20051	KTCI	MN	ST PAUL	17	E	
20051	KTEJ	AR	JONESBORO	19	E	
20051	KTFT-	ID	TWIN FALLS	38	N	N
20051	KTHV	AR	LITTLE ROCK	11	N	С
20051	KTNV	NV	LAS VEGAS	13	N	A
20051	KTVK	AZ	PHOENIX	03	1	
20051	KTVU	CA CA	OAKLAND	02		F
20051	KTVX	UT	SALT LAKE CITY	04	N	A
20051	KTWO	WY	CASPER	02	N	A
20051	KUAM	GU	AGANA	08	N	R
20051	KUED	UT	SALT LAKE CITY	07	E	I X
20051	KUSA	CO	DENVER	09	N	N
	KUSD	SD	VERMILLION	03	E	1 4
20051			PHOENIX	45	<u> </u>	Υ
20051	KUTP	AZ		18	E	I
20051	KVPT	CA	FRESNO	48	<u> </u>	R
20051	KVTJ	AR	JONESBORO	05	l l	F
20051	KVVU	NV	HENDERSON			

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	KWBP	OR	SALEM	32	l	С
20051	KWDK	WA	TACOMA	56	Е	
20051	KWGN	CO	DENVER	02		С
20051	KWQC	IA	DAVENPORT	06	N	N
20051	KWWF	IA	WATERLOO	22	I	
20051	KWWL	IA	WATERLOO	07	N	N
20051	KXNE	NE	NORFOLK	19	E	
20051	KYTV	MO	SPRINGFIELD	03	N	N
20051	KYW	PA	PHILADELPHIA	03	N	C
20051	W28BC	NY	MASSENA	28	L	
20051	W31BP	NY	BURLINGTON	31	L	
20051	WABC	NY	NEW YORK	07	N	Α
20051	WABM	AL	BIRMINGHAM	68	l	Y
20051	WACX	FL	LEESBURG	55	l l	R
20051	WACY	WI	APPLETON	32	<u> </u>	Y
	WALA		MOBILE	10	<u> </u>	F
20051		AL	KINGSPORT	30	L	P
20051	WAPK	TN		30		P
20051	WAPW-	VA	ABINGDON		L	R
20051	WAQP	MI	SAGINAW	49	<u> </u>	Y
20051	WATL	GA	ATLANTA	36	<u> </u>	
20051	WAVE	KY	LOUISVILLE	03	N	N
20051	WAXN	NC	KANNAPOLIS	64		
20051	WAZE	KY	MADISONVILLE	19	<u>l</u>	С
20051	WBAL	MD	BALTIMORE	11	N	N
20051	WBAY	WI	GREEN BAY	02	N	Α
20051	WBBJ	TN	JACKSON	07	N	Α
20051	WBBM	IL	CHICAGO	02	N	С
20051	WBCC	FL	COCOA	68	E	
20051	WBDC	DC	WASHINGTON	50	ı	C
20051	WBFF	MD	BALTIMORE	45	l	F
20051	WBGH-	NY	BINGHAMTON	20	N	N
20051	WBGN-	PA	PITTSBURGH	59	L	
20051	WBGT-	NY	ROCHESTER	40	L	Р
20051	WBGU	ОН	BOWLING GREEN	27	Е	
20051	WBKI	KY	CAMPBELLSVILLE	34	l	С
20051	WBKP	MI	CALUMET	05	N	Α
20051	WBNG	NY	BINGHAMTON	12	N	С
20051	WBNS	ОН	COLUMBUS	10	N	С
20051	WBOY	W	CLARKSBURG	12	N	N
20051	WBPG	AL	GULF SHORES	55	1	С
20051	WBQC-	OH	CINCINNATI	25	Ĺ	P
20051	WBRC	AL	BIRMINGHAM	06	<u> </u>	F
20051	WBTV	NC	CHARLOTTE	03	N	C
20051	WBUW	WI	JANESVILLE	57	1	C
20051	WBZ	MA	BOSTON	04	, N	C
20051	WCAU	PA	PHILADELPHIA	10	N	N
-	WCCB	NC	CHARLOTTE	18	I	F
20051	er vara - m		CINCINNATI	48	E	I commence of the second of th
20051	WCET	OH	NEW SMYRNA BEACH	15	E	
20051	WCEU	FL				
20051	WCEU-DT	FL	NEW SMYRNA BEACH	33	E	
20051	WCFE	NY	PLATTSBURGH	57	E	V
20051	WCGV	WI	MILWAUKEE	24	1	Y
20051	WCHS	W	CHARLESTON	08	N	Α
20051	WCML	MI	ALPENA	06	E	

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	WCNC	NC	CHARLOTTE	36	N	N
20051	WCNY	NY	SYRACUSE	24	E	
20051	WCVE	VA	RICHMOND	23	Е	
20051	WCWB	PA	PITTSBURGH	22		Y
20051	WDBJ	VA	ROANOKE	07	N	С
20051	WDCA	DC	WASHINGTON	20	l	Р
20051	WDIV	MI	DETROIT	04	N	N
20051	WDJT	WI	MILWAUKEE	58	N	С
20051	WDRB	KY	LOUISVILLE	41	l I	F
20051	WDSU	LA	NEW ORLEANS	06	N	N
20051	WDWB	MI	DETROIT	20	1	В
20051	WECT	NC	WILMINGTON	06	N	N
20051	WEIQ	AL	MOBILE	42	E	
20051	WENY	NY	ELMIRA	36	N N	Α
20051	WETA	DC	WASHINGTON	26	E	
		NY	ELMIRA	18	N	N
20051	WETM				IN .	F F
20051	WEUX	WI	CHIPPEWA FALLS	48	l I	S
20051	WFDC	VA	ARLINGTON	14	<u> </u>	5 F
20051	WFLD	IL	CHICAGO	32	1	
20051	WFQX	MI	CADILLAC	33		F
20051	WFRV	WI	GREEN BAY	05	N	AC F
20051	WFTV	FL	ORLANDO	09	N	A
20051	WFXS	WI	WITTENBERG	55	l l	F
20051	WFXV	NY	UTICA	33		F
20051	WGAL	PA	LANCASTER	08	N	N .
20051	WGBA	WI	GREEN BAY	26	N	N
20051	WGCL	GA	ATLANTA	46	N	С
20051	WGGB	MA	SPRINGFIELD	40	N	A
20051	WGME	ME	PORTLAND	13	N	С
20051	WGMU	VT	BURLINGTON	39	L	P
20051	WGN	ΙĹ	CHICAGO	09		
20051	WGPX	NC	BURLINGTON	16		X
20051	WGRZ	NY	BUFFALO	02	N	N
20051	WGTE	ОН	TOLEDO	30	Ε	
20051	WGTV	GA	ATHENS	08	E	
20051	WHA	WI	MADISON	21	E	
20051	WHAM	NY	ROCHESTER	13	N	Α
20051	WHAS	KY	LOUISVILLE	11	N	Α
20051	WHBQ	TN	MEMPHIS	13		F
20051	WHCP	ОН	PORTSMOUTH	30	i	С
20051	WHEC	NY	ROCHESTER	10	N	N
20051	WHIO	OH	DAYTON	07	N	C
20051	WHP	PA	HARRISBURG	21	N	C
20051	WHTM	PA	HARRISBURG	27	N	A
20051	WHUT	DC	WASHINGTON	32	E	And the confidence of the first of the second secon
20051	WIAT	AL	BIRMINGHAM	42	N	С
l	WICZ	NY	BINGHAMTON	40	I I	F
20051			FREEPORT	23	N	C
20051	WIFR	IL INI	THE RESIDENCE OF THE PARTY OF T	49	E	
20051	WIPB	IN	MUNCIE			N
20051	WIS	SC	COLUMBIA	10	N	C
20051	WISC	WI	MADISON	03	N	<u> </u>
20051	WISF-	NY	ONEONTA	15	L	Α
20051	WISN	WI	MILWAUKEE	12	N	Α
20051	WITF	PA	HARRISBURG	33	Е	

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	WITI	WI	MILWAUKEE	06	11	F
20051	WIVB	NY	BUFFALO	04	N	С
20051	WIVT	NY	BINGHAMTON	34	N	A
20051	WIWB	WI	SURING	14	-	С
20051	WIXT	NY	SYRACUSE	09	N	Α
20051	WJAC	PA	JOHNSTOWN	06	N	N
20051	WJAL	MD	HAGERSTOWN	68		В
20051	WJBK	MI	DETROIT	02		F
20051	WJEB	FL	JACKSONVILLE	59	E	
20051	WJJA	WI	RACINE	49	1	
20051	WJKT	TN	JACKSON	16	1	Р
20051	WJLA	DC	WASHINGTON	07	N	Α
20051	WJRT	MI	FLINT	12	N	Α
20051	WJTV	MS	JACKSON	12	N	С
20051	WJW	ОН	CLEVELAND	08		F
20051	WJZ	MD	BALTIMORE	13	N	С
20051	WJZY	NC	BELMONT	46	. [	C
20051	WKAR	MI	EAST LANSING	23	E	
20051	WKBD	MI	DETROIT	50	1	С
20051	WKBT	WI	LA CROSSE	08	N	C
20051	WKCF	FL	CLERMONT	18	l	C
20051	WKMG	FL	ORLANDO	06	N	C
20051	WKMJ	KY	LOUISVILLE	68	E	
20051	WKMU	KY	MURRAY	21	E	
20051	WKNO	TN	MEMPHIS	10	E	
20051	WKOH	KY	OWENSBORO	31	Ē	
20051	WKOI	IN	RICHMOND	43	Ī	R
20051	WKOW	WI	MADISON	27	N	A
20051	WKRG	AL	MOBILE	05	N	C
20051	WKRN	TN	NASHVILLE	02	N	A
20051	WKTV	NY	UTICA	02	N	N N
20051	WLCB	FL	LEESBURG	45	<u></u>	R
20051	WLED	NH	LITTLETON	49	E	
20051	WLFG	VA	GRUNDY	68	<u> </u>	R
		OH	LIMA	35	N N	N
20051	WLIO		LEXINGTON	11	E E	11
20051	WLJT	TN KY	LOUISVILLE	32	N	С
20051	WLKY		KALAMAZOO	64	l IN	В
20051	WLLA WLMB	MI	TOLEDO	40		
20051		OH TN	MEMPHIS	30		С
20051	WLMT				<u>l</u>	C
20051	WLNS	MI	LANSING	06	N <sub>N</sub>	<del></del>
20051	WLS	IL NA/I	CHICAGO	07	N	<u>A</u> F
20051	WLUK	VVI	GREEN BAY	11		C
20051	WLVI	MA	CAMBRIDGE	56	<u> </u>	
20051	WLXI	NC	GREENSBORO	61	1	R C
20051	WLYH	PA	LEBANON	15		<u> </u>
20051	WMAE	MS	BOONEVILLE	12	E	NI
20051	WMAQ	IL.	CHICAGO	05	N	N
20051	WMAR	MD	BALTIMORE	02	N N	A C
20051	WMAZ	GA	MACON	13	N	
20051	WMC	TN	MEMPHIS	05	N <sub>1</sub>	N
20051	WMFE	FL	ORLANDO	24	E	
20051	WMFE-DT	FL	ORLANDO	23	E	
20051	WMHT	NY	SCHENECTADY	17	E	

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	WMLW-	WI	MILWAUKEE	41	L	
20051	WMPB	MD	BALTIMORE	67	E	
20051	WMQF	MI	MARQUETTE	19	l	M
20051	WMSN	Wi	MADISON	47		F
20051	WMTV	WI	MADISON	15	N	N
20051	WMUR	NH	MANCHESTER	09	N	Α
20051	WMVS	WI	MILWAUKEE	10	E	
20051	WMVT	WI	MILWAUKEE	36	E	
20051	WNBC	NY	NEW YORK	04	N	N
20051	WNDU	IN	SOUTH BEND	16	N	N
20051	WNED	NY	BUFFALO	17	E	
20051	WNEG	GA	TOCCOA	32	N	С
20051	WNEM	MI	BAY CITY	05	N	C
20051	WNEU	NH	MERRIMACK	60	1	S
20051	WNMU	MI	MARQUETTE	13	E	
20051	WNPA	PA	JEANNETTE	19	<u> </u>	С
20051	WNPB	W	MORGANTOWN	24	E	
				08	E	
20051	WNPT	TN	NASHVILLE	54	<u> </u>	С
20051	WNUV	MD	BALTIMORE			<u> </u>
20051	WNVC	VA	FAIRFAX	56	E	N.I.
20051	WNWO	OH	TOLEDO	24	N	N
20051	WNYO	NY	BUFFALO	49	<u> </u>	Y
20051	WNYS	NY	SYRACUSE	43	ļ.	<u>B</u> .
20051	WNYW	NY	NEW YORK	05	<u> </u>	F
20051	WOAI	TX	SAN ANTONIO	04	N	N
20051	WOIO	ОН	SHAKER HEIGHTS	19	N	С
20051	WOSU	ОН	COLUMBUS	34	E	
20051	WOTM-	AL	MONTEVALLO	19	L	
20051	WOUB	OH	ATHENS	20	E	
20051	WOWK	WV	HUNTINGTON	13	N	C
20051	WPBN	MI	TRAVERSE CITY	07	N	N
20051	WPBO	ОН	PORTSMOUTH	42	E	
20051	WPBS	NY	WATERTOWN	16	E	
20051	WPBT	FL	MIAMI	02	E	
20051	WPBY	WV	HUNTINGTON	33	Е	
20051	WPCB	PA	GREENSBURG	40		R
20051	WPDE	SC	FLORENCE	15	N	A
20051	WPGA	GA	PERRY	58	N	Α
20051	WPGH	PA	PITTSBURGH	53	l	F
20051	WPHL	PA	PHILADELPHIA	17		Υ
20051	WPIX	NY	NEW YORK	11	I	С
20051	WPMY	PA	PITTSBURGH	22	I	Y
20051	WPNE	WI	GREEN BAY	38	E	
20051	WPSD	KY	PADUCAH	06	N	N
20051	WPSG	PA	PHILADELPHIA	57	I	С
20051	WPSX	PA	CLEARFIELD	03	E	
20051	WPTO	ОН	OXFORD	14	E	
20051	WPTY	TN	MEMPHIS	24	N	Α
20051	WPVI	PA	PHILADELPHIA	06	N	Α
20051	WPXD	MI	ANN ARBOR	31	l	X
20051	WPXE	WI	KENOSHA	55	l	X
20051	WPXI	PA	PITTSBURGH	11	N	N
20051	WPXX	TN	MEMPHIS	50	1	Y
20051	WQAD	IL	MOLINE	08	N	A
Z003 I		i iL	INIOPIIAE	1 00	I N	

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	WQED .	PA	PITTSBURGH	13	E	
20051	WQEX	PA	PITTSBURGH	16	l	Н
20051	WQOW	WI	EAU CLAIRE	18	N	Α
20051	WQRF	IL	ROCKFORD	39		F
20051	WRC	DC	WASHINGTON	04	N	N
20051	WREG	TN	MEMPHIS	03	N	С
20051	WREX	IL	ROCKFORD	13	N	N
20051	WRIC	VA	PETERSBURG	08	N	Α
20051	WROC	NY	ROCHESTER	08	N	С
20051	WSAW	WI	WAUSAU	07	N	С
20051	WSAZ	WV	HUNTINGTON	03	N	N
20051	WSBE	RI	PROVIDENCE	36	E	
20051	WSBK	MA	BOSTON	38	.	
20051	WSBT	IN	SOUTH BEND	22	N	С
20051	WSEE	PA	ERIE	35	N	С
20051	WSFA	AL	MONTGOMERY	12	N	N
20051	WSHM-	MA	SPRINGFIELD	67	L	С
20051	WSKG	NY	BINGHAMTON	46	E	
20051	WSKY	NC	MANTEO	4	l	
20051	WSMH	MI	FLINT	66		F
20051	WSMV	TN	NASHVILLE	04	N	N
20051	WSOC	NC	CHARLOTTE	09	N	A
20051	WSPA	SC	SPARTANBURG	07	N	C
20051	WSPX	NY	SYRACUSE	56	i	X
20051	WSRE	FL	PENSACOLA	23	E	
20051	WSTM	NY	SYRACUSE	03	N	N
20051	WSYT	NY	SYRACUSE	68		F
20051	WSYX	ОН	COLUMBUS	06	N	A
20051	WTAE	PA	PITTSBURGH	04	N	A
20051	WTAJ	PA	ALTOONA	10	N	C
20051	WTBS	GA	ATLANTA	17	1	
20051	WTGL	FL	LEESBURG	45	i i	R
20051	WTGS	SC	HARDEEVILLE	28	i	F
20051	WTMJ	WI	MILWAUKEE	04	N	, N
20051	WTRF	W	WHEELING	07	N	C
20051	WTSF	KY	ASHLAND	61	1	<u> </u>
20051	WTSN	IN	EVANSVILLE	63	Ĺ	Υ
20051	WTTW	IL IL	CHICAGO	11	Ē	
	WTTX-	NY	ELMIRA	30	L	
20051 20051	WTVF	TN	NASHVILLE	05	N	С
		NY	SYRACUSE	05	N	C
20051	WTVH	NC NC	CHARLOTTE	42	E	
	WTVI			17	<u> </u>	Α -
20051	WTVO	IL VA	ROCKFORD	06	N N	C
20051	WTVR		RICHMOND DETROIT	56	E E	<u> </u>
20051	WTVS	MI		20		С
20051	WTWB	NC DA	LEXINGTON			F
20051	WTXF	PA	PHILADELPHIA	29		Y
20051	WUAB	OH	LORAIN	43	<u> </u>	F
20051	WUHF	NY	ROCHESTER	31	l	
20051	WUNI	MA	WORCESTER	27		S
20051	WUPA	GA	ATLANTA	69		C
20051	WUPN	NC	GREENSBORO	48		Y
20051	WUSA	DC	WASHINGTON	09	N.	C
20051	WUTB	MD	BALTIMORE	24	l l	Υ

ACCT-PD	CALL-REPORTED	CALL-STATE	CALL-CITY	СН	STATION-TYPE	STATION-SUBTYPE
20051	WUTF	MA	MARLBOROUGH	66	1	S
20051	WUTR	NY	UTICA	20	N	Α
20051	WUTV	NY	BUFFALO	29	I	F
20051	WUVG	GA	ATHENS	34		S
20051	WVCY	WI	MILWAUKEE	30		R
20051	WVIA	PA	SCRANTON	44	Е	
20051	WIR	VA	CHARLOTTESVILLE	29	N	N
20051	WVPT	VA	STAUNTON	51	E	
20051	WVTB	VT	ST JOHNSBURY	20	Е	
20051	WVTV	WI	MILWAUKEE	18	ı	С
20051	WWBT	VA	RICHMOND	12	N	N
20051	WWCP	PA	JOHNSTOWN	08	· <b>I</b>	F
20051	WWDP	MA	NORWELL	46		
20051	WWJ	MI	DETROIT	62	N	С
20051	WWL	LA	NEW ORLEANS	04	N	C
20051	VVVMT	MI	KALAMAZOO	03	N	С
20051	WWNY	NY	CARTHAGE	07	N	C
20051	WWOR	NJ	SECAUCUS	09	l	Υ
20051	WWSI	NJ	ATLANTIC CITY	62	l	S
20051	WWWB	SC	ROCK HILL	55	l	В
20051	WXIA	GA	ATLANTA	11	N	N
20051	WXIX	KY	NEWPORT	19		F
20051	WXXI	NY	ROCHESTER	21	E	
20051	WXYZ	MI	DETROIT	07	N	Α
20051	WYDN	MA	WORCESTER	48	Ε	
20051	WYES	LA	NEW ORLEANS	12	E	
20051	WYOU	PA	SCRANTON	22	N	С
20051	WZTV	TN	NASHVILLE	17		F

#### **APPENDIX B**

## REBUTTAL TESTIMONY OF

MARSHA KESSLER

#### **APPENDIX B**

**COMPENSABLE v NON-COMPENSABLE** 

339,670

100.0%

329,398 100.0%

	PROGRAMMING			
	2004		2005	
	_ MINUTES	SHARE	MINUTES	SHARE
Total Broadcast Time, Sports Programs	855,636	100.0%	894,379	100.0%
Less, ABC/CBS/NBC Net Sports Programs (i.e. Not Compensable)	_ (526,238)	61.5%	(554,709)	62.0%
Total Broadcast Time, Compensable Sports Programs	329,398	38.5%	339,670	38.0%
	PROGRA	AMMING CLAIN	F COMPENS AMONG PH MANTS	ASE 1
Total Broadcast Time, Sports Programs, Canadian Claimants		AMMING CLAIN 8.0%	<b>AMONG PH MANTS</b> 21,179	6.2%
Total Broadcast Time, Sports Programs, Canadian Claimants Total Broadcast Time, Sports Programs, Comm'l Tv Claimants	PROGRA	AMMING CLAIN	AMONG PH	6.2% 8.7%
· · · · · · · · · · · · · · · · · · ·	26,316	AMMING CLAIN 8.0%	<b>AMONG PH MANTS</b> 21,179	6.2%

	NON-COM	PENSABLE, NON-JSC SPORTS
Total Broadcast Time, Network Sports Programs (i.e. Not Compensable)	526,238	554,709
Total Broadcast Time, Sports Programs, Canadian Claimants	26,316	21,179
Total Broadcast Time, Sports Programs, Comm'l Tv Claimants	37,184	29,700
Total Broadcast Time, Sports Programs, Program Suppliers	168,472	180,830_
Total Broadcast Time, Non-JSC Sports	758,210	786,418
Share Of Total Broadcast Time, Non-Compensable, Non-JSC Sports	88.6%	87.9%

**Total Allocation Of Compensable Sports Time** 

#### **DECLARATION OF MARSHA E. KESSLER**

I declare under penalty of perjury that the foregoing rebuttal testimony is true and correct and of my personal knowledge.

Executed on December 11, 2009.

Marsha E. Kessler

# THE DIMINUTION OF LIVE PROFESSIONAL TEAM SPORTS PROGRAMMING CARRIED ON DISTANT SIGNALS IN THE BORTZ SURVEYS AND NIELSEN STUDIES

PREPARED BY:

JOHN MANSELL ASSOCIATES, INC. 1093 LORAN COURT GREAT FALLS, VA 22066-1533 DECEMBER 11, 2009

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#### I. Introduction

My name is John Mansell, Jr. I am President/CEO of John Mansell Associates, Inc. I have over 34 years of experience analyzing sports media rights, franchise values and sports networks, including over 20 years as the senior analyst at Kagan Research, where I was responsible for writing and editing the *Media Sports Business* newsletter. I provided direct testimony in this proceeding regarding the migration of live professional team sports programming from broadcast television to cable and satellite television and to other media.<sup>1</sup> That testimony also contains a detailed description of my background and experience.

#### II. Purpose Of Testimony

In the direct phase of this proceeding, James Trautman of Bortz Media & Sports Group, Inc. ("Bortz") presented the results of a survey of cable system employees for the years 2004 and 2005, which I will refer to as the Bortz Report.<sup>2</sup> The Bortz Report included tables that tabulated the survey responses of the cable operator surveys conducted by Bortz and predecessor firms from 1978 through 2005, as well as other non-Bortz surveys within the same period.<sup>3</sup> The Bortz surveys purport to measure

<sup>&</sup>lt;sup>1</sup> PS Exhibit 6.

<sup>&</sup>lt;sup>2</sup> SP Exhibit 2.

<sup>&</sup>lt;sup>3</sup> SP Exhibit 2 at 22-23 (Tables III-1 and III-2).

"how cable operators valued, on a relative basis, the different categories of non-network distant signal television programming that they carried in those years."

Mr. Trautman testified that "it is useful to compare the results over the years to understand trends in response patterns," and that "the consistency of the survey results over time—is an indicator of the reliability of the survey."

Counsel for Program Suppliers asked me to analyze trendlines for the following: (1) live professional team sports shown on the distant signals carried by cable systems responding to the Bortz surveys for the years 1998-2005; (2) live professional team sports shown on the distant signals that were included in the study samples for the 1998, 1999, 2004 and 2005 Nielsen Viewing Studies ("Nielsen Studies") presented by Program Suppliers in the 1998-99 cable distribution proceeding and in this proceeding, respectively; and (3) subscriber instances, as compiled by Cable Data Corporation, for the distant signals appearing both in the Bortz surveys and the Nielsen Studies samples in 1998, 1999, 2004, and 2005. I understand from counsel that this undertaking is intended to provide a context for the Copyright Royalty Judges to evaluate the consistency of the

<sup>&</sup>lt;sup>4</sup> SP Exhibit 2 at 1-2.

<sup>&</sup>lt;sup>5</sup> SP Exhibit 2 at 22.

<sup>&</sup>lt;sup>6</sup> Tr. at 110:5-7 (Trautman).

results reported in Tables III-1 and III-2 of the Bortz Report. I performed this analysis only for Major League Baseball ("MLB"), the National Basketball Association ("NBA"), and the National Hockey League ("NHL"). I did not perform such an analysis for the National Football League ("NFL") or the National Collegiate Athletic Association ("NCAA") sports.

#### III. Executive Summary

There was no significant change in the share allocated to live professional team sports in the Bortz surveys conducted in 1998 through 2005. There was no significant change in the number of distant stations in the Bortz surveys samples that carried live professional team sports programming from 1998 to 2005. The number of live professional team sports games appearing on the distant signals carried by the Bortz survey respondents declined by approximately 32% between the 1997-98 season and the 2004-05 season. The average number of games carried per station for the same period declined by 48%. When the analysis is limited to the five distant signals carrying live professional team sports programming that appeared in each of the Bortz surveys conducted between 1998 and 2005 (KCAL, WGN, WPSG, WSBK, and WUAB), the

number of live professional team sports games declined by more than 36%.<sup>7</sup>

Similarly, there was no significant change in the number of distant stations that carried live professional team sports programming from 1998 to 2005 in the Nielsen Studies samples. The number of live professional team sports games carried on the distant signals included in the Nielsen Studies declined by approximately 44% between 1998 and 2005. The average number of games carried per station for those same signals declined by 55%.

l also examined a combination of the signals used in the Bortz surveys and the Nielsen Studies. Likewise, the number of live professional team games carried by stations in the combined list declined by about 34% and the average number of games per station dropped 44%.

<sup>&</sup>lt;sup>7</sup> All of these stations were also included in the Nielsen data each year except that WPSG was not included in 1998.

<sup>&</sup>lt;sup>8</sup> The analysis focuses on sports "flagship" television stations, namely the team's primary station in the team's home market that produces live game telecasts and feeds them to affiliates. In many cases, the term "flagship" may no longer apply because cable regional sports networks often hold exclusive rights and in some cases may even produce games carried by the former flagship television station. Also, this analysis does not include national MLB telecasts that aired on the FOX network, which remained flat between 1998-99 and 2004-05. See PS Exhibit 6 at 19-20.

## IV. Live Professional Team Sports on Distant Signals Carried By Bortz Survey Respondents Between 1998 and 2005

The Bortz Surveys conducted for the years 1998 through 2005 allocated the following values to live professional and college team sports:

Table 1

BORTZ SURVEY VALUES FOR LIVE PROFESSIONAL TEAM SPORTS						
YEAR	VALUE					
1998	37.0%					
1999	38.8%					
2000	35.4%					
2001	35.4%					
2002	36.2%					
2003	37.8%					
2004	33.5%					
2005	36.9%					
Source: SP Exhibit 2 at 23.						

As you can see from this table, there was no significant change in the value allocated to live professional and college team sports by Bortz survey respondents for the 1998 through 2005 survey years.

Using discovery materials the Joint Sports Claimants provided to

Program Suppliers, I compiled lists of the unique distant signals carried by
cable systems responding to the Bortz survey in each survey year from

1998 through 2005 ("Bortz Sample Stations"). A list of the Bortz Sample Stations for each of these years is attached to my testimony as Appendix A. I used data from Kagan's *Media Sports Business* newsletters to determine the number of live NBA, MLB and NHL games carried on each distant signal for the eight sports seasons between 1997-98 and 2004-05. I aggregated the results and calculated the percentage changes in carriage patterns.

Table 2 shows the total number of Bortz Sample Stations that carried live NBA, MLB and/or NHL games from 1997-98 to 2004-05. With a few exceptions, there was little change in the number of Bortz Sample Stations carried in each season.

Table 2

	Tubic 2	·						
NUMBER OF BORTZ SAMPLE STATIONS CARRYING NBA, MLB AND NHL GAMES								
Year NBA MLB NHL								
1997-98	12	14	5					
1998-99	5	17	5					
1999-2000	11	13	6					
2000-01	7	19	8					
2001-02	8	12	5					
2002-03	10	15	4					
2003-04	15	17	5					
2004-05	13	15	0					
│ │ © John Mans	ell Assoc	iates, 200	)9					

<sup>&</sup>lt;sup>9</sup> Sports seasons tend to straddle calendar years, while the Bortz Report and the Nielsen Studies cover calendar years. Game data is combined into the year with the majority of games. For example, 2003-04 games are included in the 2004 calendar year even though some games occurred in the fourth quarter of 2003. Notwithstanding, the downward trend in carriage of live professional sports team games on distant signals over the years is easily discernible.

Table 3 shows that the total number of live MLB, NBA and NHL games carried on Bortz Sample Stations declined by 32.4%, from a total of 1,278 games in 1997-98 to 864 games in 2004-05. There were zero NHL games in 2004-05 due to the NHL lockout that season.

Table 3

TOTAL NBA, MLB AND NHL GAMES ON DISTANT TV STATIONS INCLUDED IN BORTZ SAMPLE STATIONS						
Year	NBA	MLB	NHL	Total		
1997-98	380	739	159	1,278		
1998-99	172	943	128	1,243		
1999-2000	294	687	151	1,132		
2000-01	227	906	155	1,288		
2001-02	205	559	115	879		
2002-03	219	528	58	805		
2003-04	415	592	84	1,091		
2004-05	254	610	0	864		
8-yr. % Chg.	-33.2%	-17.5%	n.a.	-32.4%		
n.anot applica	able					
© John Manse	II Associate	es, 2009				

During the period from 1997-98 to 2004-05, the number of NBA games on Bortz Sample Stations declined by 33.2% and the number of MLB games dropped by 17.5%. From 1997-98 to 2003-04, the number of NHL games slid 47.2%.

Table 4 shows that the number of games per station for the Bortz
Sample Stations games also trended downward. The total number of

NBA, MLB and NHL games per station for those stations declined by 48.2% from 116.3 games per station in 1997-98 to 60.2 games per station in 2004-05.

Table 4

GAMES PER STATION FOR BORTZ SAMPLE STATIONS CARRYING GAMES						
Year	NBA	MLB	NHL	Total		
1997-98	31.7	52.8	31.8	116.3		
1998-99	34.4	55.5	25.6	115.5		
1999-2000	26.7	52.8	25.2	104.7		
2000-01	32.4	47.7	19.4	99.5		
2001-02	25.6	46.6	23.0	95.2		
2002-03	21.9	37.7	14.5	74.1		
2003-04	27.7	34.8	16.8	79.3		
2004-05	19.5	40.7	-	60.2		
8-yr. Chg.	-38.5%	-23.0%	n.a.	-48.2%		
n.anot app	n.anot applicable					
© John Mansell Associates, 2009						

Table 5 shows the results of my examination of the five distant signals that appeared in each Bortz survey sample from 1998 to 2005. That examination revealed a significant dropoff in carriage of NBA, MLB and NHL games on these signals. These five stations recorded a combined 185-game (36.6%) decline in the number of games carried during the eight-year period analyzed, dropping from 506 games to 321

games. Two of the stations experienced declines of over 60%, and two others more than 30%.

Table 5

			<del>ubio 0</del>				
TOTAL NBA, MLB AND NHL GAMES CARRIED							
	KCAL	WGN	WPSG	WSBK	WUAB	TOTAL	
1997-98	138	179	21	78	90	506	
1998-99	101	170	182	36	86	575	
1999-00	132	132	101	40	98	503	
2000-01	116	124	79	25	100	444	
2001-02	90	122	59	26	25	322	
2002-03	97	124	61	25	20	327	
2003-04	102	119	63	24	30	338	
2004-05	86	124	53	28	30	321	
8-Yr. Chg.	-37.7%	-30.7%	152.4%	-64.1%	-66.7%	-36.6%	
© John Mansell Associates, 2009							

# V. Live Professional Team Sports on Distant Signals in the 1998,1999, 2004 and 2005 Nielsen Viewing Studies

Similar to the analysis of the Bortz surveys, using data from Kagan's *Media Sports Business* newsletters, I examined local TV carriage of NBA, MLB and NHL games on stations used in the Nielsen Studies for 1998, 1999, 2004, and 2005 ("Nielsen Sample Stations"). A list of the Nielsen Sample Stations for each of these years is attached to my testimony as Appendix B.

Table 6 shows the total number of Nielsen Sample Stations that carried live NBA, MLB and/or NHL games in 1997-98, 1998-99, 2003-04 and 2004-05. As with the Bortz Sample Stations, the number of Nielsen

Sample Stations carrying NBA, MLB and/or NHL games remained relatively flat across the periods I examined.

Table 6

NUMBER STATIONS GAMES	· · · · · · ·		SAMPL	E	
Year	NBA	MLB	NHL	Total	
1997-98	9	12	4	25	
1998-99	8	13	7	28	
2003-04	9	14	2	25	
2004-05	10	11	0	21	
© John Mansell Associates, 2009					

Table 7 shows that the total number of live MLB, NBA and NHL games carried by stations included in the Nielsen Sample Stations declined 44.0% from 1,115 games in 1997-98 to 624 games in 2004-05. There were zero NHL games in 2004-05 due to the NHL lockout that season.

Table 7

TOTAL LOCAL T STATIONS	V GAMES	S-NIELSEI	N SAMF	PLE		
Year	NBA	MLB	NHL	Total		
1997-98	317	669	129	1,115		
1998-99	245	868	162	1,275		
2003-04	237	553	29	819		
2004-05	217	407	0	624		
% Chg.						
97-98 to 04-05	-31.5%	-39.2%	n.a.	-44.0%		
n.anot applicab	le					
2004-05: NHL ha	d 0 games	3				
1998-99: Short NBA season						
© John Mansell Associates, 2009						

During the period from 1997-98 to 2004-05, the number of NBA games declined by 31.5% and the number of MLB games dropped by 39.2%. From 1997-98 to 2003-04, the number of NHL games fell 77.5%.

Table 8 shows that the number of games per station for the Nielsen Sample Stations carrying games also trended downward. The total number of NBA, MLB and NHL games per station declined by 52.4% from 123.2 games per station in 1997-98 to 58.7 games per station in 2004-05.

Table 8

GAMES PER STATION FOR NIELSEN SAMPLE STATIONS CARRYING GAMES						
Year 1997-98 1998-99	NBA 35.2 30.6	MLB 55.8 66.8	NHL 32.3 23.1	Total 123.2 120.5		
2003-04 2004-05	26.3 21.7	39.5 37.0	14.5	80.3 58.7		
8-yr. Chg38.4% -33.6% n.a52.4%						
n.anot applicable © John Mansell Associates, 2009						

# VI. Live Professional Team Sports and Subscriber Instances for Combined Bortz Sample Stations and Nielsen Sample Stations, 1998-2005

Cable Data Corporation provided data on subscriber instances<sup>10</sup> for the combined Bortz Sample Stations and Nielsen Sample Stations ("Nielsen/Bortz Stations") for 1998, 1999, 2004, and 2005 (*i.e.*, stations unique to both samples for the relevant years). Table 9 below shows that in those years, the number of Nielsen/Bortz Stations distant signals carrying live professional team sports ranged from 26 to 36 and averaged approximately 31 stations. There were approximately 41.6 million subscriber instances in 2005, only 0.5% more than in 1998.

<sup>&</sup>lt;sup>10</sup> Subscriber instances refer to the number of subscribers with access to each distant signal.

Table 9<sup>11</sup>

	Sports Carriers	Total Sports Station Subscribers	Sports Subs/ Sports Carrier		
1997-98	28	41,385,895	1,478,068		
1998-99	26	41,218,094	1,585,311		
2003-04	36	41,299,145	1,147,198		
2004-05	33	41,609,676	1,300,302		
© John Mansell Associates, 2009					

# VII. Summary of Findings

By any measure, there has been a significant decline in the amount of live professional team sports programming carried on distant signals between 1998 and 2005. This decline is an important consideration providing context for the Copyright Royalty Judges in making a determination about the consistency and reliability of the Bortz survey over time. As shown in Table 10 below, taking an average of my analyses, between 1997-98 and 2004-05, the percentage decline in the total number of NBA, MLB and NHL games carried on distant signals was 37.7%.

During that same period, the average percentage decline in the number of games carried per station carrying games was 46.6%.

<sup>&</sup>lt;sup>11</sup> Analysis is limited to 1998, 1999, 2004, and 2005 because there were no Nielsen Studies presented in a distribution proceeding for 2000 through 2003. This analysis also does not include live professional team sports that aired during the 2003-04 season on KSTP, WFTC, and WSBK due some unresolved discrepancies with the Settling Parties' discovery data as maintained by Cable Data Corporation.

Table 10

PERCENTAGE CHANGES 1997-98 vs. 2004-05						
Total Number of Games Games/Station Carrying Games © John Mansell Associates, 2009	Bortz Sample -32.4% -48.2%	Five Leading Dist. Signals -36.6%	Nielsen Sample -44.0% -55.0%	Average Change -37.7% -46.6%		

Thank you for the opportunity to participate in this proceeding.

# APPENDIX A

# REBUTTAL TESTIMONY OF

JOHN MANSELL

CBET	WBAL	WIS	WPSX
CKSH	WBBM	WISC	WPTA
KABC	WBFF	WISH	WPVI
KARE	WBRE	WISN	WPXN
KATU	WBRZ	WITN	WQED
KCAL	WCAL	WIXT	WQRF
KCET	WCAU	WJAR	WREX
KCNC	WCAV	WJZ	WRTV
KCOP	WCBS	WKBD	WSAZ
KDFY	wcco	WKRN	WSB
KERA	WCHS	WKTV	WSBK
KEZI	WCNY	WKU	WSEE
KFXK	WCPB	WLAE	WSKG
KGO	WCPO	WLAX	WTAE
KHTV	WCVB	WLIW	WTGI
KICU	WDBJ	WLNE	WTIU
KLAX	WDCN	WLPB	WTMJ
KLGT	WDCQ	WLUK	WTOG
KMGH	WDPB	WLVI	WTTW
KMSP	WDSU	WLYH	WTVD
KNBC	WEWS	WMAQ	WTVO
KOIN	WFFT	WMPB	WTVT
KPBS	WFLA	WMTV	WTXF
KPTV	WFLD	WMVT	WUAB
KQED	WFMZ	WNBC	WUHF
KRMA	WFTC	WNCT	WUPL
KRON-	WFYI	WNED	WUTR
KSMN	WGAL	WNEP	WUTV
KSTP	WGBH	WNET	WVAH
KTCA	WGBY	WNMU	WVIA
KTLA	WGKI	WNUV	WVLA
KTNC	WGN	WNVC	WVTV
KTRK	WGNX	WNYO	WWOR
KTVU	WHA	WNYW	WXFV
KUHT	WHEC	WOR	WXIA
KUSA	WHMM	WORK	WXIN
KUSM	WHNO	WOWK	WXIX
KVAL	WHWC	WPGH	WXTV
KWGN	WHYY	WPHL	WXXI
KYW	WICZ	WPHZ	WYBE
WAFB	WIFR	WPIX	WYOU
WAGA	WIPB	WPSG	WYTV

CBLT         KTWO         WGN         WQRF           CBMT         KUED         WGNX         WRAL           CFCF         KUSA         WHMM         WRAN           CFTO         KWGN         WHYY         WREX           CHCH         KWGN         WHYY         WREZ           CHCH         KWTV         WICZ         WRIC           CHCH         KWTV         WIPB         WSB           K168P         KYW         WIPB         WSB           K44CN         WABC         WIS         WSBK           K44CN         WABC         WIS         WSBK           K4ACN         WABC         WIS         WSBK           KABC         WABM         WISN         WSEE           KADN         WAGA         WXT         WSMW           KARC         WALA         WJET         WTHR           KATY         WBAL         WJZ         WTKR           KARK         WAVY         WJET         WTMJ           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCBS         WBBM         WKTV         WTV	CBFT	KTVU	WGEM	WQED
CFCF         KUSA         WHMM         WRAN           CFTO         KWGN         WHYY         WREX           CHCH         KWTV         WICZ         WRIC           CHCH         KWTV         WICZ         WRIC           CHCH         KWTV         WIFR         WRLH           K16BP         KYW         WIPB         WSBK           K44CN         WABC         WIS         WSBK           K44CN         WABC         WIS         WSBK           K4ACN         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSMW           KADN         WAGA         WIXT         WSMW           KATY         WALA         WJEB         WSWB           KATY         WBAL         WJZ         WTKR           KATY         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMT           KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTFF           KCOP         WBPT         WLAX         WTVD           KDD         WBRA         WLUK         WTVF	CBLT	KTWO	WGN	WQRF
CFTO         KWGN         WHYY         WREX           CHCH         KWTV         WICZ         WRIC           CIII         KXAS         WIFR         WRLH           K16BP         KYW         WIPB         WSB           K44CN         WABC         WIS         WSBK           K44CN         WABC         WIS         WSBK           KABC         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSMW           KADN         WAGA         WIXT         WSMW           KARK         WALA         WJEB         WSWB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKRT         WTOV           KCET         WBFF         WKRN         WTTF           KCOP         WBPT         WLAX         WTVD           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLVI         WTVA	CBMT	KUED	WGNX	WRAL
CHCH         KWTV         WICZ         WRIC           CIII         KXAS         WIFR         WRLH           K16BP         KYW         WIPB         WSB           K44CN         WABC         WIS         WSBK           KABC         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSWB           KADN         WAGA         WIXT         WSWB           KATV         WALA         WJEB         WSWB           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTFF           KCOP         WBPT         WLAX         WTVC           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLUV         WTVO           KERA         WBRZ         WMAQ         WTVR           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WJB           KIRO         WCNY         WNET         WCM	CFCF	KUSA	WHMM	WRAN
CIII         KXAS         WIFR         WRH           K18BP         KYW         WIPB         WSB           K44CN         WABC         WIS         WSBK           KABC         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSMV           KAET         WALA         WJEB         WSWVB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WJZ         WTMJ           KCAL         WBAL         WKRD         WTMJ           KCBS         WBBM         WKRD         WTMJ           KCBS         WBBM         WKRN         WTF           KCOC         WBMG         WKTV         WTVC           KCOOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KETA         WBZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KING         WCAU         WNDY         WAB	CFTO	KWGN	WHYY	WREX
K16BP         KYW         WIPB         WSB           K44CN         WABC         WIS         WSBK           KABC         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSMV           KAET         WALA         WJEB         WSWB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTF           KCOC         WBMG         WKTV         WTV           KCOP         WBPT         WLAX         WTVD           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLVI         WTVO           KERA         WBZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCNY         WNBT         WUMB           KIRO         WCNY         WNBT         WUMD	СНСН	KWTV	WICZ	WRIC
K44CN         WABC         WIS         WSBK           KABC         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSMV           KAET         WALA         WJEB         WSWB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCBS         WBBM         WKTV         WTV           KCOC         WBMG         WKTV         WTV           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLUK         WTVF           KDVR         WBRA         WLUK         WTVF           KETA         WBZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF	CIII	KXAS	WIFR	WRLH
KABC         WABM         WISN         WSEE           KADN         WAGA         WIXT         WSMV           KAET         WALA         WJEB         WSWB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTFF           KCOC         WBMG         WKTV         WTVC           KCOP         WBPT         WAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCNY         WNET         WUCM           KIRO         WCNY         WNET         WUCM           KMBC         WCNY         WNET         WUCM           KMGH         WDAM         WNUV         WIT	K16BP	KYW	WIPB	WSB
KADN         WAGA         WIXT         WSMV           KAET         WALA         WJEB         WSWB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCBS         WBBM         WKRN         WTFF           KCOC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRZ         WMAQ         WTVR           KETA         WBZ         WMAQ         WTVZ           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNDY         WUAB           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUPN           KMGH         WDAM         WNUV         WUPN           KMOS         WDPB         WNVC         WUTA	K44CN	WABC	WIS	WSBK
KAET         WALA         WJEB         WSWB           KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCBS         WBFF         WKRN         WTFF           KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCNY         WNET         WUMN           KMGH         WDAM         WNUV         WUPN           KMGH         WDAM         WNUV         WUTN           KMOV         WDPB         WNVC         WTT	KABC	WABM	WISN	WSEE
KARK         WAVY         WJET         WTHR           KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCBS         WBFF         WKRN         WTFF           KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUNP           KMGH         WDAM         WNUV         WUTN           KMOV         WDPB         WNVC         WUTR           KMOV         WDPS         WOLO         WCC           KMSP         WDSU         WVTV           KNBC	KADN	WAGA	WIXT	WSMV
KATV         WBAL         WJZ         WTKR           KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTRF           KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVT           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUNP           KMGH         WDAM         WNUV         WUTR           KMOV         WDPS         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSU         WOR         WVTM           KNBC         WDSU         WOR         WVTM	KAET	WALA	WJEB	WSWB
KCAL         WBAL         WKBD         WTMJ           KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTRF           KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRA         WLVI         WTVO           KERA         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVT           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUNP           KMGH         WDAM         WNUV         WUTR           KMOV         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSU         WVTW           KNBC         WDSU         WVTW           KPLR         WFAA	KARK	WAVY	WJET	WTHR
KCBS         WBBM         WKBT         WTOV           KCET         WBFF         WKRN         WTRF           KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUPN           KMGH         WDAM         WNUV         WUPN           KMGH         WDAM         WNUV         WUTR           KMGH         WDAM         WNUV         WUTR           KMOV         WDPB         WNVC         WUTR           KMOV         WDPS         WVTM           KNBC         WDSU         WVTM           KPLR         WFAA	KATV	WBAL	WJZ	WTKR
KCET         WBFF         WKRN         WTRF           KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDSD         WBRA         WLVI         WTVO           KDRA         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCONY         WNET         WUCM           KMBC         WCPB         WNOL         WUTP           KMGH         WDAM         WNUV         WUTR           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSU         WVTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWL           KTCI	KCAL	WBAL	WKBD	WTMJ
KCNC         WBMG         WKTV         WTVC           KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUPN           KMGH         WDAM         WNUV         WUTR           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSI         WOR         WVTM           KNBC         WDSU         WVTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWL           KTCI         WFUM         WPSG         WTV           KTLA         WFXT         WYES         WXIA           KTNC	KCBS	WBBM	WKBT	WTOV
KCOP         WBPT         WLAX         WTVD           KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUNP           KMGH         WDAM         WNUV         WUPN           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSI         WOR         WVTM           KNBC         WDSU         WOSU         WVTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWC           KTCI         WFUM         WPSG         WTV           KTLA         WFXT         WPSX         WXIA           KTNC         WGBH         WPTD         WYES	KCET	WBFF	WKRN	WTRF
KDSD         WBRA         WLUK         WTVF           KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUPN           KMGH         WDAM         WNUV         WUPN           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSI         WOR         WVTM           KNBC         WDSU         WOSU         WVTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWL           KRMA         WFRV         WPIX         WWOR           KTLA         WFXT         WPSX         WXIA           KTLA         WGBH         WPTD         WYES	KCNC	WBMG	WKTV	WTVC
KDVR         WBRC         WLVI         WTVO           KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUPN           KMGH         WDAM         WNVC         WUTR           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSI         WOSU         WVTV           KNBC         WDSU         WVTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWL           KRMA         WFRV         WPIX         WWOR           KTCI         WFUM         WPSG         WYTV           KTLA         WFXT         WPSX         WXIA           KTNC         WGBH         WPTD         WYES	KCOP	WBPT	WLAX	WTVD
KERA         WBRZ         WMAQ         WTVR           KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUNP           KMGH         WDAM         WNUV         WUPN           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSI         WOR         WYTM           KNBC         WDSU         WOSU         WYTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWL           KTCI         WFUM         WPSG         WYTV           KTLA         WFXT         WPSX         WXIA           KTNC         WGBH         WPTD         WYES	KDSD	WBRA	WLUK	WTVF
KETA         WBZ         WMPB         WTVZ           KETC         WCAU         WNBC         WTXF           KING         WCMU         WNDY         WUAB           KIRO         WCNY         WNET         WUCM           KMBC         WCPB         WNOL         WUNP           KMGH         WDAM         WNUV         WUPN           KMOS         WDPB         WNVC         WUTR           KMOV         WDPX         WOLO         WVEC           KMSP         WDSI         WOR         WYTM           KNBC         WDSU         WOSU         WVTV           KPLR         WFAA         WPBT         WWBT           KPTV         WFLD         WPHL         WWOR           KTCI         WFUM         WPSG         WWTV           KTLA         WFXT         WPSX         WXIA           KTNC         WGBH         WPTD         WYES	KDVR	WBRC	WLVI	WTVO
KETC WCAU WNBC WTXF KING WCMU WNDY WUAB KIRO WCNY WNET WUCM KMBC WCPB WNOL WUNP KMGH WDAM WNUV WUPN KMOS WDPB WNVC WUTR KMOV WDPX WOLO WVEC KMSP WDSI WOR WVTW KNBC WDSU WOSU WVTV KPLR WFAA WPBT WWBT KPTV WFLD WPHL WWL KRMA WFRV WPIX WOR KTCI WFUM WPSG WYTS KTLA WFXT WPSX WXIA KTNC WGBH WPTD WYES	KERA	WBRZ	WMAQ	WTVR
KING WCMU WNDY WUAB KIRO WCNY WNET WUCM KMBC WCPB WNOL WUNP KMGH WDAM WNUV WUPN KMOS WDPB WNVC WUTR KMOV WDPX WOLO WVEC KMSP WDSI WOR WYTM KNBC WDSU WOSU WYTV KPLR WFAA WPBT WWBT KPTV WFLD WPHL WWL KRMA WFRV WPIX WWOR KTCI WFUM WPSG WYTV KTLA WFXT WPSX WXIA KTNC WGBH WPTD WYES	KETA	WBZ	WMPB	WTVZ
KIRO WCNY WNET WUCM KMBC WCPB WNOL WUNP KMGH WDAM WNUV WUPN KMOS WDPB WNVC WUTR KMOV WDPX WOLO WVEC KMSP WDSI WOR WVTM KNBC WDSU WOSU WVTV KPLR WFAA WPBT WWBT KPTV WFLD WPHL WWL KRMA WFRV WPIX WOSO WWTV KTCI WFUM WPSG WVTV KTLA WFXT WPSX WXIA KTNC WGBH WPTD WYES	KETC	WCAU	WNBC	WTXF
KMBCWCPBWNOLWUNPKMGHWDAMWNUVWUPNKMOSWDPBWNVCWUTRKMOVWDPXWOLOWVECKMSPWDSIWORWVTMKNBCWDSUWOSUWVTVKPLRWFAAWPBTWWBTKPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KING	WCMU	WNDY	WUAB
KMGHWDAMWNUVWUPNKMOSWDPBWNVCWUTRKMOVWDPXWOLOWVECKMSPWDSIWORWVTMKNBCWDSUWOSUWVTVKPLRWFAAWPBTWWBTKPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KIRO	WCNY	WNET	WUCM
KMOSWDPBWNVCWUTRKMOVWDPXWOLOWVECKMSPWDSIWORWVTMKNBCWDSUWOSUWVTVKPLRWFAAWPBTWWBTKPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KMBC	WCPB	WNOL	WUNP
KMOVWDPXWOLOWVECKMSPWDSIWORWVTMKNBCWDSUWOSUWVTVKPLRWFAAWPBTWWBTKPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KMGH	WDAM	WNUV	WUPN
KMSPWDSIWORWVTMKNBCWDSUWOSUWVTVKPLRWFAAWPBTWWBTKPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KMOS	WDPB	WNVC	WUTR
KNBC WDSU WOSU WVTV KPLR WFAA WPBT WWBT KPTV WFLD WPHL WWL KRMA WFRV WPIX WWOR KTCI WFUM WPSG WWTV KTLA WFXT WPSX WXIA KTNC WGBH WPTD WYES	KMOV	WDPX	WOLO	WVEC
KPLRWFAAWPBTWWBTKPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KMSP	WDSI	WOR	WVTM
KPTVWFLDWPHLWWLKRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KNBC	WDSU	WOSU	WVTV
KRMAWFRVWPIXWWORKTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KPLR	WFAA	WPBT	WWBT
KTCIWFUMWPSGWWTVKTLAWFXTWPSXWXIAKTNCWGBHWPTDWYES	KPTV	WFLD	WPHL	WWL
KTLA WFXT WPSX WXIA KTNC WGBH WPTD WYES	KRMA	WFRV	WPIX	WWOR
KTNC WGBH WPTD WYES	KTCI	WFUM	WPSG	WWTV
	KTLA	WFXT	WPSX	WXIA
KTTV WGBX WPVI	KTNC	WGBH	WPTD	WYES
	KTTV	WGBX	WPVI	

CBMT	KOIN	KXVO	WFUM	WMVS	WTLH
K30AL	KOLN	KYW	WFYI	WMVT	WTMJ
K30BP	KOMO	WAAY	WGAL	WNBC	WTMU
KABC	KOPB	WABC	WGBA	WNED	WTOV
KADN	KPDX	WACY	WGBS	WNEM	WTTG
KARE	KPIX	WAFB	WGKI	WNEP	WTTW
KARK	KPRC	WAGA	WGN	WNET	WTVQ
KATU	KPTV	WALA	WGNX	UMMW	WTVR
KATV	KQED	WALV	WHA	WNOL	WTWC
KBSI	KRCB	WBAL	WHAG	WNPA	WTXF
KCAL	KRMA	WBAY	WHIZ	WNPB	WTXL
KCBS	KRON	WBDC	WHNO	WNYW	WUAB
KCET	KRSC	WBFF	WHP	WOLF	WUPL
KCNC	KRWG	WBKP	WHTM	WOWT	WUSA
KCOP	KSLA	WBPT	WISN	WPBT	WVBG
KDEB	KSMQ	WBRE	WITI	WPHL	WVIA
KERA	KSPR	WBRZ	WIWB	WPIX	WVLA
KETK	KSTP	WBZ	WJAC	WPMT	WVTV
KETV	KTCA	WCAU	WJAL	WPNE	WVUE
KEYC	KTCI	WCCB	WJLA	WPSD	WWBT
KEZI	KTEH	WCCO	WJNB	WPSG	WWL
KFVS	KTHV	WCET	WJRT	WPSX	WWOR
KGW	KTLA	WCEU	WJZ	WPTD	WWPX
KHWB	KTNC	WCGV	WKBD	WPTY	WXIA
KING	KTTC	WCVE	WKBN	WPVI	WXIN
KITN	KTTV	WDAF	WKBT	WPXI	WXIX
KLGT	KTWU	WDAM	WKNO	WPXL	WXTF
KLKN	KTXA	WDCA	WKOI	WQEX	WYBE
KLRN	KUHT	WDJT	WKRN	WQOW	WYES
KMBC	KUON	WDKY	WKYT	WRC	WYMT
KMIZ	KUSA	WDSU	WLAE	WRTV	WYOU
KMSP	KVAL	WEUX	WLPB	WSBK	
KMTV	KWGN	WEYI	WLUK	WSEE	
KNBC	KXAS	WFAA	WLYH	WSWB	
KNLJ	KXLT	WFQX	WMAR	WTBS	
KNME	KXTX	WFTC	WMPB	WTIU	

CBET	KOCB	KWTV	WCTX	WHDH	WMAQ	WPSG	WTSF
CBFT	KOCO	KXAS	WCVB	WHNO	WMAR	WPSX	WTTV
CBMT	KOIN	KXTX	WCWB	WHP	WMC	WPTO	WTVA
CFCF	KOKH	KYW	WDAM	WHPN	WMDT	WPTZ	WTVE
CHLT	KOMO	WABC	WDBJ	WHTM	WMPB	WPVI	WTVG
CKSH	KPBS	WACY	WDCQ	WHUB	WMSM	WPXB	WTVI
CKWS	KPIX	WAFB	WDIV	WHWC	WMTV	WPXI	WTVO
KABC	KPLR	WAGA	WDRB	WHYY	WMUR	WPXL	WTVS
KAET	KPTV	WAIQ	WDSU	WIFR	WMVS	WQED	WTXF
KARK	KQED	WALA	WDWB	WIPB	WMVT	WQEX	WUAB
KATU	KRON	WANE	WEAU	WIS	WNBC	WQOW	WUAB
KATV	KRSC	WATE	WEDH	WISC	WNCT	WQRF	WUPL
KBHK	KSDK	WATM	WEHT	WISN	WNDS	WREX	WUPW
KBYU	KSHB	WAVE	WEKW	WITI	WNDU	WRIC	WUSA
KCAL	KSL	WBAL	WEMT	WIWB	WNEO	WROC	WUTF
KCBS	KSMQ	WBAY	WEUX	WIXT	WNEP	WRTV	WUTR
KCET	KSMS	WBBJ	WEVV	WJEB	WNET	WRYI	WVAH
KCNC	KSPR	WBBM	WEWS	WJLA	WNIN	WSAH	WVIA
KCNS	KSTS	WBFF	WFAA	WJMN	WNJS	WSAW	WVII
KCOP	KSTW	WBGU	WFFF	WJW	WNMU	WSAZ	WVIT
KCPT	KTCA	WBIR	WFIE	WJZ	WNOL	WSB	WVLA
KCRA	KTEC	WBKI	WFLD	WJZY	WNPA	WSBE	WVLT
KCTS	KTEH	WBKP	WFMZ	WKA	WNPB	WSBK	WVNY
KDEB	KTHV	WBNS	WFQX	WKAQ	WNVT	WSBT	WVPX
KDFW	KTLA	WBOC	WFUM	WKAR	WNVV	WSEE	WVTM
KDKA	KTNC	WBPX	WFWA	WKBD	OWNW	WSFA	WVTV
KDNL	KTRK	WBRC	WFXS	WKBN	WNYN	WSFJ	WVUE
KDSD	KTVI	WBRE	WFXT	WKBT	WNYW	WSKG	WWDP
KERA	KTVK	WBRZ	WFXV	WKJG	WNYZ	WSLS	WWL
KETC	KTVT	WBTV	WGAL	WKOI	WOET	WSPA	WWLP
KEZI	KTVU	WBZ	WGBA	WKOW	WOLF	WSPX	WWOR
KFOR	KTWU	WCAU	WGBH	WKRN	WOR	WSWB	WWTV
KGO	KTXA	WCAZ	WGBL	WKTV	WOWK	WSYX	WXIA
KICU	KUHT	WCBS	WGCL	WKYC	WPBT	-WTAE	WXIN
KION	KUID	WCCB	WGME	WLAE	WPBY	WTGS	WXIX
KMGH	KUSD	WCEU	WGN	WLBZ	WPCB	WTIV	WXXI
KMIZ	KUSK	WCFE	WGNS	WLKY	WPDE	WTMJ	WYBE
KMSP	KUSM	WCGV	WGTE	WLPB	WPGH	WTNH	WYES
KNBC	KVAL	WCHS	WGTV	WLUK	WPHL	WTOL	WYOU
KNLJ	KWET	WCNY	WHA	WLVI	WPIX	WTOV	
KNXV	KWGN	WCTI	WHAS	WLYH	WPNE	WTRF	

CBWT	KPRC	W4ICI	WFXT	WMAQ	WSJV
KABC	KPTV	WABC	WGBH	WMAR	WSMV
KADN	KQED	WADL	WGCL	WMAZ	WSWB
KAET	KRON	WALA	WGGB	WMTW	WSYX
KARK	KRSC	WATL	WGHT	WNAB	WTBS
KATU	KRWG	WBAL	WGME	WNBC	WTLJ
KATV	KSAWLP	WBBJ	WGN	WNDS	WTLW
KBHK	KSAX	WBNS	WGPX	WNDU	WTMJ
KCAL	KSMQ	WBNX	WGTV	WNEP	WTNZ
KCBS	KSMS	WBQC	WGTW	WNET	WTOG
KCET	KSNT	WBRE	WGVK	WNOL	WTOV
KCNS	KSTS	WBXX	WHA	WNPT	WTVF
KCOP	KSTV	WBZ	WHH	WNYW	WTVT
KCPM	KTCI	WCAU	WHME	WOOD	WTWB
KCTV	KTEH	WCAV	WHPN	WOTV	WTXF
KDSD	KTFTLP	WCCB	WIBW	WOWT	WUAB
KESD	KTHV	WCET	WISC	WPBF	WUNP
KETA	KTLA	WCFT	WISN	WPEC	WUPA
KETC	KTNC	WCIQ	WJAC	WPGA	WUPN
KETV	KTWU	WCSH	WJBK	WPHL	WUVG
KEZI	KTXA	WCVB	WJW	WPIX	WVTV
KFME	KTYO	WDAF	WJZ	WPMT	WWHO
KGO	KUED	WDEF	WKAQ	WPSG	WWJ
KICU	KUHT	WDIO	WKAR	WPTO	WWL
KION	KUSM	WDIV	WKBD	WPTV	WWMT
KIPT	KUTV	WDSU	WKBN	WPVI	WWOR
KLRN	KVAL	WDWB	WKOI	WPXB	WXIA
KMBC	KVIA	WEDW	WKRG	WPXK	WXIX
KMOV	KVII	WEIU	WKRN	WQAD	WXMI
KMSP	KVLY	WETA	WLIO	WQED	WXYZ
KMTV	KWCM	WEWS	WLLA	WSAH	WYBE
KMWB	KWGN	WFLA	WLS	WSBK	WYDN
KNBC	KWQC	WFLD	WLVI	WSBT	WYES
KOIN-TV	KWTV	WFLX	WLXI	WSEE	UOYW
KPIX	KYW	WFMZ	WLYH	WSFJ	WZPX

CBET	KSAT	WBVT	WGBA	WKRC	WPCB	WTVD
CHCH	KSDK	WBZ	WGBH	WKRG	WPGH	WTVE
CKSH	KTBY	WBZL	WGGS	WKRN	WPHL	WTVH
CKWS	KTCA	WCAU	WGME	WKTV	WPIX	WTVR
KABB	KTEJ	WCBS	WGN	WLIO	WPMT	WTVS
KABC	KTEL	WCCB	WGNT	WLS	WPNE	WTVZ
KAET	KTHV	WCET	WGTV	WLUK	WPSG	WTXF
KARK	KTLA	WCFE	WHA	WLVI	WPSX	WUAB
KATU	KTNC	WCGV	WHAG	WLYH	WPTO	WUNF
KATV	KTVI	WCHS	WHDH	WMAR	WPTZ	WUPV
KBFX	KTVK	WCNY	WHEC	WMDT	WPVI	WUSA
KBYU	KUED	WCPO	WHOH	WMHT	WQED	WUTF
KCAL	KUHT	WCSH	WHP	WMLW	WQOW	WUTR
KCBS	KUSA	WCVB	WHTM	WMPB	WQPX	WUXP
KCET	KUWB	WDAM	WHYY	WMTV	WRC	WVAH
KCNC	KVAL-TV	WDBT	WHYY- HD	WMTW	WRDW	WVCY
KCOP	KVIA	WDCA	WIAT	WMVR	WRIC	WVEC
KDKA	KVPT	WDIV	WICU	WMVS	WSAH	WVIA
KDNL	KWGN	WDJT	WICZ	WMVT	WSBK	WVNY
KENS	KWTV	WDSU	WIS	WNAB	WSEE	WVPT
KETA	KYW	WEDH	WISC	WNBC	WSFJ	WVTA
KETC	WABC	WEDW	WISN	WNDS	WSKG	WVTF
KEZI-TV	WABM	WENH	WITF	WNDU	WSLS	WVTV
KFOR	WACY	WENY	WITI	WNED	WSPX	WWBT
KING	WAIQ	WETA	WITN	WNEP	WSTM	WWDP
KIRO	WALA	WETM	WIWB	WNET	WSWB	WWHO
KLRN	WAPW	WEUX	WIXT	WNEU	WSYT	WWL
KMOV	WASV	WEWS	WJAC	WNNE	WSYX	WWOR
KNBC	WAVY	WFFF	WJAL	WNOL	WTAE	WWPB
KNME	WBAL	WFMZ	WJBK	WNTV	WTGS	WWPX
KNXV	WBAY	WFRV	WJEB	WNYE	WTIC	WXIX
KOAT	WBDC	WFSB	WJLA	WNYS	WTKR	WXYZ
KOIN-TV	WBNS	WFTC	WJW	WNYW	WTLW	WYDN
KPDX	WBOC	WFXS	WJZ	WOAI	WTMJ	WYES
KPLR	WBRE	WFXT	WKAQ	WOLF	WTOV	WZTV
KRMA	WBRZ	WFXV	WKBT	WOWK	WTTG	
KRWG	WBTV	WFYI		WPBS	WTTW	
			WKOI			

CBET	KQED	WAXN	WEEE	WITF	WMVS	WPXI	WUAB
CBLT	KREN	WBAL	WEKW	WITI	WMVT	WPXP	WUPA
CBMT	KRWG	WBAY	WENH	WITN	WNAB	WPXV	WUPN
CFTO	KSAT	WBDC	WETK	WIUP	WNBC	WQED	WUSA
CHTV	KSAX	WBGN	WEUX	WIWB	WNCT	WQEX	WUTF
CIII	KSDK	WBGU	WEWB	WIXT	WNDS	WQLN	WUTR
CKSH	KSPR	WBKB	WEYI	WJAC	WNDU	WQOW	WUVP
KABB	KTCA	WBKP	WFAA	WJAL	WNED	WRC	WUXP
KAET	KTCI	WBNS	WFFF	WJBK	WNEG	WRGB	WVAH
KAJB	KTEL	WBOY	WFLX	WJET	WNEM	WRIC	WVBK
KARE	KTNC	WBQC	WFQX	WJLA	WNEP	WSAW	WVBT
KATV	KTVD	WBRE	WFRU	WJMN	WNET	WSAZ	WVTA
KAWB	KTVK	WBTV	WFSB/ WFSBDT	WJRT	WNEU	WSB	WVNY
KCAL	KTVU	WBZ	WFTC	WJW	WNMU	WSBK	WVTV
KCCO	KTXA	WBZL	WFUM	WJZ	VMMV	WSBT	WWBT
KCEB	KUHT	WCAU	WFXP	WJZY	WNPA	WSEE	WWDP
KCEN	KUID	WCAX	WFXS	WKAR	WNPB	WSKG	WWJ
KCET	KUSA	WCCB	WFXT	WKBD	WNPT	WSKY	WWOR
KCNC	KVIA	WCEU	WFXV	WKBT	WNYA	WSMH	WWPX
KCOP	KVRR	WCFE	WGBA	WKMJ	WNYT	WSMV	WWSI
KCRG	KWBM	WCFN	WGBHLP	WKRN	WNYW	WSOC	WWTV
KCSO	KWGN	WCGV	WGCL	WKTV	WOAI	WSPA	WWWB
KDEB	KWTX	WCHS	WGME	WKYT	WOUB	WSYX	WXEL
KDKA	KWWL	WCIA	WGN	WLAJ	WOWK	WTAE	WXIA
KENS	KXAS	WCML	WGNT	WLEX	WPBN	WTBS	WXII
KERA	KXTX	WCMV	WGPX	WLNS	WPBS	WTCE	WXXA
KGAN	KYTV	WCNY	WGTV	WLRN	WPBT	WTCN	WXYZ
KLRN	KYTX	WCTI	WHAG	WLTV	WPBY	WTEN	WYBE
KMGH	KYW	WCVB	WHDH	WLUK	WPCB	WTMJ	WYDN
KMIZ	W3IBP	WCWB	WHNT	WLVI	WPDE	WTRF	WYDO
KMSP	W5OBE	WDBJ	WHP	WLXI	WPGH	WTTG	WYOU
KMWB	WAAY	WDCA	WHRO	WLYH	WPHL	WTVF	WYPX
KNLJ	WACY	WDCQ	WHTM	WMAR	WPIX	WTVI	WZPX
KNME	WAFF	WDIV	WHYY/	WMCN	WPMT	WTVP	WZTV
KNXT	WAGA	WDJT	WHYYDT	WMFQ	WPNE	WTVQ	WZZM
KNXV	WAMI	WDRL	WICU	WMHT	WPSG	WTVS	
KOLR	WAND	WDSE	WICZ	WMLW	WPSX	WTVZ	
KPIX	WAQP	WDTA	WIS	WMPB	WPTO	WTWB	
KPLR	WATC	WDWB	WISFLP	WMUR	WPVI	WTXF	
KPXM	WATL	WEDH	WISN	WMVR	WPXD	WTXF/WTXFD	Т

CBET	KIRO	KSTW	WAVE	WDLI	WIAT	WKTV	WNWO	WREX	WTVS
CBMT	KJZZ	KTBY	WAXN	WDRB	WICZ	WLED	WNYO	WRIC	WTWB
CBUT	KLAS	KTCA	WAZE	WDSU	WIFR	WLFG	WNYS	WROC	WTXF
CBWT	KLJB	KTCI	WBAL	WDWB	WIPB	WLIO	WNYW	WSAW	WUAB
CFCF	KLRN	KTEJ	WBAY	WEAO	WIS	WLJT	WOAI	WSAZ	WUHF
CHLT	KLVX	KTFT	WBBJ	WEIQ	WISC	WLKY	WOIO	WSBE	WUNI
CJOH	KMBC	KTHV	WBBM	WELT	WISF	WLMB	WOME	WSBK	WUPA
CKSH	KMIZ	KTNV	WBDC	WENY	WISN	WLMT	WOSU	WSBK/ WSBKDT	WUPN
CKWS	KMOV	KTTC	WBGH	WETA	WITF	WLNS	WOTM	WSBT	WUSA
KABB	KMSP	KTVK	WBGN	WETM	WITI	WLS	WOUB	WSEE	WUTF
KAET	KNLJ	KTVU	WBGT	WEUX	WIUP	WLUK	WOWK	WSFA	WUTR
KAIT	KNTV	KTVX	WBGU	WFDC	WIVB	WLVI/ WLVIDT	WPBN	WSHM	WUTV
KARE	KNXT	KTWO	WBKI	WFLD	WIVT	WLXI	WPBO	WSKG	WUVG
KARK	KNXV	KUAM	WBKP	WFQX	WIWB	WLYH	WPBS	WSKY	WVCY
KATU	KOIN	KUED	WBNG	WFRV	WIXT	WMAE	WPBT	WSMH	WVIA
KATV	KOLN	KUSA	WBNS	WFTC	WJAC	WMAQ	WPBY	WSMV	WVIR
KBHK	KOLR	KUTP	WBOY	WFTV	WJAL	WMAR	WPCB	WSOC	WVIZ
KBSI	комо	KVPT	WBPG	WFXS	WJBK	WMAZ	WPDE	WSPA	WVPT
KBTC	KOMU	KVTJ	WBQC	WFXV	WJEB	WMC	WPGA	WSPX	WVTB
KBYU	KOPB	KVVU	WBRC	WGAL	WJJA	WMFE	WPGH	WSRE	WVTV
KCAL	KPDX	KWBM	WBTV	WGBA	WJKT	WMHT	WPHL	WSTM	WWBT
KCET	KPIX	KWBP	WBUW	WGBO	WJLA	WMLW	WPIX	WSYT	WWCP
KCNC	KPLR	KWDK	WBZ	WGCL	MMLW	WMPB	WPNE	WSYX	WWJ
KCPT	KPNZ	KWGN	WCAU	WGGB	WJRT	WMQF	WPSD	WTAE	WWL
KCRA	KPTV	KWKB	WCCB	WGGN	VTLW	WMSN	WPSG	WTAJ	WWNY
KCRG	KPXR	KWQC	WCCO	WGMU	WJW	WMTV	WPSX	WTBS	WWOR
KCTS/ KCTSDT	KQED	KWWF	WCET	WGN	WJZ	WMUR	WPTO	WTFX	wwsi
KDKA	KRMA	KWWL	WCEV/ WCEVDT	WGPX	WJZY	WMVS	WPTY	WTFXWTF	WWWB
KENS	KRWG	KXIT	WCFE	WGRZ	WKAR	WMVT	WPVI	WTGL	WXIA
KETC	KSAT	KYTV	WCGV	WGTE	WKBD	WNBC	WPXD	WTGS	WXIX
KEVN	KSAW	KYW	WCHS	WGTV	WKBT	WNDU	WPXE	WTMJ	WXXI
KFPX	KSCB	W28BC	WCMH	WHA	WKBW	WNED	WPXI	WTRF	WXYZ
KFVS	KSDK	W31BP	WCML	WHAM	WKCF	WNEG	WPXX	WTRV	
KFXB	KSFX	WABC	WCNC	WHAS	WKMG	WNEM	WQAD	WTSF	
KGAN	KSIN	WABM	WCNY	WHBQ	WKMJ	WNEU	WQED	WITW	
KGO	KSL	WACY	WCVE	WHCP	WKMU	WNEV	WQEX	WTTX	
KGW	KSLA	WALA	WCWB	WHEC	WKNO	WNMU	WQLN	WTVF	
KGWC	KSMQ	WAPK	WDBJ	WHIO	WKOH	WNPA	WQOW	WTVG	
KIIN	KSPR	WAPW	WDCA	WHP	WKOI	WNPB	WQRF	WTVH	
KING	KSTC	WAQP	WDIV	WHTM	WKOW	WNPT	WRC	WTVI	
KIPT	KSTP	WATL	WDJT	WHUT	WKRG	WNVC	WREG	WTVO	
EXII° I			AADOI			VVIVC		**   VO	

# APPENDIX B

# REBUTTAL TESTIMONY OF

JOHN MANSELL

KABC	KTBS	WEAO	WKRN	WSBK
KATN	KTLA	WEAU	WLIW	WSEE
KAUT	KTNC	WEDU	WLLA	WSFA
KAYU	KTSF	WEMT	WLPB	WSTM
KCAL	KTTW	WETM	WLS	WSWB
KCET	KUAT	WFFT	WLUK	WSYX
KCNC	KUHT	WFLD	WLWT	WTIC
KCOP	KUSI	WFMY	WMAH	WTNZ
KDKA	KUTV	WFTV	WMCF	WTRF
KDVR	KUVS	WGBH	WMPB	WTTW
KERA	KVII	WGBO	WMTW	WTVC
KETC	KWGN	WGGB	WNBC	WTVE
KETG	KWTX	WGN	WNCT	WTVF
KETS	KXAN	WGVK	WNDY	WT∨M
KEYE	WABC	WHA	WNED	WTVP
KGO	WATE	WHNO	WNEM	WTVS
KGWN	WBAL	WHOI	WNEP	WTVW
KHTV	WBBM	WHSI	WNET	WTXF
KIMO	WBDC	WHYY	WNPB	WUAB
KIMT	WBNS	WICD	WNYW	WUSA
KIPT	WBRC	WILX	WOOD	WVIZ
KIXE	WBRE	WIS	WPBT	WVTV
KLRT	WBTW	WISN	WPHL	WWJ
KMAZ	WCAU	WIVT	WPIX	WWLP
KMIZ	WCBS	WIXT	WPSX	WWOR
KMOS	WCCB	WJAL	WPTA	WWPX
KNBC	WCFE	MMLW	WPTO	WWSB
KNXV	WCMH	WJSU	WPXN	WWTO
KOIN	WCMU	WJW	WPXT	WXEL
KOLD	WCNY	WJZ	WPXU	WXIA
KPTS	WDAZ	WKBD	WQLN	WXIN
KQED	WDBJ	WKBT	WQRF	WXIX
KRMA	WDCA	WKMG	WRAL	WYES
KRON	WDEF	WKNO	WRAZ	WYIN
KRSC	WDIV	WKOI	WREG	WZTV
KSNT	WDTN	WKRG	WSBA	

Source: 1998-99 Cable Distribution Proceeding, Docket No. 2001-8 CARP CD 98-99, PS Exhibit 19 (Admitted April 24, 2003).

KABC	KPTV	WDIV	WKJG	WSB
KADN	KQBN	WDKY	WKNO	WSBE
KARK	KQED	WETM	WKRN	WSBK
KATN	KRWG	WFFT	WKSO	WSEE
KATU	KSLA	WFLD	WLAE	WSLS
KATV	KSNK	WFMJ	WLEF	WSPA
KCAL	KTEJ	WFRV	WLIW	WSWB
KCBS	KTLA	WFUM	WLKY	WSYX
KCET	KTNC	WFXB	WLNS	WTCE
KCNC	KTSF	WFYI	WLS	WTCI
KCOP	KTVK	WGBH	WLTV	WTGS
KCTS	KTXS	WGBY	WLVI	WTHI
KCTV	KUHT	WGCB	WMDT	WTJP
KDSD	KUTP	WGEM	WMGT	WTMJ
KDTN	KWES	WGGB	WMUR	WTTW
KDVR	KWGN	WGME	WNBC	WTVS
KERA	KWTV	WGN	WNCT	WTVY
KETS	KXII	WGVK	WNDS	WTXF
KEZI	WAAY	WHA	WNEO	WUAB
KFXB	WACY	WHAG	WNET	WUNI
KGO	WATM	WHDF	WNJS	WUPL
KHQ	WAXN	WHIO	WNPI	WUTB
KICU	WBAL	WHLA	WNVC	WUXP
KIMO	WBBJ	WHP	WNYW	WVEC
KIPT	WBFS	WHYV	WPBT	WVTV
KLAX	WBNS	WIFR	WPDE	WVUE
KLRT	WBOC	WILX	WPHL	WWJ
KLTL	WBRE	WIPB	WPIX	WWLP
KMOT	WBVT	WIS	WPSG	WWOR
KMSS	WCAU	WITI	WPTV	WWPB
KNBC	WCET	WJAC	WPVI	WXIA
KOAC	WCFT	WJSU	WPXX	WXII
KOMO	WCPO	WJW	WQEX	WXIX
KOOD	WCTI	WJZ	WQPT	WYCC
KOTV	WDAM	WKBD	WRAL	WYES
KPLR	WDEF	WKBN	WRLH	WYIN

Source: 1998-99 Cable Distribution Proceeding, Docket No. 2001-8 CARP CD 98-99, PS Exhibit 21 (Admitted April 24, 2003).

CBET	KMWB	WAAY	WHRO	WPBT
CBLT	KNXV	WALA	WHYY	WPHL
CBMT	KOAB	WALB	WIAT	WPIX
CBUT	KODE	WAPK	WICD	WPSG
CFTO	KOMU	WBBM	WICU	WPTO
CJOH	KPLC	WBKB	WILL	WPTY
CKSH	KPRC	WBNX	WIS	WPVI
EBNS	KPXM	WCAU	WISC	WPXD
ETVS	KRMA	WCBS	WIVT	WPXL
KAAL	KSBI	WCCB	WJWB	WPXV
KABC	KSFY	WCET	WJYS	WQAD
KAKE	KSIN	WCEU	WJZ	WQLN
KBAK	KSTC	WCVE	WKAR	WQPT
KBHE	KSTS	WDIV	WKBD	WREX
KBMT	KTBC	WDJT	WKMJ	WSB
KBNT	KTCA	WDTA	WKNO	WSBK
KBWB	KTVD	WEKW	WKOH	WSBN
KBYU	KTEJ	WFAA	WKRN	WSEE
KCAL	KTFT	WFLI	WLAJ	WSFJ
KCET	KTLA	WFMZ	WLIW	WTAJ
KCOP	KTNC	WFRV	WLUC	WTCE
KCRA	KTNV	WFSB	WMAK	WTCN
KCSD	KTVI	WFTE	WMGT	WTHI
KCTS	KTVU	WGBA	WMPB	WTTW
KDSD	KTWU	WGBH	WMTW	WTVY
KERA	KTXA	WGBX	WNBC	WTXF
KETK	KUHT	WGN	WNCT	WUAB
KETV	KUTP	WGRZ	WNDS	WUNJ
KFXK	KVII	WGTU	WNDY	WUPW
KGO	KVLY	WGTW	WNET	WVBG
KGWC	KVUE	WGVU	WNJS	WVTV
KHBS	KWBT	WGXA	WNYA	WWL
KHQA	KWGN	WHA	WNYO	WWLP
KLFY	KWWF	WHAS	WNYW	WWOR
KLTL	KXII	WHO	WOTV	WXIX
KMEX	KYW	WHP	WPBA	WXXA

Source: PS Exhibit 9.

CBET	KOCM	WDBJ	WLUC	WRJM
CBLT	KOVR	WDIV	WLVT	WRNN
CBMT	KRWG	WDWB	WMAQ	WROC
CBUT	KSCB	WEEK	WMEC	WRTV
CFTO	KSDK	WFAA	WMGT	WSB
CHLT	KSMO	WFQX	WMPB	WSBK
CIII	KSNF	WFRZ	WMQF	WSEE
CKSH	KTEH	WFUM	WMSN	wsoc
KAKW	KTLA	WGBH	WNBC	WTGS
KAUT	KTMO	WGBX	WNET	WTJP
KAVU	KTNC	WGN	WNIN	WTSF
KBLN	KTNV	WGNO	WNPA	WTTV
KBYU	KTRK	WGTU	WNPT	WTTW
KCAL	KUHT	WHAM	WNTZ	WTTX
KCET	KUVS	WHAS	WOI	WTVH
KCNC	KVIA	WICD	WOIO	WTVT
KCOP	KYW	WINK	WOOD	WTXF
KCRA	WAAY	WINM	WOSU	WTXL
KCRG	WABC	WIS	WOWK	WUAB
KCTS	WAGA	WISH	WOWT	WUNC
KDCK	WAKA	WISN	WPBT	WUNP
KDLT	WANE	WJCL	WPCB	WUSA
KERA	WBBJ	WJHG	WPGH	WUTR
KEYT	WBGT	WJWB	WPHL	WUXP
KGNS	WBNS	WJZ	WPIX	WVNS
KGO	WBNX	WJZY	WPMT	WVTV
KGTV-	WBSC	WKAR	WPPX	WVUE
KHQA	WBUI	WKBD	WPSD	WWBT
KICU	WCAU	WKBS	WPSG	WWLP
KKRA	WCAX	WKRN	WPSU	WWOR
KLCS	WCCO	WKSO	WPTO	WXIA
KLKN	WCHS	WLED	WPVI	WXIX
KLWY	WCIU	WLFG	WPXA	WYCN
KMEG	WCJB	WLFL	WPXD	WYTV
KNWS	WCNY	WLIO	WRAY	WZPX
KOCE	WCTI	WLIW	WREX	WZZM

Source: PS Exhibit 9.

# **DECLARATION OF JOHN MANSELL**

I declare under penalty of perjury that the foregoing rebuttal testimony is true and correct and of my personal knowledge.

Executed on December 11, 2009.

DB03/762224.0056/9312728.1 IG09

Rebuttal Testimony of Arthur C. Gruen, Ph.D

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#### Introduction

My name is Arthur C. Gruen. I am the co-founder and a principal of Wilkofsky Gruen Associates Inc., an internationally known consultancy that specializes in the entertainment, media, and telecommunications industries. I provided direct testimony in this proceeding regarding my role in the development and execution of the 2004 and 2005 Cable Subscriber Surveys presented by Program Suppliers. That testimony also contained a detailed description of my background and experience and a copy of my curriculum vitae.

For the rebuttal phase of this proceeding, Judge Roberts asked me to analyze valuation responses of respondents to the 2004 and 2005 Cable Subscriber Surveys who subscribed to cable systems with one distant signal ("single-DS respondents") as compared with respondents who subscribed to cable systems with multiple distant signals ("multi-DS respondents"). *See* Tr. 1934:4-1935:9 (Gruen).

# **Background**

In the 2004 Cable Subscriber Survey sample, 43 systems retransmitted a single distant signal and 46 systems retransmitted multiple distant signals, with 29 carrying between two and four distant signals and 17 carrying five or more distant signals.

In the 2005 Cable Subscriber Survey sample, 52 systems retransmitted a single distant signal and 40 systems retransmitted multiple distant signals, with 18 carrying between two and four distant signals and 22 carrying five or more distant signals.

<sup>&</sup>lt;sup>1</sup> PS Exhibit 8.

To address Judge Roberts' request, I sought to determine whether any similarities or wide variations exist between (1) overall valuation responses of single-DS respondents and multi-DS respondents, and (2) valuation responses of single-DS respondents and multi-DS respondents by demographic group. In performing this analysis, I did not incorporate the results of the virtual interviews.<sup>2</sup> Also, I did not incorporate the related weights provided to me by Dr. Frankel<sup>3</sup> as those weights were computed based on the inclusion of the virtual interviews.

# Single Versus Multiple Distant Signal Respondents (Overall)

I computed valuation responses of respondents based on three categories of cable systems: those carrying (1) one distant signal, (2) two-to-four distant signals, and (3) five or more distant signals. The allocations made by respondents for these three categories for 2004 are shown in Table 1 and the allocations for 2005 are shown in Table 2.

<sup>&</sup>lt;sup>2</sup> Virtual interview results refer to the artificial interview allocations and responses credited to the Canadian-only and Public Television ("PTV")-only cable systems whose subscribers were not interviewed. *See* PS Exhibit 8 at 20.

<sup>&</sup>lt;sup>3</sup> See id.

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Table 1

Raw Survey Results by Number of Distant Signals, 2004 (Percent)

	1	2-4	5+
	Distant	Distant	Distant
Category	Signal	Signals	Signals
Program Suppliers			
Series	25.24	19.98	18.60
Movies and Specials	22.24	21.20	18.25
Non-Team Sports	8.03	8.17	8.08
Program Supplier Total	55.51	49.35	44.93
News and Community Events (NAB)	15.60	16.40	18.28
Devotional Programs (Devotional)	8.48	7.79	5.69
Live Team Sports (JSC)	19.52	18.74	17.31
PBS (PTV)	0.00	6.55	11.50
Canadian (CCG)	0.00	0.15	0.54
Other	0.89	1.01	1.75
Total*	100.00	99.99	100.00

<sup>\*</sup>May not equal 100.00 percent due to rounding.

Table 2

Raw Survey Results by Number of Distant Signals, 2005 (Percent)

	1	2-4	5+
	Distant	Distant	Distant
Category	Signal	Signals	Signals
Program Suppliers			
Series	23.12	20.86	18.66
Movies and Specials	22.70	19.15	17.03
Non-Team Sports	6.69	5.84	7.90
Program Supplier Total	52.51	45.85	43.59
News and Community Events (NAB)	19.79	20.30	19.04
Devotional Programs (Devotional)	8.09	7.76	7.18
Live Team Sports (JSC)	18.49	17.00	17.47
PBS (PTV)	0.00	7.29	10.42
Canadian (CCG)	0.00	0.25	0.14
Other	1.12	1.55	2.17
Total*	100.00	100.00	100.01

<sup>\*</sup>May not equal 100.00 percent due to rounding.

Because subscribers receiving PTV-only or Canadian-only systems were not interviewed, for the purpose of my analysis, valuation responses of single-DS respondents did not include virtual responses allotted to systems carrying only public television or Canadian television stations as distant signals. Single-DS respondents also did not have any actual PTV or Canadian signals to value. The PTV and Canadian signals, however, are represented on a majority of the remaining systems. Because multi-DS respondents in many cases had two additional program categories to value than single-DS respondents, the relative valuations in Tables 1 and 2 do not necessarily represent an apples-to-apples comparison.

To provide figures allowing for an apples-to-apples comparison, I adjusted for differences in the array of available program categories by eliminating valuations assigned to the PTV and CCG categories. For those respondents who subscribed to systems with either a public television distant signal or a Canadian distant signal and who placed a positive value on those categories, I changed that value to zero and proportionally raised their valuations of the remaining categories.

In the 2004 survey, there were three respondents who assigned a 100 percent valuation to PTV and a zero valuation to the other categories and there was one respondent who split the valuation between PTV and CCG and assigned a zero valuation to the remaining categories. I eliminated those responses from the calculation. In the 2005 survey, one respondent assigned a 100 percent valuation to PTV and a zero valuation to the other categories. I eliminated that response from the calculation.

As I did in my direct testimony, I then eliminated the "other" category and recalculated the shares for the remaining claimant groups so that the total would approximate 100 percent. The revised shares for 2004 are shown in Table 3 and the revised shares for 2005 are shown in Table 4.

Table 3

Normalized Survey Results by Number of Distant Signals Excluding PTV and CCG, 2004 (Percent)

CCG, 2004 (1 creent)					
Category	1 Distant Signal	2-4 Distant Signals	5+ Distant Signals		
Program Suppliers					
Series	25.47	21.72	21.53		
Movies and Specials	22.44	23.37	21.42		
Non-Team Sports	8.10	8.67	9.07		
Program Supplier Total	56.01	53.75	52.01		
News and Community Events (NAB)	15.74	17.67	21.57		
Devotional Programs (Devotional)	8.56	8.27	6.56		
Live Team Sports (JSC)	19.70	20.31	19.86		
Total*	100.00	100.01	100.00		

<sup>\*</sup>May not equal 100.00 percent due to rounding.

Table 4

Normalized Survey Results by Number of Distant Signals Excluding PTV and CCG, 2005 (Percent)

003 (Fercent)		
1 Distant Signal	2-4 Distant Signals	5+ Distant Signals
23.38	22.87	21.22
22.96	21.42	19.76
6.77	6.70	8.75
53.10	50.98	49.72
20.01	21.83	22.15
8.18	8.60	8.07
18.70	18.58	20.06
100.00	99.99	100.01
	23.38 22.96 6.77 53.10 20.01 8.18 18.70	1 Distant Signal         2-4 Distant Signals           23.38         22.87           22.96         21.42           6.77         6.70           53.10         50.98           20.01         21.83           8.18         8.60           18.70         18.58

<sup>\*</sup>May not equal 100.00 percent due to rounding.

Except for News and Community Events and Devotional Programs in 2004, the overall valuation responses of single-DS respondents do not vary widely from valuation responses of multi-DS respondents. For example, in 2004, the share for Program Suppliers was 4.00 percentage points lower on systems with five or more distant signals compared with systems with only one distant signal, and in 2005 the differential was 3.38 percentage points. In both years, the difference was less than 10 percent.

The significance of valuations by respondents in systems with five or more distant signals must be viewed in the context of the contribution of those systems to the overall royalty pool. Systems carrying five or more distant signals contribute relatively less to the royalty pool than the other two categories of systems. As shown in Table 5 below, systems carrying five or more distant signals contributed 21.5 percent and 24.7 percent to the royalty pool in 2004 and 2005, respectively.

Table 5
Cable System Copyright Royalty Payments

	2004		2005	
Cable System Category	Royalty Payments (\$)	Share of Total (%)	Royalty Payments (\$)	Share of Total (%)
0-1 Distant Signals	35,091,462	54.7	31,284,157	48.4
2-4 Distant Signals	15,269,995	23.8	17,372,327	26.9
5+ Distant Signals	13,753,773	21.5	15,949,178	24.7
Total	64,115,230	100.0	64,605,662	100.0

Source: Cable Data Corporation

I would also note that the subscriber valuations reported in my direct testimony already reflect a heavier weighting for cable systems with multiple distant signals than cable systems with only one distant signal. As shown in Table 6, in 2004 allocations made by respondents in systems with five-or-more distant signals received a 5 percent higher weight on average than respondents in systems with only one distant signal, and in 2005 they were assigned a 22 percent higher average weight compared with single-DS respondents.

Table 6
Average Weight Per Respondent

Cable System Category	2004	2005
1 Distant Signal	0.99	0.85
2-4 Distant Signals	1.02	1.46
5+ Distant Signals	1.04	1.04

Note: Figures do not include weights for virtual interviews.

### Single Versus Multiple Distant Signal Respondents (Demographic Group)

Using the same procedure as I did in calculating the overall results, I computed normalized findings for respondents in the 18-49 age group and in the 50-and-older age group. Overall, in 2004 and 2005, Program Suppliers generated a higher share among respondents in the 18-49 age group compared with respondents in the 50-and-older age group for each of the three categories of cable systems. The 18-49 and 50-and-older results for 2004 are shown in Tables 7 and 8, respectively, and comparable findings for 2005 are shown in Tables 9 and 10, respectively.

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Table 7

Normalized Survey Results for 18-49 Respondents by Number of Distant Signals Excluding PTV and CCG, 2004 (Percent)

Category	1 Distant Signal	2-4 Distant Signals	5+ Distant Signals
Program Suppliers			
Series	26.57	23.58	23.22
Movies and Specials	22.73	22.96	21.49
Non-Team Sports	8.15	9.57	9.35
Program Supplier Total	57.45	56.11	54.06
News and Community Events (NAB)	14.74	16.29	18.91
Devotional Programs (Devotional)	7.15	7.59	5.45
Live Team Sports (JSC)	20.65	20.00	21.59
Total*	99.99	99.99	100.01

<sup>\*</sup>May not equal 100.00 percent due to rounding.

Table 8

Normalized Survey Results for 50-and-Older Respondents by Number of Distant Signals Excluding PTV and CCG, 2004 (Percent)

Category	1 Distant Signal	2-4 Distant Signals	5+ Distant Signals
Program Suppliers			
Series	24.42	20.23	20.33
Movies and Specials	21.92	23.76	21.81
Non-Team Sports	8.22	8.07	8.83
Program Supplier Total	54.56	52.06	50.97
News and Community Events (NAB)	16.61	18.62	23.12
Devotional Programs (Devotional)	9.96	8.51	7.25
Live Team Sports (JSC)	18.86	20.81	18.66
Total*	99.99	100.00	100.00

<sup>\*</sup>May not equal 100.00 percent due to rounding.

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Table 9

Normalized Survey Results for 18-49 Respondents by Number of Distant Signals Excluding PTV and CCG, 2005 (Percent)

Category	1 Distant Signal	2-4 Distant Signals	5+ Distant Signals
Program Suppliers			
Series	25.32	28.12	23.54
Movies and Specials	23.19	20.75	18.57
Non-Team Sports	7.23	8.19	11.25
Program Supplier Total	55.74	57.06	53.36
News and Community Events (NAB)	18.39	18.92	20.50
Devotional Programs (Devotional)	6.79	7.41	6.41
Live Team Sports (JSC)	19.08	16.60	19.73
Total*	100.00	99.99	100.00

<sup>\*</sup>May not equal 100.00 percent due to rounding.

Table 10

Normalized Survey Results for 50-and-Older Respondents by Number of Distant Signals Excluding PTV and CCG, 2005 (Percent)

1 Distant Signal	2-4 Distant Signals	5+ Distant Signals
21.93	18.91	19.47
22.71	22.05	20.96
6.46	5.64	7.00
51.10	46.60	47.43
21.26	23.79	22.69
8.95	9.24	9.22
18.68	20.39	20.65
99.99	100.02	99.99
	21.93 22.71 6.46 51.10 21.26 8.95 18.68	Signal         Signals           21.93         18.91           22.71         22.05           6.46         5.64           51.10         46.60           21.26         23.79           8.95         9.24           18.68         20.39

<sup>\*</sup>May not equal 100.00 percent due to rounding.

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#### Conclusion

Except for News and Community Events and Devotional Programs in 2004, there are no wide variations between overall valuation responses of single-DS respondents and multi-DS respondents. With the same exceptions, there are also no wide variations between the responses of the two groups of respondents when analyzed by demographic group. Multi-DS respondents' valuation responses tended to be slightly lower for Program Suppliers in both years. However, multi-DS respondents in systems with five-or-more distant signals account for less than a quarter of the overall royalty pool in both 2004 and 2005. Moreover, the differentials in valuations that do exist for Program Suppliers between single-DS and multi-DS respondents are largely offset by the higher weights given to multi-DS respondents in computing the overall results presented in my direct testimony. In both analyses, Program Suppliers remained by far the dominant program category among all Cable Subscriber Survey respondents in both 2004 and 2005.

# **DECLARATION OF ARTHUR C. GRUEN**

I declare under penalty of perjury that the foregoing rebuttal testimony is true and correct and of my personal knowledge.

Executed on December 11, 2009.

Arthur C. Gruen

#### REBUTTAL TESTIMONY OF GEORGE S. FORD

# COPYRIGHT ROYALTY JUDGES 2004-2005 COPYRIGHT ROYALTY DISTRIBUTION PROCEEDING

# **DECEMBER 11, 2009**

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# REBUTTAL TESTIMONY OF GEORGE S. FORD

My name is George S. Ford. I am the President of Applied Economic Studies, a private consulting firm specializing in economic and econometric analysis, located in Birmingham, Alabama. I am also the Chief Economist of the Phoenix Center for Advanced Legal & Economic Policy Studies, a Washington, D.C.-based 501(c)(3) research organization that specializes in the legal and economic analysis of public policy issues involving the communications and technology industries. I provided direct testimony in this proceeding in which I presented my estimate of what the relative market value of distant signal programming would be for the different programming categories in an unregulated distant signal marketplace. That testimony also included a description of my background and experience, and a copy of my curriculum vitae.

I have been asked by the Program Suppliers to respond to the direct testimony of Dr. Robert Crandall and of Dr. Joel Waldfogel, both of whom appeared on behalf of the Settling Parties. Drs. Crandall and Waldfogel testify that relative market value should be used as the standard for allocating the royalties among the competing program categories in this proceeding, but they differ substantially on how market value should be measured. Dr. Crandall claims that the relative market values of the programming

PS Exhibit 11.

at issue should be determined by the Bortz survey results, while Dr. Waldfogel proposes a linear regression analysis of royalty payments made by cable systems.

The market value of the programming is the price at which it would change hands between willing buyers and willing sellers in an unregulated market, that is, a market where the compulsory license does not apply.<sup>2</sup> The market value of a good or service consists of two components: price and quantity. In this proceeding, the relevant quantities are the programs actually retransmitted on a distant basis in 2004 and 2005. The purpose of this proceeding is to assign relative market prices to these quantities based, to the extent possible, on actual marketplace transactions.

While Dr. Crandall, Dr. Waldfogel, and I agree that the standard for allocation of royalty funds is relative market value, neither Dr. Crandall nor Dr. Waldfogel provides credible economic analysis that would justify using either the Bortz survey results or the regression analysis results to establish the relative market values of the programming in question. Accordingly, neither Dr. Crandall's nor Dr. Waldfogel's approach is proper for determining how to allocate the 2004 and 2005 royalties among the program categories.

### I. Summary of Conclusions

With respect to Dr. Crandall's direct testimony, I conclude as follows:

In the Matter of Distribution of 1998 and 1999 Cable Royalty Funds, Report of the Copyright Arbitration Royalty Panel to the Librarian of Congress, Docket No. 2001-8 CARP CD 98-99 (October 21, 2003) ("1998-99 Report") ("In an unregulated world, absent a compulsory license ... (at 11)").

- First, the Bortz survey does not produce direct estimates of market value, and Dr. Crandall provides no economic explanation of the purported linkage between the Bortz survey and market value. The Bortz survey elicits, at best, estimates of willingness to pay. But, relative willingness to pay equals relative market value only under an implausible set of conditions, which is not satisfied here.
- Second, a market valuation cannot rely on the Bortz survey results because it fails to take into account the specific quantity of programming retransmitted in 2004 and 2005 that is to be valued in this proceeding. The Bortz survey does not ask respondents to value the actual amounts of programming retransmitted, but asks only for hypothetical willingness to pay for general categories of programming. As a result, it is not clear exactly what amounts of compensable programming are being valued by the Bortz survey respondents.
- Third, Dr. Crandall's analysis is based on a single buyer's willingness to pay. Dr. Crandall claims that in an unregulated environment, the cable operator would compete for the rights to the programming with other potential buyers, including broadcasters and satellite video providers. Yet, the Bortz survey obtains the valuations only of cable operators. When there is competition among potential buyers, the market value of the item to be purchased is rarely, if ever, determined by a single buyer's

valuations or relative valuations. To the contrary, competition among buyers, combined with seller behavior, determines prices.

With respect to Dr. Waldfogel's direct testimony, I conclude as follows:

- First, his regression analysis incorrectly relies on royalty payments made by cable systems. These payments are entirely based on a specific regulatory formula, not on market transactions, and, thus, do not possess the unregulated market price information needed to perform a legitimate "hedonic" analysis of this problem and to assign relative market values to the relevant programming.
- Second, because the statutory royalty payment formula uses the number and type of distant signals retransmitted and a cable system's gross receipts to determine the cable system's royalty liability, the payments are not affected by the mix of programming (*i.e.*, minutes) available on retransmitted signals. Consequently, the different coefficients estimated by Dr. Waldfogel's regression analysis are not indicative, indeed cannot be indicative, of the true contribution of different programming types to the amount of royalties paid, much less a measure of market prices.
- Third, as a consequence of regression mis-specification, Dr. Waldfogel's
  regression results are highly sensitive to the particular sample used to
  estimate the coefficients and, thus, unreliable measures of relative market
  values.

• Fourth, additional problems with the regression model undermine the validity of the results obtained by Dr. Waldfogel.

For these reasons, neither Dr. Crandall nor Dr. Waldfogel has provided an approach proper for determining how to allocate the 2004 and 2005 royalties. Neither effort incorporates data from actual market transactions nor relies on the known factors that determine the market value of television programming in unregulated markets.

## II. Rebuttal to Direct Testimony of Dr. Robert Crandall

Dr. Crandall concludes that the "best evidence on how the marketplace would have allocated these royalties is to be found in constant sum surveys of cable system executives who are asked how they would have allocated a fixed budget for imported broadcast signals." This statement requires that willingness to pay responses of the Bortz survey equal market value. However, Dr. Crandall offers no testimony on what economic assumptions would be required to conclude that the relative willingness to pay responses of the Bortz survey equal relative market values. Willingness to pay responses, at best, provide only indirect evidence of market value and do so under the most implausible conditions. Moreover, the Bortz survey does not elicit valuations of the specific programming that must be valued in this proceeding. We have no idea what content the Bortz respondents are providing values for, except that the evidence suggests they are not likely equal to the actual programming retransmitted during 2004 and 2005 under the Section 111 license. Finally, Dr. Crandall's depiction of the

<sup>3</sup> SP Exhibit 3 at 3.

hypothetical market underlying his conclusions explicitly rejects the cable-centric Bortz survey as an indicator of relative market value.

#### A. Bortz Does Not Seek A Market Value Response

Willingness to pay is the maximum amount that a buyer is willing to pay for a good or a service. This is distinct from market value, which is the actual price paid for a particular quantity of a good or service. In most exchanges, the market price is lower than the willingness to pay for consumers.<sup>4</sup> The relevant Bortz survey question reads: "[H]ow much do you think each such type of programming was worth, if anything, on a comparative basis, in terms of attracting and retaining subscribers[?]"<sup>5</sup> As recognized explicitly by Dr. Crandall, this question elicits the cable system's willingness to pay for programming, rather than the market value of such programming.<sup>6</sup> Dr. Crandall concludes that the Bortz survey results could equate to market value, but he provides no explanation as to why this should be so. Willingness to pay is, at best, indirect

<sup>4</sup> Absent compulsion, price is always below willingness to pay.

SP Exhibit 2 at Appendix B (question 4a). The question does not ask the respondent what they would pay for a given quantity of programming of a particular type in a market exchange. See 1990-92 CARP Report at 65 ("The question should ask what would the cable system operator have to and be willing to spend."). This type of question may be more sensibly interpreted as evidence of market value.

Dr. Crandall states the Bortz survey responses are based on "the copyrighted program's marginal contribution to cable-system net revenue." SP Exhibit 3 at 5-6. Net revenue measures the maximum willingness to pay for the program, which, if the item is purchased, includes both market value and consumer's surplus (or producer's surplus in this case since the cable system is a firm and programming is an input). See D. Pearce, THE MIT DICTIONARY OF MODERN ECONOMICS (1989) at 79 and 342. See also 1990-92 CARP Report at 65 ("willing to spend a certain amount").

evidence of market value, and relative willingness to pay equals relative market value only under an implausible set of conditions.

While a number of conditions are required for relative willingness to pay to equal relative market value, a discussion of two such conditions sufficiently demonstrates the improbability of the correspondence. First, for Dr. Crandall's support of Bortz as a measure of relative market value to be legitimate, the demand curves for all programming must be linear. If the demand curves are not linear, then relative willingness to pay cannot equal relative market value (except by chance). While linear demand curves are often used in economic analysis, they are selected not because they are realistic, but because they simplify the mathematics. Dr. Crandall did not provide any testimony supporting linearity of the demand curve in his analysis, and there is no reason to believe that the demand curves are linear.

Second, the elasticities of demand for all programming categories must be identical at the selected quantities.<sup>8</sup> With linear demand curves, satisfying the condition of equal elasticities is highly improbable. A linear demand curve has a constant slope, so the elasticity of demand has a different value at every price-quantity pair.<sup>9</sup> In other words, a demand curve does not have a single elasticity, but at each point on the demand curve the elasticity of demand is different, implying that for any single

<sup>7</sup> See Appendix A.

<sup>8</sup> See id. The own-price elasticity of demand is a measure of price sensitivity and is defined as the percentage change in quantity divided by the percentage change in price.

The elasticity of demand can be written as  $E_d = (1/Slope)(Price/Quantity)$ .

demand curve there are a very large number of demand elasticities.<sup>10</sup> Given the required condition of linear demand, there is every reason to believe that the elasticities are *not* equal for the seven program categories of the Bortz survey. Certainly, economic theory provides no basis for a claim of equal factor demand elasticities across the inputs of production (in this case, the categories of television programming). The simultaneously required conditions of linear demand and equal elasticities of demand are wholly inconsistent with any expectation that relative willingness to pay would equal relative market value. Accordingly, there is no economic support for Dr. Crandall's testimony in this regard.

B. The Bortz Survey Does Not Assign Value Based on the Programming Actually
Retransmitted

The total value of a good, whether value is identified with market value or willingness to pay, depends on how much of it is being valued. A significant defect in the Bortz survey is that it asks respondents to provide relative willingness to pay valuations for each category of programming, but without any relation to the actual quantities of compensable programming retransmitted in 2004 and 2005 under the compulsory license. In order to allocate the 2004 and 2005 royalty funds, we need estimates of the relative market values of the actual programming retransmitted, not a

In economic parlance, the term (1/Slope) -- with a large number of potential values -- for each program type must be such that, when it is multiplied by the ratio Price/Quantity -- also with a large number of potential values -- for each program type, the same elasticity results across all program types.

generic valuation of the program categories presumed to have been carried. Bortz did not provide respondents with estimates of the quantities of compensable programming retransmitted on their systems, and this failure led to some predictably absurd responses. For example, in an earlier proceeding, one cable system respondent assigned a value to sports programming even though that respondent's cable system did not carry any sports programming.<sup>11</sup> In the current survey, Bortz again finds positive valuations for sports programming even though the presence of sports programming on certain cable systems could not be confirmed.<sup>12</sup> If some respondents are valuing programming they do not carry, it seems implausible that the valuation responses are based on sufficiently accurate estimates of the relative quantities of retransmitted programming.

In a market, you pay for the quantity you get. The fact that the respondents to the Bortz survey do not appear to be placing values on the "quantities they get" is sufficient reason, in my opinion, to reject the Bortz survey valuations as indicative of either relative willingness to pay or relative market value of the quantities relevant to this proceeding. Even if the Bortz survey's willingness to pay valuations did measure market value, it is unclear what the market valuations represent.

<sup>11</sup> SP Exhibit 2 at 37-8.

<sup>12</sup> *Id.* at 38.

## C. Bortz Survey Incorrectly Reflects a Single Buyer's View of the Market

When questioned by Judge Wisniewski about competition among buyers of the television programming relevant here, Dr. Crandall suggested the cable system would compete with "the satellite provider" and "off-the-air broadcasting." <sup>13</sup> If this is true, then the Bortz survey, which shows only one buyer's perspective, cannot provide an accurate measure of relative market value. Rather, competition among these buyers, combined with seller behavior, determines prices.

This is shown by a simple example. Assume three buyers – Tom, Dick, and Harry – are competing for a single unit of each of two goods, Good 1 and Good 2. Table 1 below displays the willingness to pay of each buyer, the implied (willingness to pay) budget shares derived from these values, and the actual price paid for each good. To determine actual prices, assume that the two goods are auctioned off, with a minimal bid increment of \$1. For Good 1, Tom, Dick and Harry are willing to pay maximums of \$45, \$15, and \$9, respectively. For Good 2, Tom, Dick and Harry are willing to pay \$15, \$45 and \$1 respectively.

<sup>&</sup>lt;sup>13</sup> Tr. at 261:9-264:22 (Crandall).

	Willin	g to Pay	Percent of Budget		
	Good 1	Good 2	Good 1	Good 2	
Tom	45	15	75%	25%	
Dick	15	45	25%	<i>7</i> 5%	
Harry	9	1	90%	10%	
:					
Market Price	16	16	63%	37%	

Tom has the highest willingness to pay for Good 1, so Tom buys Good 1. However, Tom does not pay what he is willing to pay (\$45), since he only has to outbid Dick, who was willing to pay \$15. Given the \$1 bid increment, the market price is \$16. The same is true for Good 2. Dick, who has the highest value for Good 2, buys Good 2. Dick, however, does not pay what he was willing to pay (\$45), but only has to outbid Tom's maximum willingness to pay of \$15. The market price of Good 2 is also \$16.

This result shows that in a competitive bidder setting for a fixed supply, it is not the buyer's willingness to pay, but the willingness of the next highest potential buyer, that determines market price. Relative willingness to pay does not coincide with relative market price. The same is true if we examine the outcome in terms of budget shares, mimicking the Bortz methodology. The market prices create budget shares of 50%-50%, which do not correspond to any buyer's relative willingness to pay.

# III. Response to Dr. Joel Waldfogel

Dr. Waldfogel endeavors to assign "market" prices to the estimates of the "compensable" programming using linear regression in a fashion superficially similar

to a hedonic analysis, which is a technique common in economic research.<sup>14</sup> A hedonic model is one in which the marginal values of the components or "attributes" of a bundle are statistically estimated by regressing data on market prices for entire bundles on variables measuring the bundle's attributes. Certain requirements are needed to make hedonic models legitimate. The prices must be market prices, determined by the interaction of both buyers and sellers, if the goal is to determine the contribution of attributes to market value. 15 Also, attributes can be valued only when changes in those attributes lead to changes in market prices; attributes that do not affect price cannot be given market values.<sup>16</sup> Neither condition is satisfied in Dr. Waldfogel's regression analysis. First, the dependent variable of Dr. Waldfogel's regression is not a market price but the *regulated* royalty payment. Second, the attributes are the volumes of each claimant's programming minutes, which do not directly or differentially impact royalty payments under the regulations. Since royalty payments are not market prices, and since the mix of programming does not determine royalty payments, Dr. Waldfogel's regression model lacks both legitimacy and relevance.

Tr. at 833:1 (Waldfogel) ("It is very much like a hedonic model.").

S. Rosen, Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition, 82 JOURNAL OF POLITICAL ECONOMY 34-55 (1975) ("market clearing prices, p(z), fundamentally are determined by the distributions of consumer tastes and producer costs (at 35)").

Id. (" $p(z_1, ..., z_n)$  must be increasing in all its arguments (at 37)").

While I believe that Dr. Waldfogel's regression analysis should be rejected on conceptual grounds, the details of the regression estimates also suggest that the estimation he employs is unreliable as a practical matter. First, a statistical review of Dr. Waldfogel's analysis points to instability in his coefficient estimates. This instability makes it difficult to see how one could use his results to determine relative market value of the competing programming. Second, other problems with the econometric model render Dr. Waldfogel's results unreliable.

#### A. Royalty Payments Are Not Market Prices

Royalty payments made by all cable systems are based entirely on a prescribed regulatory formula, and, thus, do not reflect a market price as one would expect of a hedonic model. By contrast, market value is determined by negotiations over prices and quantities between willing buyers and willing sellers, not by regulatory rules.

The total royalty fund consists of three components: the Base Fund, the 3.75% Fund, and the Syndex Fund. The regulations provide for royalty payments to be calculated based on the number and type of distant signals carried by the cable system and the system's gross receipts. The regulations also provide specific and different formulas to be used by cable operators in calculating royalty payments to each fund. There are rules describing how every dollar of royalty payments is determined. Owners of the copyrighted content have no say in the matter, as retransmission occurs under compulsion. Consequently, royalty payments are not market outcomes; they are regulatory outcomes. There is no negotiation among willing buyers and sellers; the

exchange is compulsory and the payments are determined by regulatory rules. It is not possible to extract market information from regulatory royalty payments using regression analysis in the manner employed by Dr. Waldfogel, and he provides no theory to suggest otherwise.

## B. Royalty Payments Are Independent of Program Minutes

Dr. Waldfogel models royalty payments as a function of the minutes of programming in each category (and some other factors). This is inconsistent both with the facts we know and his own testimony. Royalty payments are calculated based on the number of distant signal equivalents and the cable system's gross receipts. As such, they are, by rule, independent of the quantities of the various programming types — e.g., minutes of sports programming or movies — appearing on retransmitted signals. To claim that a minute of sports increases royalty payments nearly forty-times (= 2.77/0.075) more than a minute of movies, as Dr. Waldfogel does, is simply not true. The calculation of the royalty payment for a system carrying one independent distant station remains the same whether that distant signal carries 100% movies, 100% live sporting events, 100% Mexican programming, or 100% Canadian programming. While Dr. Waldfogel understands that royalty payments are regulatorily prescribed and that

<sup>17</sup> See PS Exhibit 5 at 10-13.

royalty payment calculations are independent of the programming mix on distant signals, 18 his model does not reflect that understanding.

The lack of connection between the program mix of a system's distant signals and the system's royalty payments can be shown by looking at Dr. Waldfogel's data. Summarized in Table 2 are two cases where the royalty payments for two cable systems are virtually identical. This occurs when the Distant Signal Equivalent ("DSE") count is identical and when the gross receipts are identical (or almost so). In Example 1, we have a case where royalty payments are identical and revenues are essentially identical. Yet, in this case, we see that the mix of programming minutes for Cable System MAA200 and VAR850 are very different. Unlike System VAR850, System MAA200 has no Commercial TV, Devotional, or Joint Sports programming minutes, retransmitting instead 20,739 Canadian minutes and 4,490 Program Supplier minutes. Yet, this very different mix had no effect on royalties paid by the two systems. This outcome is not restricted to systems with only one DSE. In Example 2, each system has 1.25 DSEs and the mix of programming is very different across systems, with the largest difference being in the Public Television category. Again, the mix of programming is different, but the royalty payment is the same.

SP Exhibit 18 at 7 ("the royalty payment for a bundle of distant signals is the product of the percentage rate (which is determined by the number of DSEs carried and other factors) and the system gross receipts for program service tiers that include broadcast stations. Hence, variation across [cable system operator] distant signal royalty payments is directly affected by two basic factors, the number and type of distant signals chosen and the system gross receipts."); Tr. 828:3-831:20 (Waldfogel).

Table 2. Royalty Payments and the Programming Mix

	Exam	ple 1	Example 2		
System ID	MAA200	VAR850	CAW525	WYU200	
<b>Gross Receipts</b>	739,320	739,325	380,013	380,009	
Total Royalty	7,489	7,489	4,231	4,231	
Total DSE	1	1	1.25	1.25	
Canadian	20,739	0	0	0	
Comm. TV.	0	2,836	2,354	5,588	
Devotional	0	1,860	1 <i>,77</i> 0	2,100	
Public Television	0	0	30,240	0	
Joint Sports	0	982	1,807	1,569	
Program Suppliers	4,490	24,562	24,309	36,509	

As shown in Table 2, the royalty payments made by cable operators are independent of the mix of programming on each signal.

## C. The Estimated Coefficients are Unstable

The dependent variable in Dr. Waldfogel's regression is royalty payments. The linear regression employed by Dr. Waldfogel is intended to quantify the relationships between royalty payments and the actual determinants of such payments. We know that the determinants of those royalty payments are DSE counts and gross receipts, yet neither of these variables appear in Dr. Waldfogel's regression. Consequently, Dr. Waldfogel does not attempt to model the true data generating process, so his model is clearly mis-specified. Mis-specified regression models like Dr. Waldfogel's tend to produce results that are specific to the data set used to estimate the coefficients.

To evaluate the stability of the coefficients obtained by Dr. Waldfogel's regression, I estimate Dr. Waldfogel's model using subsamples of his data. I selected

the subsamples such that there would be no change in the coefficients given Dr. Waldfogel's own specification. While we would not expect the coefficients obtained using the subsample to be identical across subsamples, they should be relatively similar if Dr. Waldfogel's regression model is sound. Large changes in the coefficients across datasets can indicate a problem with specification, and such changes are problematic because Dr. Waldfogel relies solely on the actual coefficients (*i.e.*, the point estimates) to compute the royalty allocation shares. The analysis below demonstrates extreme sensitivity of the coefficients to data set changes in Dr. Waldfogel's modeling approach.

#### 1. Pooling the Data

Dr. Waldfogel's dataset consists of data for four time periods, which he pools into one dataset for estimation. He assumes that the coefficients on program minutes (and the other coefficients) are equal across all four time periods. Estimating the model for each time period, then, provides an opportunity to evaluate the stability of Dr. Waldfogel's coefficients in a manner consistent with the overall specification used by Dr. Waldfogel.

The first column of Table 3 provides the coefficient estimates from Dr. Waldfogel's testimony.<sup>19</sup> In the next four columns, I calculate the coefficient estimates for the four time periods individually. The range of the coefficient estimates is provided in the final column. As shown in the table, the regression coefficients vary widely across the time periods. In fact, the coefficients on Public Television and

<sup>19</sup> SP Exhibit 18 at 11 (Table 2).

Devotional minutes change sign across models. The coefficient for Commercial TV is as high as 0.582 and as low as 0.006. The coefficient for Canadian ranges from 0.077 to 0.45, and the Sports coefficient ranges from 1.69 to 5.45. The ranges on the estimated coefficients are very wide, particularly considering the relatively compact time periods involved. The instability of the coefficients across the samples demonstrates the consequence of a poorly specified model.

	Full Data Set	First Half 2004	Second Half 2004	First Half 2005	Second Half 2005	Range (Max - Min)
Program Suppliers	0.075*	0.111*	0.093	0.022	0.048	0.086
Sports	2.77*	1.69	4.00*	4.96*	5.45*	3.76
Commercial TV	0.256*	0.239	0.074	0.582*	0.006	0.576
Public Broadcasting	0.042	-0.012	0.013	0.141	-0.007	0.153
Devotional	-0.067	0.020	-0.130	0.013	-0.251	0.271
Canadian	0.282*	0.450	0.295	0.298*	0.077	0.373
R <sup>2</sup>	0.75	0.74	0.76	0.73	0.78	
Obs.	4954	1301	1303	1294	1056	
* Statistically Significa	nt 10% level.	Robust.				

While there are statistical tests such as that performed by Dr. Waldfogel to evaluate the statistical differences in the coefficients across time periods,<sup>20</sup> such tests are not very compelling in this case. In Table 3, the asterisk ed coefficients under the individual time periods are those for which the null hypothesis (the coefficient equals zero) is rejected. The null hypothesis is rejected for only 6 of the 24 estimated coefficients (at the 10% level). In other words, across time, most of the coefficients are not statistically different from zero and have very wide confidence intervals. These

SP Exhibit 18 at Appendix 3, p. 3.

poor estimates make it difficult to perform statistical tests on the equality of coefficients. For example, we can say on statistical grounds that in Dr. Waldfogel's regression, the coefficient for Public Broadcasting (0.042) is equal to the coefficient for Commercial TV (0.256), even though the two estimates differ by a factor of six.<sup>21</sup> Likewise, the Program Suppliers coefficient (0.075) and the Devotional coefficient (-0.067) are statistically equal, even though the Devotional price is negative and the Program Suppliers price is positive and statistically different from zero.<sup>22</sup> In fact, statistically speaking, the coefficients for the Program Suppliers, Commercial TV, Public Television, and Devotional are all equal.<sup>23</sup> Put simply, when a coefficient is poorly estimated (i.e., it has a wide confidence interval), testing its equivalence to other coefficients also poorly estimated is exceptionally weak evidence. Moreover, statistical tests are irrelevant in Dr. Waldfogel's analysis. In the computation of shares, only the actual value of the coefficient enters Dr. Waldfogel's calculation. Statistical significance plays no role in the his calculation of allocation shares.<sup>24</sup> In this light, the variability in the coefficients is very troubling.

The instability of the coefficients is further illustrated by studying the sample of systems paying the 3.75% fees versus non-3.75% systems. The Base and 3.75% Funds

More formally, the null hypothesis of equal coefficients is not rejected. The F-statistic is 1.74 with Probability level 0.175.

The F-statistic is 0.97 with Probability level 0.326.

The F-statistic is 1.85 with Probability level 0.136.

Only negative coefficients are discarded. Statistically insignificant but positive coefficients are used without adjustment.

are different funds, and the computation of royalty payments is very different across the two. Evaluating each group of systems independently is a useful exercise, and since Dr. Waldfogel accounts for the 3.75% Fund payments using a single dummy variable, we should, by definition, be able to estimate separate regressions for the two system types without any significant changes in the coefficients.<sup>25</sup>

Table 4. Coefficient Instability Across 2004-2005 Funds							
Claimant	Waldfogel's Table 3 Coefficients	Exclude 3.75% Fund Systems	Include Only 3.75% Fund Systems				
Program Suppliers	0.075*	0.108*	0.073				
Sports	2.77*	0.922	3.404*				
Commercial TV	0.256*	0.315*	0.118				
Public Broadcasting	0.042	0.006	0.119*				
Devotional	-0.067	-0.247	-0.007				
Canadian	0.282*	0.050	0.631*				
R <sup>2</sup>	0.75	0.85	0.62				
Obs.	4954	3851	1103				
Statistically Significan	nt 10% level. Ro	obust.					

Table 4 presents the estimated coefficients on minutes for subsamples of Dr. Waldfogel's data chosen based on the payments to the 3.75% Fund. In the first numerical column, Dr. Waldfogel's coefficient estimates are provided.<sup>26</sup> In the second numerical column, I estimate the coefficients after *excluding* all firms making a payment to the 3.75% Fund (leaving only Base Fund and Syndex paying systems). Comparing the first two numerical columns, we see that the coefficient estimates when 3.75% Fund

The constant term of the regression may change, but this coefficient is irrelevant to the computation of royalty shares.

<sup>&</sup>lt;sup>26</sup> SP Exhibit 18 at 11.

systems are excluded are very different than those reported in Dr. Waldfogel's testimony. The coefficients on Sports, Public Broadcasting, Devotional, and Canadian shrink considerably.<sup>27</sup> In the third numerical column, I estimate the coefficients including only firms that pay into the 3.75% Fund. These estimated coefficients are very different than those reported by Dr. Waldfogel. Comparing the last two columns, we see large differences in the coefficient estimates across the two subsamples.<sup>28</sup> If Dr. Waldfogel's model specification were sufficiently reliable for the allocation of the royalty funds, we would not expect to see such large differences in the coefficients.

This analysis reveals once more the fact that the coefficient estimates are highly unstable across subsamples. This instability confirms what we already know to be a problem with model specification, and indicates Dr. Waldfogel's analysis is too unreliable to allocate the royalty fund under a relative market value standard.

# D. Specification and Outliers

During Dr. Waldfogel's oral testimony, Judge Wisniewski asked him if he had performed any analysis of the residuals of his regression.<sup>29</sup> Dr. Waldfogel answered that he had not.<sup>30</sup> In light of the question, I decided to analyze Dr. Waldfogel's regression in two ways. First, I performed a widely-used specification test known as

The statistical significance of the coefficients change as well, but statistical significance is not relevant to Dr. Waldfogel's calculations.

A statistical test of equal coefficients on the Claimants' minutes is likewise rejected at better than the 10% level (F Statistic = 2.90, Probability < 0.01).

<sup>&</sup>lt;sup>29</sup> Tr. at 935:11-936:18 (Waldfogel).

<sup>&</sup>lt;sup>30</sup> Tr. at 935:16 (Waldfogel).

RESET, which is a somewhat general test of specification error.<sup>31</sup> The hypothesis of RESET is that the model is correctly specified; Dr. Waldfogel's model failed that test. This test provides strong evidence that Dr. Waldfogel's regression model is not correctly specified, suggesting the model is inadequate and the estimated coefficients are unreliable.<sup>32</sup>

More directly to the issue of the residuals, I evaluated Dr. Waldfogel's regression for what are often referred to as "outliers" or influential observations. Such observations can exert undue influence on the coefficient estimates, and their identification can tell us other things about the data or the model. In this case, the presence of outliers is used as evidence of poor model specification.<sup>33</sup> Specifically, if we know that a cable system's actual royalty payment matches the payment calculation from the regulations, then that system should not be an outlier. If such a system is an outlier, then there must be a problem with the model's specification.

The test is used primarily to test for incorrect functional form and in some instances omitted variables. *See, e.g.,* D. Gujarati, BASIC ECONOMETRICS (1995) at 464-6; J. Wooldridge, INTRODUCTORY ECONOMETRICS (2003) at 292-4.

The null hypothesis of RESET is "no specification error," and the test statistic follows the F-distribution. If the test statistic from the regression exceeds the critical value, then it can be assumed that the model is not correctly specified. Applying RESET to Dr. Waldfogel's regression produces a test statistic of 48.45. The critical F-value is 2.08 at the 10% significance level, so the null hypothesis of "no specification error" is rejected at much better than standard significance levels.

D. Belsley, E. Kuh, and R. Welsch, REGRESSION DIAGNOSTICS: IDENTIFYING INFLUENTIAL DATA AND SOURCES OF COLLINEARITY (2004) ("since the data could have been generated by a model(s) other than that specified, diagnostics may reveal pattern suggestive of these alternatives (at 6)").

I computed the outlier statistics Cook's D and COVRATIO for each observation.<sup>34</sup> I found that Dr. Waldfogel's regression model labeled some good data as outliers (and perhaps vice versa). For example, one of the systems I observed with a particularly large Cook's D (an outlier) is Cable System AZP580 (0.077 in the second half of 2005). This system carries only 1.0 DSE and paid 1.013% of its gross receipts in cable royalties. The system's royalty payment is exactly in line with the regulatory rule, so this particular system should not be labeled an outlier if the model specification is legitimate. Yet, based on Dr. Waldfogel's regression model, the system is an outlier. Another system, System CAS810, also showed a large Cook's D (0.01). The system, with 5.25 total DSEs, made roy alty payments amounting to 3.4095% of gross receipts -exactly what it should have paid under the regulatory rule.<sup>35</sup> Again, this valid observation is determined to be an outlier by Dr. Waldfogel's regression, indicating mis-specification of the regression model. Now, consider System ILE240, which, with 5.5 total DSEs, paid only 1.2% of its gross receipts in royalties where the DSE total should have led to payments of about 3.3% of gross receipts.<sup>36</sup> This system's Cook's D is 0.00016, which is well below the threshold for outlier status. In all, there are 377

The threshold value of Cook's D is D > 4/N, or 0.00081 (N = 4,954). The threshold value for COVRATIO is  $|COVRATIO-1| \ge 3K/N = 0.0121$ , where K is the number of estimated parameters including the constant term (or 20). See L. Hamilton, STATISTICS WITH STATA (2009) at 224.

The calculation is 1.013 + 0.668.3 + 0.314.1.25 = 3.4095%.

The calculation is  $0.956 + 0.63 \cdot 3 + 0.296 \cdot 1.5 = 3.29\%$ .

outliers indicated in Dr. Waldfogel's data based on his regression model.<sup>37</sup> Excluding the outliers from the estimation sample results in substantially different royalty shares for the Claimants, and all the estimated coefficients are positive.<sup>38</sup> Moreover, most of these "outliers" appear to paying the correct level of royalty payments and thus should not be outliers in a correct model. Even if legitimate reasons exist for the outliers that do not appear to be paying the correct royalty amount, Dr. Waldfogel's analysis should have accounted for those reasons in his regression model. The outlier statistics further demonstrate that Dr. Waldfogel's model is mis-specified.

## E. Corroboration of Bortz

Dr. Waldfogel claims his regression analysis can be used to corroborate the Bortz survey results. Meaning, if the regression approach and the Bortz survey render similar results, then this is evidence that the two approaches are producing legitimate estimates of relative market value. In fact, Dr. Waldfogel's regression analysis does not corroborate the Bortz survey results.

Dr. Waldfogel's testimony includes two alternative computations of program value—one based on "Compensable Minutes" and the other based on "All WGNA Minutes." For the computation of the relative market values actually recommended by

By Cook's D and COVRATIO there are 377 outliers. A review of the data indicates that most of these systems (over 90%) are making payments at least roughly in line with the regulatory rules.

The shares based on "compensable" minutes are: Program Suppliers (40.7%), Sports (34.1%), Commercial TV (14.5%), Public Broadcasting (5.0%), Devotional (1.26%), and Canadian (4.47%). Dr. Waldfogel describes his results as "implausible" due to the negative coefficient on Devotional minutes. Tr. at 781:14 (Waldfogel).

Dr. Waldfogel, he uses the Compensable Minutes.<sup>39</sup> Dr. Waldfogel believes these compensable minutes are the proper quantities for determining relative market value.<sup>40</sup> The alternative calculation, which is found in an appendix to Dr. Waldfogel's written testimony, relies on the All WGNA Minutes, which Dr. Waldfogel believes contain program minutes that are "not eligible to receive any share of the royalties in this proceeding."<sup>41</sup> Although he does not claim the All WGNA Minutes analysis produces results that can be used to determine relative market value, Dr. Waldfogel uses the All WGNA Minutes as somehow corroborative of the Bortz survey results as proper estimates of relative market value.

Table 5 provides the final shares recommended by the Bortz survey along with Dr. Waldfogel's two results. The Bortz shares for 2004 and 2005 are provided in the first two numerical columns. In the third column, Dr. Waldfogel's recommended shares for the royalty distribution based on Compensable Minutes are provided. As shown in the table, Dr. Waldfogel's Compensable Minutes results are not at all consistent with the Bortz numbers. For example, in the Program Supplier category, Dr. Waldfogel's recommended share is 45% lower than the two-year average of the Bortz share. In the Commercial Television category, Dr. Waldfogel's recommended share is 30% higher

<sup>39</sup> SP Exhibit 18 at 12 ("we consider only compensable programs").

<sup>40</sup> *Id.* at 12, note 11.

<sup>41</sup> *Id.* at 12.

than the two-year average of the Bortz share. His recommended share for the Canadian Claimants is 67% higher than the two-year average of the Bortz share.

Table 5. Corroboration of Bortz									
	Bortz		Waldfogel		Waldfogel				
			Compensable Minutes		All WGNA Minutes				
			Results		Results				
	2004	2005	04-05	04-05 Difference		Difference			
			Shares	(Average)	Shares				
Program Suppliers	35.40	36.20	24.68	45%	32.15	11%			
Sports	32.40	35.50	42.36	20%	38.73	12%			
Commercial TV	17.90	14.20	22.86	30%	20.20	21%			
Public Broadcasting	6.20	6.05	6.79	10%	6.01	2%			
Devotional	7.60	3.30	0.00	•••	0.00	•••			
Canadian	0.50	1.65	3.30	67%	2.92	63%			

Dr. Waldfogel does not, however, make the comparison between his Compensable Minutes results, which he believes to be the correct basis for allocation of royalties, and the Bortz shares, which Dr. Crandall argues are legitimate. Rather, Dr. Waldfogel re-computes the relative shares for the claimants using All WGNA Minutes, which he claims *do not* show relative market value for the programming to be compensated here, for comparison to Bortz. It is the All WGNA Minutes estimates of shares that Dr. Waldfogel compares to Bortz to conclude the value derived from his regression results are corroborative of the Bortz survey results. So, the corroboration attempt is allegedly successful only if Dr. Waldfogel compares the relative shares from Bortz to his All WGNA Minutes results of relative shares, and not to the relative shares that he claims represent relative market value. Dr. Waldfogel's recommended distribution shares clearly do not corroborate the Bortz survey results. In essence, Dr.

Waldfogel claims the improperly computed shares corroborate Bortz, which is a discredit to his analysis, the Bortz survey, or both.

Even if one could accept Dr. Waldfogel's All WGNA Minutes shares as the appropriate market value shares, these results would not corroborate the Bortz survey results. The Bortz survey provides separate allocation shares for the years 2004 and 2005, whereas Dr. Waldfogel provides only estimated shares for the combined periods. In order to meaningfully compare the two estimates, I re-estimated Dr. Waldfogel's regression model and recalculated the share values for each year using the All WGNA Minutes. The results are depicted in Table 6.

Table 6. All WGNA Minutes Shares Versus Bortz Shares (By Year)

	Year 2004			Year 2005		
-	Coefs.	Shares	Bortz	Coefs.	Shares	Bortz
		Total	Shares		Total	Shares
		Minutes			Minutes	
Program Suppliers	0.111*	46.90	35.40	0.036	14.78	36.20
Sports	2.702*	37.31	32.40	3.528	47.27	35.50
Commercial TV	0.154	11.98	17.90	0.323	24.39	14.20
Public Broadcasting	0.001	0.19	6.20	0.082	11.38	6.05
Devotional	-0.057	0.00	7.60	-0.092	0.00	3.30
Canadian	0.354*	3.62	0.50	0.220	2.18	1.65
* Statistically Significa	nt 10% lev	el. Robust.				

Initially, the resulting coefficients in Table 6 show, once again, that Dr. Waldfogel's coefficients are not stable over time. For example, the coefficient on Program Suppliers is 0.111 in 2004 but 0.036 in 2005 -- a 102% difference.<sup>42</sup> The

The difference is so large, I use the arc formula to compute the percentage difference (= (0.111-0.036)/0.5(0.111+0.036)).

coefficient on Public Television rises from 0.001 to 0.082 across the two years -- a 195% difference. None of the estimated coefficients are statistically different from zero in 2005 (even at the 10% level). In fact, statistically speaking, all the coefficients are equal in 2005.

As a consequence of the coefficient instability, the allocation shares based on total minutes are very different in 2004 and 2005. In 2004, Program Suppliers get 46.9% by Dr. Waldfogel's approach, but only 14.78% in 2005. Sports jumps from 37.31% to 47.27% between years, and Public Television rises from 0.19% to 11.38%. In fact, very few of the estimated shares are close across Dr. Waldfogel's regression approach and the Bortz survey. In reference to Bortz, even a comparison using the All WGNA Minutes results as Dr. Waldfogel recommends for the corroboration exercise, Table 6, shows that the two methods render very different recommendations in 2004 and 2005. These results clearly reject the argument of corroboration between the two methodologies.

#### IV. Conclusion

As explained in detail in this testimony, neither Dr. Crandall nor Dr. Waldfogel provides credible economic analysis that would justify using the Bortz survey results, or the regression analysis results, as evidence of the relative market values of the programming in question. Accordingly, neither Dr. Crandall's nor Dr. Waldfogel's approach is proper for determining how to allocate the 2004-05 royalties.

# APPENDIX A

REBUTTAL TESTIMONY OF

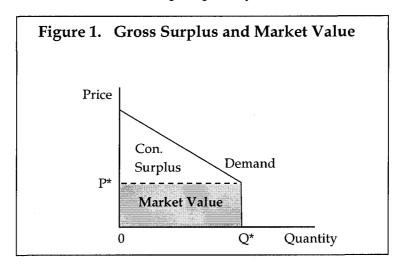
GEORGE FORD, Ph.D.

#### APPENDIX A

## Conditions Under Which Willingness-to-Pay (or Gross Surplus)

#### **Equals Relative Market Value**

Figure 1 illustrates the difference between willingness to pay (or gross value) and market value. In Figure 1, we have a downward sloping demand curve labeled "Demand." The market price and quantity are labeled P\* and Q\*. Market value (P\*Q\*) is the shaded area labeled "Market Value". Willingness to pay is the sum of market value and Consumer Surplus, the latter of which is the triangular area labeled "Con. Surplus". Gross surplus, or willingness to pay, is the area under the demand curve up to quantity Q\*.



Turning to the comparison of relative gross surplus and relative market value, we consider the case of two goods, Good 1 and Good 2. Mathematically, we can define the gross surplus from Good 1 as

$$GS_1 = \int_0^{Q_1} P_1(s) ds \tag{1}$$

where  $P_1(Q)$  is the inverse demand curve for Good 1. Expression (1) is just the total area under the demand curve (total or "gross" surplus") for the quantity  $Q_1$ . We can define the gross surplus for Good 2 (GS<sub>2</sub>) similarly:

$$GS_2 = \int_{0}^{Q_2} P_2(s) ds {2}$$

Note that for any  $Q_i$ , we have an associated price  $P_i = P_i(Q_i)$ , and this price makes  $Q_i$  optimal for the firm. Although the analysis to follow is ordinarily discussed within the context of consumer behavior, the logic is the same in the case of a firm buying inputs. When it is not ambiguous, we will move freely between the two examples. At prices  $P_i$ , we have supplier revenues  $R_i = P_iQ_i$ , where these revenues are identified with the market value of the input

quantity purchased. Further,  $GS_i$  -  $R_i$  is the consumer surplus from Good i, which is actually producer surplus (variable profits) since these are factor demands.

The question of interest is under what condition relative gross surplus equals relative market value, or  $GS_1/GS_2 = R_1/R_2$ . (This argument extends to more than two goods.) To answer this question, we first replace the inverse demand function  $P_i(s)$  in Expressions (1) and (2) by their Taylor expansions around the quantity  $Q_i$ . Suppressing the subscripts, we have

$$P(s) = P(Q) + P'(Q)(s - Q) + (1/2)P''(Q)(s - Q)^{2} + \dots$$
 (3)

Ordinarily, these Taylor expansions may contain many terms and, if the demand function is relatively well-behaved, the Taylor expansion will, in the limit, perfectly express the underlying function it approximates. If the demand curve is linear, and only if it is linear, we can solve the resulting integral for the Gross Surplus, obtaining the exact solution

$$GS_1 = R(1 + 1/2\eta) (4)$$

where  $\eta$  is the own-price elasticity of demand at ( $P_i$ ,  $Q_i$ ). So, making this substitution for both, we can write

$$\frac{GS_1}{GS_2} = \frac{R_1(1+1/2\eta_1)}{R_2(1+1/2\eta_2)} \tag{5}$$

as the condition of interest. From Expression (5), it is easy to see that the ratio of gross surplus (or willingness-to-pay) is equal to relative market value (i.e., the ratio of revenues) only when  $\eta_1 = \eta_2$  (inclusive of the assumption of linear demand).

In sum, for relative willingness-to-pay to be found equal to relative market value (except perhaps by chance), the following two conditions must hold. First, the demand curves must be linear. If the demands are not linear, then the Taylor expansion used in the proof will not terminate at the first derivative, so there will be additional, unequal terms. This will, in general, lead to inequality in the ratios of interest. Second, the own-price elasticities of demand must be equal across the goods. Even with linear demands, the points on the demand curve where the evaluations of surplus and revenue are made must be selected so that the demand elasticities are then equal. This is highly improbable. If either condition is violated, the equality of the two ratios is not implied. Also,. Since linear demand curves contain all elasticity values, the elasticities are different at every price, and there is no theoretical reason to expect that the demand elasticities for the inputs of production should be equal, the equality of elasticities across an arbitrary pair of prices is an exceptionally unlikely event for any continuous distributions of prices. Formally, the probability is literally zero for any pair of continuous distributions over prices.

# **DECLARATION OF GEORGE S. FORD**

I declare under penalty of perjury that the foregoing rebuttal testimony is true and correct and of my personal knowledge.

Executed on December 11, 2009.

George S. Ford

## **CERTIFICATE OF SERVICE**

I, Lucy Holmes Plovnick, hereby certify that on this 11th day of December, 2009, a copy of the Written Rebuttal Statement of Program Suppliers was sent by courier or by Federal Express to the parties listed on the attached Service List.

Dated: December 11, 2009

Lucy Holmes Plannick
Lucy Holmes Plovnick

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