Before the
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In the Matter of	)	
Distribution of the 1998 and 1999	)	Docket No. 2001-8 CARP CD 98-99
Cable Royalty Funds	)	

PROGRAM SUPPLIERS' PROPOSED PHASE I FINDINGS OF FACT AND CONCLUSIONS OF LAW

Michael E. Tucci
Gregory O. Olaniran
Robert L. Eskay, Jr.
Sarah K. Johnson
Stinson Morrison Hecker LLP
1150 18th Street, NW, Suite 800
Washington, DC 20036
(202) 785-9100

Attorneys for
PROGRAM SUPPLIERS

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GLOSSARY

1990-92 tr.:	Transcript of the 1990-92 CARP Proceedings
Bortz Study:	Cable Operator Valuation of Distant Signal Non-Network Programming, JSC Exhibit __
Canadians:	Canadian Claimants
CARP:	Copyright Arbitration Royalty Panel
CDC:	Cable Data Corporation
CRT:	Copyright Royalty Tribunal
Claimants:	Copyright Owners Participating in the 1990-92 Copyright Royalty Distribution Proceeding
Devotionals:	Devotional Claimants
Ex. __:	Direct Testimony Exhibit
Ex. __-X:	Direct Case Cross-Examination Exhibit
Ex. __-R:	Rebuttal Testimony Exhibit
Ex. __-RX:	Cross-Examination Rebuttal Exhibit
Fee(s) gen:	Compulsory Royalty Fees Generated
H.Rep. No.:	House Report Number
Librarian:	Librarian of Congress
JSC:	Joint Sports Claimants (also referred to as Sports)
Music:	Music Claimants
NAB:	National Association of Broadcasters (also referred to as "Local" or "Commercial TV Claimants")
NAB Regression Model:	Regression model presented by NAB witness, Dr. Gregory L. Rosston

INTRODUCTION

In accordance with the CARP Order dated July 18, 2003, Program Suppliers hereby provide their Proposed Findings of Fact and Conclusions of Law. As demonstrated herein, the Panel should allocate the 1998-99 Royalty Funds in the following manner:

	1998 percentage of		1999 percentage of	
	Basic	3.75	Basic	3.75
Program Suppliers	72.00	78.50	72.00	78.50
NAB	6.80	8.24	6.80	8.24
PTV	3.82	0.0	3.90	0.0
Music	2.33	2.33	2.33	2.33
Canadian	1.47	0.11	1.56	0.27

In addition, the Syndex Funds should be awarded to the Music Claimants and Program Suppliers in shares of 2.33% for Music and 97.67% to Program Suppliers. Program Suppliers do not propose any specific awards for the Joint Sports Claimants in this Proceeding.[1]

[1] Several years ago, Joint Sports Claimants and Program Suppliers entered into agreements settling controversies over the 1992-2000 satellite royalty funds, the 1993-2000 cable royalty funds and related matters. Consistent with those agreements, Program Suppliers do not propose any findings or conclusions with respect to the Joint Sports Claimants.

PROPOSED FINDINGS OF FACT

PROGRAM SUPPLIERS

Jack Valenti

1. Section 111 of the Copyright Act requires cable systems to pay a license fee to copyright owners of non-network programs retransmitted by the cable operator on a distant basis. Valenti written direct, 5.

2. The "non-network" and "distant retransmission" aspects of the compulsory license reflect that television programming is normally licensed to broadcast stations for broadcast only within a station's local service area. For the purposes of Section 111, network programs are those programs aired by the ABC, CBS, and NBC networks.

3. When cable systems retransmit non-network programs beyond a station's local service area, that retransmission is considered distant, and compensable under Section 111. Valenti written direct, 6; tr. 6207-08.

4. In creating the compulsory license scheme, Congress specifically recognized that cable systems benefit and owners are harmed when distant non-network programming is retransmitted. The royalty fee plan ensures that cable operators pay something for the benefit they receive. Valenti written direct, 6-7.

5. Because owners of network programs give nation-wide transmission rights to the networks when they license a program for network broadcast, the owners are already paid for carriage of these programs on a national basis, and thus they are not entitled to Section 111 royalties when cable operators retransmit their programs. Valenti written direct, 6.

6. The vast majority of non-network programs are Program Suppliers' programs, including syndicated series, specials, and movies. Valenti written direct at 3; tr. 6208.

7. There are generally two types of syndicated series. "Off-network" series are those series that first appear on a network before being sold on a market-by-market basis. "First run" series are those that go directly from production into syndication. Valenti written direct, 3-4.

8. Movies in the Program Suppliers' category include feature films that were released first in theaters and then distributed via syndication, as well as made-for-television films. Valenti written direct, 4.

9. The popularity of television programs is the best evidence of their profound cultural presence. Valenti written direct, 7.

10. Viewership is both the starting and ending point for any analysis regarding the value of distant signal programming. Nielsen measurement are the currency of the industry, best measure of viewership, and the best measure of program value in the broadcast market today. Valenti written direct, 8.

11. People subscribe to cable to get programs. The mere availability of a program is meaningless if people do not watch the program. Valenti written direct, 9.

12. Although cable channels are licensed on a per subscriber basis, unless those channels continue to offer programs subscribers want to watch, they will lose their value. This is true for almost any product. If you offer a product that nobody wants to use, you won't be in business very long. Valenti, tr. 6213.

13. The success or value of a program, then, can only be measured by how many people actually watch it, not by the mere fact that it happens to be available. While critics and pundits may tell people what they ought to watch, actual viewing conduct tells us what people actually choose to watch. Valenti written direct, 9.

14. About 80 percent of all new television shows do not last through the second year. Producers typically operate at a deficit until a show goes into syndication. To achieve syndication, producers need to continue production long enough to create 88 to 100 episodes so that a program can be stripped (broadcast every day). Syndication is the only means that producers can recoup their deficits, and thus is the goal for every series. Valenti, tr. 6216-17.

Babe Winkelman

15. Collectively, twenty-six new episodes of Babe Winkelman's *Good Fishing* and *Outdoor Secrets* are produced every year. Winkelman written direct, 3.

16. During 1998 and 1999, *Good Fishing* and *Outdoor Secrets* ran on numerous national cable networks and broadcast stations, including Superstation WGN, USA, and the Outdoor Channel. Winkelman written direct, 3-4.

17. Collectively, *Good Fishing* and *Outdoor Secrets* have won more awards for excellence than any other outdoor show. Winkelman written direct, 4.

18. Babe Winkelman Productions' ("BWP") primary opportunity for profit is through the sale of commercial time to corporate sponsors. Winkelman written direct, 6.

19. BWP purchases commercial television time from stations and networks around the country and then sells commercial time in its programs to make money. Winkelman written direct, 6.

20. BWP is profitable when the cost of purchasing time is less than its revenues from the sale of commercial time. Winkelman written direct, 6-7.

21. For maximum exposure of its shows, BWP targets both broadcast stations and cable networks for licensing by time purchases or by barter. Winkelman written direct, 7.

22. BWP sells commercial time on its shows by offering sponsors maximum viewer reach at the lowest possible cost per thousand viewers. Winkelman written direct, 7.

23. The best indication of the success of a BWP show is Nielsen ratings. Winkelman written direct, 7.

24. Nielsen ratings permit the tracking of weekly, monthly, quarterly, and annual viewer dynamics; increased ratings indicate that viewers like what they are seeing, while the opposite is true when numbers go down. Winkelman written direct, 7.

25. Nielsen ratings are extremely important to BWP in making licensing deals with broadcast stations and cable networks, because audience size helps to determine the market value of programs, establish expectations with regard to advertising sales, and assess the profitability of BWP shows. Winkelman written direct, 7.

26. Since BWP sells and guarantees the number of impressions (viewers) a sponsor will receive, Nielsen ratings are the most trackable measuring stick that can be used. Winkelman written direct, 8.

27. Ratings dictate whether BWP will have a profit or loss. Winkelman written direct, 8.

28. Nielsen is the only organization that determines actual viewership. Winkelman, tr. 6275.

29. How many people actually view a program is important. Winkelman, tr. 6275.

30. By watching, people get involved with a program; people get involved with BWP shows because the program is important to them. Winkelman, tr. 6276.

31. Nielsen ratings are crucial to the way BWP operates its business; without Nielsen numbers, BWP cannot survive. Winkelman, tr. 6279.

32. If BWP can show to an advertiser that 75 percent of its audience is an 18 to 49-year-old male demographic, that is crucially important. Winkelman, tr. 6281.

33. Television stations use BWP programs as lead-ins and lead-outs to try and bring up a particular kind of audience and strengthen that part of the station's schedule. Winkelman, tr. 6282.

34. BWP often buys time from stations for its programs. Winkelman, tr. 6291-92.

35. BWP often scores and produces its own music for its programs. Winkelman, tr. 6292.

36. If its Nielsen numbers are not strong enough with the right demographics, advertisers will not be interested in BWP's programming. Winkelman, tr. 6296.

37. Producers run a significant risk in terms of production costs because unless a program is put all together into the right kind of a format and package that is accepted by the people, the program will fail to recover its production costs. Winkelman, tr. 6296-97.

38. BWP simulcasts programming to increase the opportunity for viewing. Winkelman, tr. 6304.

39. Advertisers generally pay for advertising sports on a cost-per-thousand viewer basis. Winkelman, tr. 6313.

40. Demographics can determine whether the cost per thousand will be higher or lower. Winkelman, tr. 6313.

41. A large audience with the best demographics will yield the highest cost per thousand from a potential client. Winkelman, tr. 6313.

42. BWP's fishing and hunting shows have considerably larger audiences than other syndicated shows about the outdoor-related industry. Winkelman, tr. 6315.

43. Viewers don't know whether BWP has received awards or not, as it is something that happens behind the lines from an industry standpoint, not something BWP comes out and tells them. Winkelman, tr. 6315.

44. The use of music in a program is kind of like frosting on a cake: it kind of decorates it up and makes it look good, but if you build a lousy cake, nobody is going to eat it. Winkelman, tr. 6336.

45. Music is not the thing that makes people watch a program or not. Winkelman, tr. 6336.

Marsha Kessler

46. Under Section 111, cable systems are obligated to pay statutorily-prescribed royalty fees for the retransmission of non-network programming transmitted by television stations. The term "non-network" programming refers to programs other than those aired by the three broadcast networks: ABC, CBS or NBC. Kessler written direct, 3.

47. FCC regulations permit program owners to license their shows to television stations for broadcast within a certain geographic area. When a cable system retransmits a broadcast station's signal outside of that area, the programs on the station are available to a new audience for which the program owner has not been compensated. Kessler written direct, 4.

48. Cable networks do not pay statutory royalties because cable networks negotiate in the marketplace for nationwide use of the programming. Kessler written direct, 5.

49. To comply with the requirements of the statutory license, cable operators must file of a Statement of Account ("SOA") and pay a royalty fee calculated in accordance with Section 111. Kessler written direct, 5.

50. SOA information about a cable system's operations includes: the owner of the system; the communities served; the categories of service offered (e.g., basic, expanded and pay cable); the number of subscribers to each service; the rates charged the subscribers; television broadcast stations retransmitted; the calculation of Gross Receipts for any and all packages, or tiers, of service that contain broadcast signals; the royalty fee calculation. Kessler written direct, 6-7.

51. Gross Receipts are the revenues collected by the cable operators from subscribers for tiers of service containing broadcast signals. Kessler written direct, 7.

52. For the purpose of filing SOAs, cable systems are classified by amount of their Gross Receipts into "Form 1," "Form 2," or "Form 3." In 1998 and 1999, the semi-annual Gross Receipts thresholds were: Form 1: $75,800 or less; Form 2: more than $75,800 and less than $292,000; Form 3: $292,000 and more. Kessler written direct, 8-9.

53. In 1998 and 1999, Form 1 operators paid a flat fee of $28 every 6 months. Form 2 operators paid a fee of 0.5% or 1.0% of their Gross Receipts. Form 3 operators' royalty fee was based on the system's Gross Receipts and the number and type of distant stations it carried. Kessler written direct, 9.

54. The total royalties paid by cable operators were $108,244,875.94 in 1998 and $108,215,085.85 in 1999. Of the 1998 total: Form 1 Systems paid $314,864; Form 2 Systems paid $4,546,689; and Form 3 Systems paid $100,703,641. Of the 1999 total, Form 1 paid $299,886; Form 2 paid $4,260,686; and Form 3 paid $105,502,702. Kessler written direct 9-10.

55. For the two years, Form 1 paid about 0.3% of all royalties; Form 2 systems paid about 4%; and Form 3 systems paid about 95%. Kessler written direct, 10.

56. Consistent with this, Form 3 cable subscribers constituted a little more than 90% of all cable system subscribers in 1998-99. Kessler written direct, 10.

57. Form 3 operators pay royalties based on their Gross Receipts and the number and type of distant stations they carry. There are three types of distant signals; each of which has a statutorily assigned Distant Signal Equivalent (DSE) value. Independent stations (including Fox, UPN, WB and PAX) are assigned 1.00 DSE. Stations affiliated with the ABC, CBS and/or NBC network ("Network Affiliates") are assigned 0.25 DSE. Noncommercial educational stations (e.g., PTV stations) also are assigned 0.25 DSE. Kessler written direct, 13-14.

58. All Form 3 cable systems must pay the Base Rate Fee. In addition, some form 3 systems must pay a 3.75% fee, or a Syndex fee. Kessler written direct, 15, 17, 18.

59. The Base Rate Fee is calculated using a sliding scale of percentages based on the number of DSEs carried. In 1998 and 1999, those percentages were: 0.893% of Gross Receipts for the first DSE, 0.563% for the 2nd, 3rd, and 4th DSEs, and 0.265% for all DSEs over 4. If a cable system carried no distant stations, or if the number of distant stations it carried totaled less

than 1.0 DSE, the system paid a minimum fee of 0.893% of Gross Receipts. Kessler written direct, 15-16, 17; tr. 6502.

60. The term "3.75%" refers to the per station royalty fee percentage of Gross Receipts assessed for the carriage of stations a cable system could not have under the since–eliminated FCC rules restricting the number of distant signals that could be retransmitted. Kessler written direct, 17; tr. 6515.

61. The "Syndex" (syndicated exclusivity) surcharge applies in those few cases where cable operators serve subscribers (1) located in Major Markets (2) carry a very high frequency station(s) (3) that throws a Grade B signal over the system (4) whose syndicated programs the operators previously were required to black-out pursuant to FCC rules in effect on June 24, 1981 (5) but which the operator no longer has to black-out because the FCC rule changed. Kessler written direct, 17.

62. In 1998 and 1999, the Base Rate Fee paid by Form 3 systems constituted 90% of royalties paid by Form 3 systems, the 3.75% fees paid by Form 3 systems constituted nearly 10% and the Syndex fees paid by Form 3 systems constituted less than 0.1%. Kessler written direct, 19-20.

63. Nearly all of the Syndex royalty fees have been allocated to Program Suppliers because those royalty fees are attributable to Program Suppliers programming. Similar justifications existed, in 1998 and 1999, to support allocating most of the Syndex royalties to Program Suppliers here. Kessler written direct, 19.

64. Viewing is the most reliable standard for determining the relative consumption of distant signal programming by cable subscribers. Viewing, as measured by Nielsen is the standard by which all television programming is evaluated. Kessler written direct, 20.

65. The parties in these proceedings rely on Nielsen ratings in the course of their normal business operations. Kessler written direct, 20; tr. 6421.

66. MPAA commissioned the Nielsen Viewing Studies for 1998 and 1999 to quantify the relative shares of distant signal viewing to programming represented by Phase 1 claimant categories. Kessler written direct, 21.

67. Nielsen selected a sample of 179 stations in 1998 and 180 stations in 1999 from the list of broadcast stations carried as full time distant signals by Form 3 cable systems in 1998 and 1999, Ms. Kessler performed a county analysis to determine the counties to which viewing was local. PS Exs. 10-11; Kessler written direct, 21-22 and 13. *See also* PS Exs. 9, 9A, 9B, 9C, and 9D; PS Demo Ex. 17.

68. Ms. Kessler's local county analysis was based on an amalgam of criteria namely: (i) the FCC's signal carriage rules which apply, as appropriate, (a) the 35 mile specified zone, (b) the Grade B contour and/or (c) significant viewing of the signal, and (ii) the ADI.

69. Nielsen used the results of Ms. Kessler's local county analysis to exclude local viewing from the study. The result was a study that reports only distant cable household viewing of non-network programming. Kessler written direct, 21-22.

70. The sample stations in the 1998 Nielsen special study covered 78.2% of total subscribers and 86.6% of all Form 3 subscribers. The sample in the 1999 Nielsen special study

covered 78.0% of total subscribers and 85.4% of all Form 3 subscribers. Kessler written rebuttal, 3.

71. Adding more stations to the Nielsen Viewing Study would not materially increase the percentage of the distant signal universe covered by the 1998 and 1999 sample stations. Kessler written rebuttal, 3. In the 1998 Nielsen study, the top 50 stations (by distant subscribers) account for over 82% of all Form 3 subscribers. Adding data from the remaining 129 stations only increased the subscriber representation by four percentage points up to 86%. Similarly, in 1999 the top 50 stations account for almost 81% of all Form 3 subscribers. It took 130 stations to increase subscriber representation four percentage points - up to 85%. Kessler written rebuttal, 3. PS Ex. 3-R; Kessler, tr. 9482-84.

72. The number of unique station signals carried to distant subscribers in the Nielsen Viewing Study equates to 86.6% of total Form 3 cable subscribers in 1998 and 85.4% in 1999. PS Ex. 3-R; Kessler, tr. 9482-84.

73. The Nielsen Viewing Study measured only programming that is compensable under Section 111 of the Copyright Act. Kessler, tr. 9487-88.

74. The mix of programming on non-selected stations would be congruent with that on the stations included in the Nielsen sample. Kessler written rebuttal, 3.

75. A vast majority of the programming on stations that pay the 3.75% royalty is Program Suppliers programming. Kessler written rebuttal, 4; PS Ex. 4-R.

76. Program categorization allows Nielsen to quantify the level of distant signal viewing to programs claimed by Program Suppliers, JSC, NAB and PBS. Kessler written direct, 24.

77. Ms. Kessler is an expert in program categorization with over 20 years of experience. Kessler tr. 6351.

78. Ms. Kessler assisted Nielsen with the assignment of each individual title broadcast by each sample station to Phase 1 program types. Kessler written direct, 24.

79. Ms. Kessler personally reviewed the program categorization for WGN, the distant signal that reached the most subscribers in 1998 and 1999. Kessler, tr. 6425.

80. Program Suppliers consist of over 100 program owners, including program owners whose works also fall within other claimant groups in this proceeding. Kessler, tr. 6359-68; PS Ex. 4.

81. Titles claimed by Program Suppliers include not only program types unique to the Program Suppliers category, but also program types similar to those claimed by other claimants categories - children's programming, news and public affairs, and sports. Among Program Suppliers claimants are: Children's Television Workshop, CNN, CNBC, Major League Baseball Properties, and the Recording Industry Association of America. Kessler, tr. 6359-68; PS Ex. 4.

82. Program Suppliers' claim contains a wide variety of program genres including business and finance shows; children's programming, entertainment and other specials, educational shows, such as "Bill Nye The Science Guy" and "Popular Mechanics For Kids"; animal shows such as "Emergency With Alex Paen" and "Wild About Animals"; outdoor shows;

dramas, such as "NYPD Blue" and "ER"; entertainment series, such as "Friends," "Frasier" and "Seinfeld"; old series (called "evergreens"), such as "M*A*S*H," "The Odd Couple" and "Gunsmoke"; and fantasy and mystery shows, such as the various "Star Trek" series. Program Suppliers also claim sports shows such as golf and car races; specials, parades, and tributes. Finally, Program Suppliers' claim includes movies. This diversity of programming is available day after day, week after week, and year after year. Kessler written rebuttal, 5-6; PS Ex. 5-R; Kessler, tr. 6404.

83. Ms. Kessler has been applying the FCC's signal carriage rules to retransmissions of broadcast signals on cable television for over 25 years. No one has done this as consistently and for as long a period as she. Kessler, tr. 6351-52, 6428.

84. When Section 111 of the Copyright Act was enacted, PTV's DSE was set at the lower, 0.25, level because there was a fear that cable operators would not carry distant PTV signals if they were required to pay the full, 1.0 DSE rate for independent stations. Kessler, tr. 6393.

85. Consumption of programming is best measured by the Nielsen company. Kessler, tr. 6422.

86. Programs showing sports like golf, wrestling, snowboarding, skiing, and skating belong to the Program Suppliers' category. Kessler, tr. 6427.

87. The DSE values for the station types are assigned based on viewing. Kessler, tr. 6502.

88. Different values are assigned to independent and network affiliate stations based on the different amounts of non-network programming carried by such stations. For example, the viewing of non-network programs on network affiliate stations is considered to approximate 25 percent of the viewing on those stations. Kessler, tr. 6502.

89. No cable system pays a 3.75% fee for the carriage of PTV stations or for the carriage of specialty (foreign language) stations or for devotional stations. Kessler, tr. 6516.

90. The programming broadcast by 3.75% stations belong entirely to Program Suppliers, Commercial Television, Joint Sports, and Canadians. Kessler, tr. 6517.

91. The following are the results of a custom analysis for 1998 viewing of stations that trigger the 3.75% royalty fee:

	Households	Persons 2+	Persons 2-17	Persons 18-49	Persons 50+
Local	15.33 %	15.48 %	5.28 %	9.08 %	28.76 %
Syndicated	70.91 %	70.77 %	88.76 %	78.62 %	51.73 %
Devotional	0.53 %	0.42 %	0.22 %	0.44 %	0.48 %
Sports	13.11 %	13.17 %	5.61 %	11.65 %	18.90 %
Other	0.13 %	0.17 %	0.13 %	0.21 %	0.13 %

Kessler written rebuttal, 4; PS Ex. 4-R (MK-2R)

92. The following are the results of a custom analysis for 1999 viewing of stations that trigger the 3.75% royalty fee:

	Households	Persons 2+	Persons 2-17	Persons 18-49	Persons 50+
Local	18.83	18.90	7.60	17.35	26.99
Syndicated	69.73	68.87	87.46	74.02	52.29
Devotional	0.36	0.30	0.16	0.39	0.26
Sports	11.00	11.85	4.75	8.14	20.37
Other	0.08	0.08	0.03	0.10	0.09

Kessler written rebuttal, 4; PS Ex. 4-R (MK-2R)

93. Section 111 compensates the program owners when the programming is consumed. The programming is consumed when someone watches a program. Kessler, tr. 6551-53.

94. Some of the programs broadcast by WGN over the air in Chicago are not retransmitted on the distant signal. Satellite carriers substitute programming at those times. This "substituted-in" programming is not compensable and is not a subject of this proceeding. Kessler, tr. 6565.

95. The Nielsen Viewing Studies exclude data from all non-compensable programming, including the satellite substitution programming on WGN. Kessler, tr. 6566.

Howard Green

96. "Syndication" refers to the process by which programming is sold on a market-by-market basis to television stations throughout the United States. Green written direct, 3.

97. Network owned-and-operated stations and network affiliates acquire syndicated programs only for the portion of the broadcast day for which they do not receive network programming. Green written direct, 3.

98. Independent stations acquire syndicated programs to fill entire broadcast days. Green written direct, 3.

99. There are generally two types of syndicated series -- off-network and first-run. Green written direct, 3.

100. Off-network programs, such as *ER, Seinfeld,* and *Friends*, are those programs syndicated after first being exposed to the public on a network. Green written direct, 3.

101. First-run programs, such as *Entertainment Tonight*, *Oprah*, and *Wheel of Fortune,* are created to be sold directly to stations for immediate exhibition. Green written direct, 3-4.

102. Immediately following a motion picture's theatrical exposure, it is licensed to airlines and in home video with the home video licensing "window" open indefinitely. Green written direct, 4.

103. Motion pictures are also licensed to pay television (HBO, Showtime, *etc.*) for a limited window, then to a network (ABC, CBS, NBC), then either to a basic cable network or, in syndication, to an *ad hoc* network of individual stations. Green written direct, 4.

104. Many movies are licensed together with other motion pictures in "packages" which may also include movies-of-the-week that were made for network television. Green written direct, 4.

105. In syndication, the motion picture license may have an initial period (usually a month) in which the stations license the film on a "barter" basis, and a subsequent period (often several years) in which the station has a right to four to six telecasts on a "cash" basis. Green written direct, 4.

106. The process by which a network selects a new series begins when a producer "pitches" a program idea to a source of funding--which may be a network, a major studio, or an independent production company—that then invests in the development of the idea for presentation to a network in hopes that the network will order a pilot. Green written direct, 5.

107. An order for a pilot will depend on the network's perception of the program idea's value: the potential of the concept to attract an audience, the track record of the producer, or the popularity of a given star. Green written direct, 5.

108. A production company produces the pilot, which results, hopefully, in a network order of from six to twenty-two episodes for placement on its schedule. Green written direct, 5.

109. If the series performs well enough in its first season to be renewed, and continues to perform well during its second season, the funding entity, or Program Supplier, is in a position to evaluate its chances in syndication, and to develop a marketing plan. Green written direct, 5.

110. In general, to be considered performing well, the program must attract a desired level of viewership. Green written direct, 5.

111. It is the rule of thumb that a series must survive four seasons of network production to have a sufficient number of episodes to be attractive in syndication. Green written direct, 4-5.

112. Most syndicated programs are "stripped," that is, broadcast at the same time every weekday (*e.g.*, a stripped *Friends* is broadcast at 7:00 p.m. Monday – Friday); to do this requires enough episodes so that they do not repeat often during the broadcast season. Green written direct, 4-5.

113. First-run series are presented to a major group of stations (instead of a conventional network) in the hope that the group (along with other stations) will form an *ad hoc* network of stations that will reach a sufficient percentage of all U.S. Television Households to make the program's launch directly into syndication economically feasible. Green written direct, 6.

114. A total audience equal at least 70% of all U.S. homes using television is generally necessary for a first-run program to proceed to production. Green written direct, 6.

115. Producing for television entails a high level of financial risk, given that new programs compete for what is becoming an increasingly limited number of available time periods. Green written direct, 6.

116. Keeping series on the air long enough to establish a syndication market for off-network programming, and sustaining a syndication market for first-run programming, offer the best, and perhaps the only, way to recover the deficits that inevitably result from program development. Green written direct, 6-7.

117. Because networks and stations are not willing to pay for all development and production costs, virtually all programming is produced at a deficit for the producer. Green written direct, 7.

118. Initial network runs do not recoup production and development costs, so producers depend on lengthy syndication runs to recover their investments in both off-network and first-run syndication. Green written direct, 7.

119. It has become increasingly difficult to achieve the number of episodes necessary for syndication of off-network programming because network orders per season have dropped from 22 to 13 episodes, and sometimes only six episodes. Green written direct, 7.

120. Even with a moderately successful off-network first cycle, or an impressive premiere season in first-run, it can take years before these large deficits can be eliminated. Green written direct, 8.

121. While first-run programming deficits are not as high as network program deficits, if a show is cancelled within a year or so, the potential loss is in the millions of dollars. Green written direct, 9.

122. First-run series that are stripped generally must provide stations with five original episodes every week, for as many as thirty-nine weeks every season, thus creating large deficits. Green written direct, 10.

123. A long successful run is needed to recover the deficits acquired by first-run "strip" series. Green written direct, 10.

124. Historically, the total compensation received by Program Suppliers for syndicated programs came from license fees (cash) paid by stations based on the station's estimated advertising revenue, and stations bore the risk that the license fee would be less than the advertising revenue. Green written direct, 10.

125. Advertiser payments to the stations were determined by the number of homes in the local market that viewed the programs licensed. Green written direct, 10.

126. Today, many programs are licensed on a "barter" basis under which the Program Supplier and the station divide the available advertising time in the broadcasts between themselves. Green written direct, 11.

127. In a barter, a Program Supplier is compensated by being able to sell a portion of the advertising time in the program, and takes on as much as half of the risk that the program will be profitable. Green written direct, 11.

128. Program Suppliers advertising revenue in barter is almost always derived from the sale of time to national advertisers, while the station generally sells its portion of time to local advertisers. Green written direct, 11-12.

129. National advertisers will generally not buy advertising time on programs with less than 70% coverage of all U.S. television households, and 80% is the desired goal. Green written direct, 11-12; Green, tr. 6716.

130. In barter, both the station and the supplier depend on advertising revenues; if a program does poorly, both suffer. Green written direct, 12.

131. Success for both station and supplier will be determined by the number of viewers watching the program because only programs that attract a large audience will have an opportunity to recoup their costs through the sale of advertising time. Green written direct, 12.

132. With the cash/barter method of compensation, the license fee paid by the station is lower than with a cash-only sale, and the amount of time furnished the Program Supplier is less than with a straight barter sale. Green written direct, 12.

133. Because virtually all first-run series are sold on a barter or cash/barter basis, more of the risk associated with new programs in first-run syndication has shifted from stations to suppliers, which intensifies the effect of ratings on a program's value. Green written direct, 12.

134. Whether cash, barter, or cash/barter is used, the license fee is based on the number of viewers watching. Green written direct, 13.

135. The value of the advertising sold by the program supplier in barter deals is determined by the national viewer level of a program across all stations, and is paid at a cost-per-thousand household (or viewer) rate. Green written direct, 13.

136. "Demographic ratings" are also a vital element of the value of a program because advertisers value and are willing to pay a higher cost-per-thousand for certain demographics. Green written direct, 13.

137. In general, advertisers and, perhaps, most in the industry, deem adults 18-49 as the most valued demographic group. Green written direct, 13.

138. A first-run programming marketing plan must consider the available day-parts, the type of program that will appeal to the demographic groups that view during those day parts, and which advertisers will be likely to pay a premium cost per thousand to reach the targeted demographic. Green written direct, 14.

139. For basic cable networks, like USA, Lifetime, or Family Channel to compete more effectively in the increasingly fragmented viewing landscape, they must run programs with high production values and a contemporary point-of-view. Green written direct, 15.

140. Licensing off-network programming serves this purpose and provides material that is familiar, or tested, to sell to advertisers. Green written direct, 15.

141. Syndicated programming is created to appeal to a very broad audience because that audience produces the best opportunity for recouping the investment and compensating for the risk, of developing programs. Green written direct, 16.

142. The most important factor considered by the industry when valuing programming is the program's viewership. Green written direct, 16.

143. When cable operators decide whether or not they are going to carry a signal, one of the things they look at is viewership of the signal. Green, tr. 6764.

Carl V. Carey

144. The predominant method of evaluating programs, including public television programming, is through the use of Nielsen ratings and demographic information. Carey written direct, 2-3.

145. Nielsen data shows audience viewing in total as well as by demographics, such as adults 18-49. Carey written direct, 2-3.

146. In the 1998-1999 period, Nielsen data were the primary method of evaluation used by broadcast stations and networks, as well as cable channels. Carey written direct, 3.

147. Viewing expresses the value placed on a program by the consumer-audience. Carey written direct, 3.

148. The Nielsen information measures the value placed on programming by its audience, as demonstrated by measured viewing. Carey written direct, 3.

149. Demographic information allows value comparisons to be made between two different programs or groups of programs: one program may reach more households, but the other may be viewed by a larger number of viewers in the 18-49 age group. Carey written direct, 3.

150. The highest value is placed on the 18-49 viewership since the majority of advertisers are attempting to appeal to men and women between the ages of 18 and 49. Carey written direct, 4.

151. Advertisers have determined that the 18-49 age demographic is most likely to switch their products or services, and thus advertisers want to bond with the 18-49 group through creation of early brand loyalty. Carey written direct, 4.

152. When a cable system operator analyzes a channel for possible carriage, that analysis, to be of assistance in attracting an audience (subscribers) and advertisers, is precisely the same as that utilized in broadcast television. Carey written direct, 4.

153. If the purpose of this proceeding is to simulate what a distant signal marketplace would look like if cable systems had to negotiate for the use of distant signals, then the advertising would play a very important role, as it does now in the broadcast and cable network marketplaces. Carey written direct, 4-5.

154. Viewing is consumption, and the fact that advertisers are willing to pay more for programs consumed by the 18-49 demographic group over other groups is an expression of the value of the programs. Carey written direct, 5.

155. When a program is sold to an advertiser, a guarantee is often given that a certain percentage (rating) of the desired 18-49 audience will be reached. Carey written direct, 5.

156. If, after analysis of the Nielsen demographic information, the program is found not to have reached the guaranteed audience, the advertiser will receive additional free commercials to compensate for the lost audience. Carey written direct, 5.

157. Cable networks rely on Nielsen ratings and have sought to have Nielsen provide cable ratings similar to the ratings provided to broadcast television. Carey written direct, 5.

158. Licensing of programs to cable networks operates more or less in the same fashion as it does in broadcast: cable networks make per episode cash deals, barter deals, and time buys. Carey written direct, 5.

159. The 18-49 demographic group, which advertisers target in broadcast television, would also be the target demographic group for cable networks and thus the demographic group cable operators would find most attractive. Carey written direct, 5-6.

160. Nielsen is the currency of the broadcast and cable industry as a constant benchmark against which all types of programs are compared to determine a program's inherent value. Carey written direct, 6.

161. The program evaluation process typical of the industry is as follows:

(a) Nielsen data are used to analyze time period to see what overall viewing levels with particular attention given to the 18-49 audience might be achieved. Carey written direct, 7.

(b) Next, Nielsen data are used to analyze the success of competitive programs and their demographic appeal, which forms the basis for an estimate or forecast of an audience for a new program in the same time slot. Carey written direct, 7.

(c) Finally, Nielsen is used to estimate the possible appeal of a new program to the 18-49 demographic group that advertisers wish to reach. Carey written direct, 7.

162. Programs that demonstrate the most potential for attracting the valued demographic group and becoming profitable are the ones eventually purchased. Carey written direct, 7.

163. Twenty years ago, there was a much greater amount and variety of "local" programming being produced that was unique to individual stations. Carey written direct, 7.

164. Now, due to the consolidation that has occurred throughout the communications business, very little truly unique local programming is being produced because programming "local" to a community is simply too costly. Carey written direct, 7.

165. Cable operators will now carry a distant signal based on the success (valued in terms of the desired 18-49 audience) of the non-network programming carried by the distant signal station. Carey written direct, 8.

166. For both the cable and broadcast business, in the absence of unique local programming the value of a distant signal is based overwhelmingly on off-network and first-run

syndicated programs, or movies, as captured by Nielsen rating and demographic data. Carey written direct, 8-9.

167. As children are a very fickle audience, there is a very heavy fatigue factor in children's programming that is not present in much of the programming that is directed to an older audience. Carey, tr. 6925.

168. Advertisers do not buy cumulative audience ratings. Carey, tr. 6943.

169. The lowest rated cable channels do not drive subscriptions, the highest rated cable channels drive subscriptions. Carey, tr. 7025.

170. Ultimately, the cable operator and the broadcaster think about viewing numbers the same way, because the cable operator is concerned about the number of eyeballs that come to the set that eventually decide to pay their cable bill every month. Carey, tr. 7030.

171. While there are differences in the business models of the broadcaster and cable operator, the models are based on the same thing, attracting viewers. Carey, tr. 7037-38.

172. As cable operators package channels, they have determined that programs with high interest in broadcast can form the basis of highly successful cable channels. Carey, tr. 7045-46.

173. Nielsen data allow cable operators to determine which cable channels are attracting viewers, and then will pay more money for those channels. Carey, tr. 7047.

174. Cable operators would pay the most for programs that would help them attract and retain subscribers which are the most viewed programs. Carey, tr. 7064, 7066.

175. If a cable system was evaluating distant signals that would help it attract and retain subscribers, it should find a signal that has very popular programming with high viewership. Carey, tr. 7069-70.

176. Viewing is the primary consideration in determining the value of programming on both broadcast and cable systems. Carey, tr. 7087-88.

Jonda Martin

177. Cable Data Corporation (CDC) collects and analyzes information from each accounting period's SOAs. CDC compiles the SOA data in its database such that the data can be manipulated and summarized as needed. Martin written direct, 1.

178. The cable system data captured by CDC from the SOAs include individual and aggregated system data regarding number of reporting systems, royalties paid, number of subscribers, Gross Receipts, carriage of signals (distant and local), types of signals carried, and DSEs. Martin written direct, 1.

179. From this database of SOA data, CDC produces standardized and customized reports. Martin written direct, 1-2.

180. All of the parties in the instant proceeding are clients of CDC. Martin, tr. 7097.

181. Over the years, CDC developed protocols for allocating royalty fees paid by each cable system (known as fees-generated or fees-gen) among all the broadcast stations the system carries. This allows CDC to calculate the fees-gen for each station across all the systems

reporting it as a distant signal. These accumulated fees-gen and other reporting statistics are aggregated and summarized by station-type and sub-type. Martin written direct, 2.

182. For systems that carried at least one distant signal and a total DSE equal to or greater than 1.0, CDC allocated the total royalty paid proportionately among the distant stations it carried, based on each station's DSE value (CDC Protocol 1). Martin written direct, 3.

183. Section 111 requires systems that carry at least one distant signal, but with a total DSE value of less than 1.0, to pay a minimum fee based on 1.0 DSE value. CDC allocated the minimum fee royalties paid by each such system among the distant stations it carried, *pro rata*, based on each station's DSE value ("CDC Protocol 2"). Martin written direct, 3-4.

184. Section 111 requires systems that carry no distant signals to pay a minimum fee based on 1.0 DSE value. Because each such zero distant signal system reports only local signal carriage, and there are no actual distant signals to receive credit for the royalty paid, CDC allocates each system's minimum fee among the local stations carried by the system ("CDC Protocol 3"). CDC refers to the fees-gen allocated to local stations as local fees-gen. Martin written direct, 4.

185. Prior to 1998, over 99% of royalty fees were generated from carriage of distant signals by cable systems because only a handful of Form 3 systems opted to not carry distant signals. Although these zero distant signal systems were subject to the minimum fee royalty payments, CDC's allocation of them was relatively unimportant because the amount of royalties involved was insignificant. Martin written direct, 2.

186. Prior to 1998, WTBS was the most widely carried distant signal. Beginning in 1998 when WTBS ceased to be a distant signal, the number of systems that opted to carry no distant signals increased from 37 to 445. Correspondingly, the minimum fees attributable to these zero distant signal systems (*i.e.*, the local fees-gen) increased from $330,000 in 1997-2 to over $10.5 million in 1998-2. Martin written direct, 2-3, 5.

187. CDC summarizes fees-gen data allocated to the various station types: Independents, Network Affiliates, Non-commercial Educational, Canadian, Mexican, and Low Power. Martin written direct, 2.

188. The substantial increase in minimum fees paid by cable systems after 1997-2 also affected CDC's calculation of aggregated fees-gen for the three major station types. Between 1997-2 and 1998-1, total fees-gen: (a) for Independent stations decreased by 44%, (b) for Network Affiliates increased by 108.7%, and (c) for Educational stations increased by 251.5%. Martin written direct, 5.

189. Prior to 1998-1, distant fees-gen differed very little from total fees-gen as calculated by CDC because the local fees-gen was such a small amount. The 1998-1 CDC analysis showed a large difference between the distant and the total fees-gen columns for the network and educational station types because local fees-gen had grown substantially. The difference between Total Fees-gen and Distant Fees-Gen in 97-2 and 98-1, expressed as a percentage of Distant Fees-Gen, shows the growth in local fees:

	1997-2	1998-1
Independents	0.194%	15.513%
Network Affiliates	4.450%	77.390%
Educationals	5.231%	126.020%

Martin written direct, 6.

190. The increase in total fees-gen for Network Affiliates and Educational stations were due to CDC's allocation protocols. Martin written direct, 6.

191. Total fees-gen for Network Affiliates and Educational stations, as allocated by CDC, more than doubled between 1997-1 and 1998-2 even though their distant subscribers and instances of distant carriage were virtually unchanged. In contrast, total fees-gen, distant subscribers, and instances of carriage for independents all changed by roughly the same rate. Martin written direct, 6-7.

192. Applying the strict DSE value approach and recalculating the fees-gen for the station types, it is clear that as a result of the minimum fee effect, the fees-gen for Educational stations were increased from roughly $1.3 million to almost $1.9 million and the fees-gen for Networks Affiliate stations were increased from about $3.1 million to $3.6 million. On the other hand, the minimum fee effect caused fees-gen for Independent stations to decline from $34.8 million to $33.8 million. Martin written direct, 7-9.

193. In addition, distant fees-gen for Educationals and Networks greatly increased between 1997-2 and 1998-1, because of the effect of the below 1.0 DSE systems ("CDC Protocol

2"). This occurred even though distant subscribers and instances of distant carriage for those station types changed little. Martin written direct, 7.

194. Applying a strict DSE value approach and recalculating the fees-gen brings the 1998-1 carriage and subscriber statistics for the three station types more in line with the changes in fees gen that would be expected based on the percentage changes in distant subscribers and distant instances of carriage for the different station types between 1997-2 and 1998-1 than without the recalculation. Martin written direct, 9-10.

Robert Seiber

195. Average audience or ratings measure the average number of households or persons watching at, or for, a particular amount of time. Seiber, 1990-92 written direct, 11.

196. While attitudinal studies explain the "why" of subscriber behavior, television viewer ratings describe that behavior in some detail. Seiber, 1990-92, tr. 3767.

197. In a free market, superstations would be able to offer local advertising time to cable operators, just as cable networks are able to do. Seiber, 1990-92, tr. 3954.

198. The principal consideration in putting together a program lineup, in the superstation context, is maximizing the audience, which is the same as satisfying cable subscribers. Seiber 1990-92, tr. 4108-09.

199. Television ratings measure consumers' actions. Seiber, 1990-92, tr. 4166.

200. Television ratings reflect both viewer intensity and the extent to which they watch the program regularly. Seiber 1990-92, tr. 4166.

201. Survey respondents often tell surveyors what the respondents think the surveyors will want to hear. Seiber 1990-92, tr. 4171-72.

202. Mr. Sieber developed Nielsen television ratings for WTBS and used them to make program purchasing and scheduling decisions for the station. Seiber, 1990-92 written direct, 21; 1990-92 tr. 3747.

203. Nielsen ratings are important to WTBS in purchasing programs, in negotiating advertising rates, and are used by cable operators in considering which services to provide to subscribers. Seiber 1990-92, tr. 3747.

204. The use of Nielsen ratings is widespread. Cable operators are familiar with national ratings and they further rely on Nielsen ratings for information about their region. Seiber, 1990-92, tr. 3751-52, 4160-61.

Paul Lindstrom

205. A Nielsen rating is a statistical estimate of the number of people viewing a particular program or a particular channel at a point in time. Lindstrom, tr. 7184.

206. Ratings provide an estimate of television audience size and are a barometer of viewing habits. Nielsen's charter as an independent measurement service is to provide both the buyer and seller of time with unbiased estimates of viewing behavior. Lindstrom written direct, 2.

207. Nielsen provides ratings information for virtually all of the players in the television business -- essentially for the broadcast networks, the cable networks, large multiple system cable operators, local cable systems, and local television stations. Buyers and sellers use Nielsen data to determine the number of viewers to a given program or network. Lindstrom, tr. 7184-85.

208. Nielsen's "People Meter" measures what channel the television set is tuned to electronically collect viewing information from the people in the household. Lindstrom written direct, 3.

209. The metered methodology records both household and demographic viewing data. Lindstrom, tr. 7188-89.

210. The People Meter is installed on every television in the household. Lindstrom, tr. 7413.

211. Use of the meter-based study allows Nielsen to measure viewing of every minute, every day, 365 days a year. Lindstrom, tr. 7197.

212. Nielsen's meter-based study avoids known biases that exist with the diary data gathering method. Lindstrom, 1990-92 tr. 8075.

213. Continuous measurement increases the reliability of Nielsen's meter study because of the significant number of sampling points measured. Lindstrom, tr. 7201-03.

214. The People Meter scans the status of the television set every 2.7 seconds. 90-92 Lindstrom, tr. 8041.

215. Most of the large multi-system cable operators (MSOs), which covers a majority of the cable systems in the country, are subscribers to Nielsen data to determine how well national cable networks are performing and to see what programming is popular. Lindstrom, tr. 7185-86.

216. Local cable operators subscribe to ratings data because they use advertising sales as a secondary source of income. There is considerable amount of cable systems' selling local ad availabilities ("avails"). Lindstrom, tr. 7185.

217. MSOs subscribe to local level metered information to gauge the ratings for their systems or for regional interconnects. Lindstrom, tr. 7186.

218. Interconnects are groups of cable systems that sell their combined subscribership for advertising purposes. Lindstrom, tr. 7186-87.

219. The People Meter service was used in 1998-99 by broadcast networks by approximately 50 cable networks, and by national syndicated programmers. Lindstrom, tr. 7190.

220. The Nielsen Viewing Study that Program Suppliers commissioned is a custom analysis of the same People Meter viewing data used to generate cable and broadcast network ratings. Lindstrom written direct, 3-4; tr. 7177-78.

221. CDC supplied Nielsen with a listing of stations CDC determined to be distantly retransmitted in 1998 and 1999. Lindstrom written direct, 4.

222. The stations in the CDC listing were ranked based upon the number of subscribers that received the stations distant signals. To create each year's sample, each year's listing of distant stations and corresponding subscribers was divided into two groups - the 50 top-ranked stations and all other stations. The top 50 stations were selected with certainty (meaning, they were automatically included in the sample) and the remainder of the stations were systematically sub-sampled. Lindstrom written direct, 4-5.

223. The top 50 stations in the sample for 1998 and 1999, account for a substantial proportion of viewing minutes and subscribers. Therefore, variations in the remainder of the sample would not have a significant impact on study results. Lindstrom, tr. 7335-40.

224. With regard to the remaining 130 stations in the sample for each year, the viewing minutes were weighted (i.e., multiplied by an approximate value) to estimate the amount of viewing for the additional stations not included in the sample. Lindstrom, tr. 7218-19, 7224-26, 7230.

225. Nielsen Media examined the schedule for each station in the sample and systematically classified each program as belonging to a particular claimant group based on an agreed upon set of rules. Lindstrom written direct, 5; PS Exs. 19 and 21.

226. Based on the local county analysis performed by MPAA, Nielsen Media eliminated all viewing to each station that occurred within the station's local area. This means Nielsen measures only distant viewing. Lindstrom written direct, 5.

227. Nielsen Media eliminated all network programs as well as other non-compensable programs in its study. Lindstrom written direct, 5.

228. Nielsen Media categorized the distant cable viewing into claimant groups and summed the data for each station to derive the end result. Lindstrom written direct, 6; PS Exs. 20 and 22.

229. Approximately 5000 households, at a given instant, across the U.S. are used for the Nielsen national meter study (as of November 2002). The television industry considers the sample adequate. Lindstrom written direct, 10.

230. The sample is a strictly geographic-based sample. A random geographic selection should result in the correct representations of religion, demographic characteristics, or whatever kinds of factors you might wish to measure. Lindstrom, tr. 7203-04.

231. For the People Meter, Nielsen Media uses scientific sampling procedures to randomly select housing units from the U.S. Census Bureau's count of all housing units in the nation. Nielsen Media measured the 5000 homes each minute and each day of each year of the study. Each minute measured for each household is a different sampling point. Lindstrom written direct, 13.

232. Of the 5000 installed households, approximately 4,200 households are intab (i.e., provide viewing data on a typical day). Lindstrom, tr. 7197.

233. During the 1990-92 period, approximately 2,100 actual cable households reported data pertaining to distant signals. Lindstrom, 90-92 tr. 8100-01.

234. Assuming a 4,200 intab sample (i.e., data used in tabulations) for 60 minutes, the People Meter measures 252,000 household minutes (4,200 x 60 = 252,000) during an hour. Multiply this times 24 hours a day, seven days a week and you get 42,336,000 household minutes (4,200 x 60 x 24 x 7 = 42,336,000). Lindstrom written direct, 13-14.

235. Nielsen Media systematically turns over its sample households such that no household is in the sample for more than two years. Lindstrom, tr. 7197-98.

236. Although the average number of installed Nielsen households is 5000, because Nielsen Media regularly refreshes its sample, the gross number of different households that contributed to the Nielsen study in 1998 and 1999 was approximately 8,800 households in each year. Lindstrom, tr. 7197-99.

237. Examining viewing over time further enhances the confidence in the viewing results. Lindstrom written direct, 11.

238. The Nielsen Study reports the data in viewing quintiles. Quintiles are groupings of households or individuals in blocks of twenty percent of the total sample segregated by relative amount of television viewing. This allows the user to see differences for the heaviest twenty percent of viewers as compared to the lightest twenty percent, and each increment in between. Lindstrom written direct, 14.

239. This quintiles data indicate that the viewing results are not unduly influenced by heavy viewing individuals and that heavy viewers do not behave substantially differently from the rest of the viewing audience. Lindstrom written direct, 14-15.

240. Standard errors provide a measure of the confidence a user can have that the results of a study reflect the results of a census study. Standard error is a reflection of a variety of factors including sample size, the magnitude of the result, the number of sampling points or duration, the correlation of viewing, and the number of discreet households that viewed the program type. Sixty-five times out of 100 the result measured would be within one standard error of a census, 95% of the time it would be within two standard errors, and 99% of the time it would be within three standard errors. Lindstrom written direct, 15-16; tr. 7180.

241. On an overall basis, there is slightly lower viewing of Program Suppliers programming among the heavy viewing quintile group, and viewing for Program Suppliers is more consistent across the quintiles than Commercial TV. Lindstrom, tr. 7240-41.

242. For 1998, the full year distant signal viewing results by households are as follows:

	Percent Share
Program Suppliers	58.9%
Joint Sports Claimants	9.0%
National Association of Broadcasters	14.4%
Devotional Claimants	0.7%
PBS	16.9%
Other Programming	.1%
Total	100.0%

PS Ex. 20

243. For 1999, the full year distant signal viewing results by households are as follows:

	Percent Share
Program Suppliers	61.0%
Joint Sports Claimants	7.9%
National Association of Broadcasters	15.0%
Devotional Claimants	0.9%
PBS	15.1%
Other Programming	.1%
Total	100.0%

PS Ex. 22

244. For 1998, the full year distant signal viewing results by demographic groups are as follows:

	2+	2-17	18-49	50+
Program Suppliers	59.1 %	67.2%	71.3 %	41.0%
Joint Sports Claimants	9.4%	3.8%	8.9%	12.9%
National Association of Broadcasters	14.4%	4.3%	9.8%	25.0%
Devotional Claimants	0.5%	0.2%	0.8%	0.4%
PBS	16.5%	24.4%	9.1%	20.6%
Other Programming	.1%	.1%	.2%	.1%
Total	100%	100%	100%	100%

PS Ex. 20

245. For 1999, the full year distant signal viewing results by demographic groups are as follows:

	2+	2-17	18-49	50+
Program Suppliers	59.5%	67.3%	67.9%	43.2%
Joint Sports Claimants	8.1%	3.5%	5.0%	14.9%
National Association of Broadcasters	14.8%	5.6%	13.1%	22.7%
Devotional Claimants	.8%	.3%	.8%	1.0%
PBS	16.8%	23.3%	13.1%	18.1%
Other Programming	.1%	.0%	.1%	.1%
Total	100%	100%	100%	100%

246. Ratings can be calculated from the results of Nielsen Media's viewing data. Lindstrom, tr. 7209, 7220-22.

247. Nielsen Media has never before provided demographic data for royalty distribution proceedings. It has done so for this proceeding in response to criticism that household viewing data did not allow an examination on a person-by-person basis. Lindstrom, tr. 7234.

248. Nielsen Media has never before provided quintile data for royalty distribution proceedings. It has done so for this proceeding in response to past criticism that heavy viewers unduly influenced household viewing results. Lindstrom, tr. 7236-37.

249. Viewing behavior of viewers of Program Suppliers' programs (from light to heavy viewers) are consistent. Lindstrom, tr. 7238.

250. A higher percentage of heavy viewing occurred to local programs (Commercial TV) in 1998. Lindstrom, tr. 7240.

Paul Donato

251. Mr. Donato is the highest ranking statistician at Nielsen Media. Donato, tr. 7446.

252. The Nielsen Viewing Study is based on Nielsen Media's People Meter data. The People Meter measures the channel to which a television set is tuned and provides a mechanism for Nielsen Media to measure which viewer is watching the television. Donato written direct, 3.

253. For the last several years, People Meters have been considered the most accurate viewing measurement tool in use throughout the world. The People Meter service is the current

standard of television audience measurement in almost all of the world's television economies. Donato written direct, 3-4.

254. People Meters are not affected by memory-related issues that could influence people's ability to recall watching one station over another. Donato written direct, 4.

255. The phenomenon of tuning without viewing has no impact on the results of the Nielsen Viewing Study. Donato written direct, 4-5; tr. 7452.

256. The National People Meter service utilizes a sample of over 5,000 households, which are selected using an area of probability sample covering the entire United States. Using techniques closely monitored by the industry's Media Ratings Council (MRC). Donato written direct, 5.

257. Nielsen's national service received unanimous accreditation from all voting members of the MRC. Donato written direct, 5.

258. The accreditation covered key areas of Nielsen's data-gathering methodology, including concepts, incentives, and response rates. Donato, tr. 7495.

259. Although poor response rates can lead to sample bias, Nielsen Media's national response rates are among the highest in the world for any panel survey on a probability sample. Donato written direct, 6.

260. Of the 5,900 randomly selected initially-predesignated households, about 15% are being recruited at any given time. Over 60% initially agree to provide ratings data. Donato written direct, 6.

261. The initial cooperation rate for January 1999 was 64.2% of the initially-predesignated households. The ongoing cooperation rate, after adjusting for subsequent refusals and drop-outs, was 55.3%. Donato written direct, 6; tr. 7460-62.

262. The intabulation ("intab") rate among predesignated households was 41.3% for January 1999. These rates far exceed most of the rates characterizing U.S. survey research. Moreover, this rate far exceeds the response rates evidenced in other countries. Donato written direct, 7.

263. Nielsen uses a variety of substitution and control procedures to ensure that its sample is free of non-response bias. Nielsen tracks demographic representation for all key demographics and this procedure yields excellent demographic representation. Nielsen has achieved this representation through a significant program of research and development. Donato written direct, 7-8.

264. Nielsen increased its national sample from 4000 to 5000 television households between the 1990-92 period and the 1998-99 period. The proportion of cable households in Nielsen's national sample also grew during the same period. Donato written direct, 8-9.

265. The differences in sampling errors associated with samples of 4,000 and 9,000 is relatively small. Donato written direct, 9.

266. Nielsen's study does not project individual ratings to individual programs in individual markets. Instead, it is a study of aggregate distant viewing - - viewing over all markets outside of a station's individual market. Donato written direct, 10.

267. On average, aggregated over all distant markets, the viewership rating is expected to be within a standard error of the true rating. When averaged over all programs and telecasts, the share of viewing is expected to be even more accurate. Donato written direct, 10.

268. Relative error represents the standard error as a percentage of the size of the estimate. Therefore, the relative error is more generally used to evaluate the size of the error relative to the estimate itself but less likely to be used in considering the difference between two estimates. Donato written direct, 12.

269. The allocation methodology used in the Nielsen special study is one where the total number of minutes viewed across all persons, and across all program types, are aggregated. Using this as the denominator, the total number of persons minutes viewed within a particular program type serves as the numerator, and it is the ratio of this numerator to the aggregate denominator that offers the share of total minutes viewed. Donato written direct, 12-13.

270. Twenty years ago, a 50% response rate to a survey was a very achievable number for most survey research applications. Currently, most media research, which is using telephone, has response rates in the mid-30s. Donato, tr. 7469.

271. Nielsen has a 5,000-person panel with no person remaining in a panel for more than two years. The sample is divided into one-24th replicates, so that every month a specific one-24th can be rolled out of the sample and replaced. This systematic replacement yields a gross number of households of about 7,500 in a year. Replacement of voluntary departures from the panel increases the gross number of households measured in a given year to about 8,500. Donato, tr. 7464-65.

272. Compared with diary studies, children and young children's viewing increases when measured with People Meters. Children are better at pushing the People Meter buttons than many adults. Donato, tr. 7485-86.

273. The statistical concept, that is highly published, of "effective sample size" plays an important role in the evaluation of Nielsen sample size. This rule of thumb doubles the effective sample size when the same group is measured multiple times over the course of a month. Donato, tr. 7517-18.

274. The stations in the Nielsen Viewing Study that are not selected with certainty are properly stratified and weighted and are representative of the remaining population of stations not in the study samples for 1998 and 1999. Donato, tr. 7457-60.

275. Panel participants are coached on how to record viewing and are constantly monitored, via a fatigue study, to ensure compliance with Nielsen's instructions. Donato written direct, 7475-76, 7486.

276. Most viewing to a broadcast station occurs within the station's DMA. Donato, tr. 7507.

Dr. Arthur Gruen

278. Attracting and retaining subscribers and inducing them to purchase additional services are of paramount importance to cable system operators. Gruen written direct, 4.

279. Between 1990-1992 and 1998-1999, cable operators faced the emergence of Direct Broadcast Satellite (DBS) as a competitive threat and limited opportunities for revenue growth. Gruen written direct, 4.

280. Cable operators responded by introducing new services that appealed particularly to people in the 18-49 demographic, and basic services and distant signals became a platform to market those services. Gruen written direct, 4.

281. Cable operators value subscribers in the 18-49 demographic and allocate their license fee payments to cable networks based on that valuation. Gruen written direct, 4.

282. Distant signals compete with cable networks for scarce channel capacity. Gruen written direct, 4-5.

283. Cable operators consider the appeal of the programming carried as well as copyright fees paid in choosing to carry distant signals. Gruen written direct, 5.

284. Cable operators consider the appeal of the programming as well as license fees paid in their selection of cable networks to carry. Gruen written direct, 5.

285. If a market existed for distant signals, cable operators would apply the same criteria in selecting and paying for distant signals as they do in selecting and paying for cable networks. Gruen written direct, 5.

286. The fees paid in the cable network program services market reveal the value of those programs to cable operators. Gruen written direct, 5.

287. Cable system operators systematically paid more in 1998-1999 for higher-rated networks than for lower-rated networks, indicating that ratings reflect the value of programming to cable system operators. Gruen written direct, 5.

288. In 1998-1999, cable operators were facing a more competitive environment, including competition from DBS and potential competition from telephone companies. Gruen written direct, 5.

289. Cable operators responded by upgrading their plant and infrastructure to increase channel capacity. They introduced digital tiers, added pay-per-view channels, provided more premium channels, and positioned themselves to offer subscribers broadband Internet access and telephony. Gruen written direct, 5.

290. Premium channels, pay-per-view, enhanced telephone services, and Internet usage are each used more intensively by people in the 18-to-49 age group. Gruen written direct, 5.

291. Cable system operators had an interest in selecting programming with an 18-49 demographic skew in order to establish the best platform to offer additional services. Gruen written direct, 6.

292. Cable system operators in 1998 and 1999 allocated their license fee payments among the top, middle, and bottom networks consistently with how advertisers allocating advertising dollars. Gruen written direct, 6.

293. Advertisers place a greater value on 18-49 ratings than on household ratings. Gruen written direct, 6.

294. Based on their spending patterns in the marketplace, cable operators value 18-49 viewership in virtually the same way as do advertisers. Gruen written direct, 6.

295. If a free market existed for distant signals, cable operators would value programming on distant signals in the same way they value programming on cable networks, and 18-49 ratings would be an accurate barometer of the value of distant signal programs to cable system operators. Gruen written direct, 6.

296. Nielsen viewing data are relevant to the value of distant signal programs to cable operators, and viewing among people in the 18-49 demographic is the best measure of what that value would be in a free market. Gruen written direct, 6.

297. In the case of local programs, PBS programs, and devotional programs, the volume of programming was the primary contributor to their viewing shares, not the appeal of the programs. Gruen written direct, 6.

298. For shows provided by Program Suppliers, the appeal of the programs was more important than volume. Gruen written direct, 6.

299. Viewing shares by themselves understate the value of programming in the case of Program Suppliers. Gruen written direct, 6.

300. Because of the reclassification of WTBS as a cable network, PBS, the only claimant group not carried on WTBS, received an artificial boost in its relative share of viewing between 1992 and 1999 vis-à-vis programming on commercial stations. Gruen written direct, 6.

301. The audience appeal of PBS distant programming declined between 1992 and 1999. Gruen written direct, 7.

302. Television stations are facing greater competition from cable networks for syndicated programs. Gruen written direct, 7.

303. Faced with more competition, television stations have increased the license fees paid for syndicated programs to obtain broadcast rights prior to cable rights. Gruen written direct, 7.

304. High license fees for syndicated programs reflect the value placed by stations on such shows. Gruen written direct, 7.

305. High-priced syndicated shows contribute to the popularity of distant signals and contribute to the willingness on the part of cable system operators to choose distant signals over cable networks. Gruen written direct, 7.

306. While variety may be important for cable system operators, it does not follow that viewing levels are not important in the distant retransmission marketplace. Gruen written direct, 8.

307. The utility of the cable service relative to its cost determines whether or not someone will subscribe and whether or not they will remain subscribers. Gruen written direct, 8.

308. According to economic theory, a product or service will be demanded up to the point where its incremental utility per dollar of cost is equal to that of any other product or service. Gruen written direct, 8.

309. Consumers will buy a product or service if the utility equals or exceeds the cost, which is a measure of the value of foregone opportunities to purchase other goods or services. Gruen written direct, 8.

310. In order to attract and retain subscribers, it is essential for cable system operators to offer program services that are popular. Gruen written direct, 8.

311. Popular services are more valuable to cable system operators than services with a limited appeal. Gruen written direct, 8.

312. The appeal to viewers of program services was even more important in 1998-1999 than in 1990-1992 because cable operators were facing credible competition from DBS. Gruen written direct, 8-9.

313. The first DBS services were launched in 1994 and by year-end 1999 there were 11.4 million DBS subscribers, representing 13.6 percent of the total multi-channel video program distribution market. Gruen written direct, 9.

314. Among the net new multi-channel households in 1999, 65.3 percent became DBS subscribers compared with 29.6 percent that became cable subscribers. Gruen written direct, 9.

315. With cable subscribers having the option to switch to DBS, a service with a greater channel capacity than that enjoyed by most cable systems, the selection of services becomes even more important for cable operators. Gruen written direct, 9.

316. The determination by cable operators of which superstations to carry (also carried on DBS) and which non-superstation distant signals to carry (not carried on DBS at that time)

was even more important in 1998-1999 than in 1990-1992 because of the new competitive environment. Gruen written direct, 9.

317. If a free market for distant signals existed, cable operators would have an incentive to pay more for distant signal programming with the widest appeal to subscribers, and that incentive would be stronger in 1998-1999 because of the DBS threat. Gruen written direct, 9.

318. While no free market exists for distant signals, a free market does exist for cable networks with cable system operators paying license fees to carry cable networks on their systems. Gruen written direct, 9.

319. The decision about which cable networks to carry is equivalent to the decision about which distant signals to carry. Gruen written direct, 9-10.

320. There were 174 national cable networks in 1998, while the average cable system channel capacity was 61. Gruen written direct, 10.

321. Distant signals and cable networks compete for scarce channel capacity. Gruen written direct, 10.

322. Cable system operators evaluate the contribution of all available programming in their selection of a package of services to offer subscribers. Gruen written direct, 10.

323. When cable systems choose to carry distant signals, they also choose not to carry the excluded cable networks, and these choices reveal the preference of cable operators. Gruen written direct, 10.

324. The fees paid for cable networks reveal the value of programming on those networks to cable operators. Gruen written direct, 10.

325. If a free market existed for distant signals, cable operators would apply the same criteria in selecting and paying for distant signals as they do in selecting and paying for cable networks. Gruen written direct, 10.

326. If ratings were a minor factor in determining the value of distant signal programming to cable system operators, ratings would also be a minor factor in determining the value of cable networks to cable system operators, and there would be little relationship between the license fees paid for networks and their ratings. Gruen written direct, 10.

327. If ratings reflect the value of a service to a cable system operator, license fees and ratings would be related. Gruen written direct, 10.

328. Cable system operators systematically paid proportionally more for high-rated networks than for low-rated networks, indicating that ratings are a good barometer of the relative value of programming to cable system operators and their subscribers. Gruen written direct, 10.

329. The variation in license fees is due to a number of factors, including the year a network was launched, the year an agreement was reached or, in the case of ESPN, surcharges related to NFL games. Gruen written direct, 11.

330. The average annual license fee per household for the 11 highest rated networks was $3.61, compared with $1.34 for the middle 11 networks, and $.80 for the lowest rated networks. Gruen written direct, 11.

331. In the actual marketplace where cable operators must decide what networks to carry and how much to pay, on average, they systematically pay more for networks with higher ratings than for networks with lower ratings. Gruen written direct, 12.

332. If ratings were not an important factor for cable system operators, they would not pay so much more for high-rated networks than low-rated networks. Gruen written direct, 12.

333. If cable operators had to negotiate with distant signal copyright holders, the decision-making process would be comparable to their decision-making in the choice of cable networks and the license fees they pay. Gruen written direct, 12.

334. As with cable networks, the popularity of the programming carried on distant signals would play a critical role in the determination of how much that programming is worth to cable system operators. Gruen written direct, 12.

335. As with cable networks, we would expect cable system operators to pay more for distant signals with higher-rated programming than for distant signals with lower-rated programming. Gruen written direct, 12.

336. Advertisers do not value all viewers equally. Gruen written direct, 13.

337. Advertisers favor viewers in the 18-49 demographic because they believe that segment of the population is more likely to switch brands and try new products, and is therefore more likely to be influenced by advertising. Gruen written direct, 13.

338. Ad rate asking prices for the prime time schedule for the broadcast networks for the 1998-99 television season represent in relative terms how the networks expect advertisers to value their programs. Gruen written direct, 13.

339. Household ratings and 18-49 ratings are not independent of each other because programs that attract a large number of viewers in the 18-49 demographic are also likely to be watched by a large number of households, and vice versa. Gruen written direct, 13.

340. Some programs, however, appeal more to older viewers than to younger viewers, creating a disparity between household ratings and 18-49 ratings. Gruen written direct, 13.

341. In the 1997-98 season, *3rd Rock from the Sun* on NBC and *Kids Say the Darndest Things* on CBS each had an average household rating of 8.3. Gruen written direct, 14.

342. The 18-49 rating for *3rd Rock from the Sun*, however, was 5.4 compared with 3.4 for *Kids Say the Darndest Things*. Gruen written direct, 14.

343. The top-16 shows ranked by ad rates for 30 second spots averaged $287,000 per spot, the second 15 averaged $139,000 per spot and the bottom 15 averaged $96,000 per spot. Gruen written direct, 14.

344. Overall, the combined differential in average ad rates for programs ranked by 18-49 ratings was $28,000 compared to a differential of $39,000 for programs ranked by household ratings. Gruen written direct, 15.

345. The 18-49 ranking was 28 percent closer than the household ranking to the ad rate ranking. Gruen written direct, 15.

346. Generally speaking, advertisers distribute their spending more closely with 18-49 ratings than with household ratings. Gruen written direct, 15.

347. 18-49 ratings represent a better predictor than household ratings of the value of programming to advertisers. Gruen written direct, 15.

348. Advertisers' behavior, while based on broadcast network information, is applicable to cable networks and distant signals. Gruen written direct, 15.

349. The launch of DBS in 1994 and passage of the Telecommunications Act of 1996 changed the competitive landscape for cable system operators. Gruen written direct, 16.

350. DBS gave households the option of subscribing to an alternative service and the Telecommunications Act enabled telephone companies to provide video programming to subscribers in their telephone market areas. Gruen written direct, 16.

351. Cable operators faced an emerging threat from DBS and a potential threat from telephone companies. Gruen written direct, 16.

352. Cable operators responded to these competitive threats by investing $28.7 billion on construction and system upgrades. Gruen written direct, 16.

353. These investments and the investments planned in the coming years—an additional $26.7 billion was spent by cable system operators in 2000 and 2001—enabled cable system operators to offer more channels and more services, thereby helping them compete with DBS. Gruen written direct, 16.

354. By 1999, 82 percent of cable homes were passed by cable plant with bandwidth of at least 550 MHz compared with only 41 percent in 1996, which enabled cable system operators to offer more channels. Gruen written direct, 17.

355. Average system channel capacity rose from 39 channels in 1992 to 61 in 1998. Gruen written direct, 17.

356. Cable operators also had the capacity to introduce digital tiers, increase the number of pay-per-view channels, and offer subscribers additional premium channels. Gruen written direct, 17.

357. In 1999, the average digital cable system offered 28 premium channels and 22 pay-per-view channels. Gruen written direct, 17.

358. In addition to more channels, the increase in bandwidth allowed for the delivery of two-way interactive services such as broadband Internet access and telephony (typically packaged with voice mail, call waiting and other enhanced services). Gruen written direct, 18.

359. These two-way services were not readily available on DBS. Gruen written direct, 18.

360. By 1998, 56 percent of cable subscribers were passed by activated two-way cable plant, a figure that rose to 68 percent in 1999. Gruen written direct, 18.

361. In 1998, cable system operators had begun offering broadband Internet access and cable telephone services to their subscribers. Gruen written direct, 18.

362. For these investments to pay off, cable operators had to induce subscribers to purchase new services. Gruen written direct, 18.

363. The role of the basic cable package evolved from an end product to a platform from which to market ancillary products and services. Gruen written direct, 18.

364. Cable operators became interested in targeting subscribers who are likely to try new products or switch brands (i.e., subscribe to broadband Internet access, or switch from their local telephone carrier to their cable system for telephony). Gruen written direct, 18-19.

365. Cable operators' interests (in targeting subscribers likely to try new products and/or switch brands) mirror those of advertisers that target the 18-49 demographic. Gruen written direct, 19.

366. The services cable system operators were either launching or expanding had an 18-49 demographic skew. Gruen written direct, 19.

367. Cable subscribers tend to be younger than non-subscribers. Gruen written direct, 20.

368. Sixty-eight percent of cable households were headed by an adult 50-and-under compared with 62 percent of non-cable households with a head of 50-and-under. Gruen written direct, 20.

369. Because of the increased concentration of people 50-and-under among cable subscribers, cable operators have a preference for programs targeted to that group. Gruen written direct, 20.

370. The results of Interactive Media Associates survey conducted by Wilkofsky Gruen Associates, Inc., which consisted of 2,145 interviews provides the following results:

Percent of Households Headed by an Adult 50 or Under

Category of Service	Subscribers/ Users	Non-Subscribers/ Non-Users
Cable	68	62
Pay Cable	73	63
Pay-Per-View	77	65
Internet	84	65
Voice Mail	85	65
Enhanced Telephone	78	58

Gruen written direct, 19-21.

371. A 1998 survey of Internet users by Narrowline Media Research indicates that the 18-49 age group comprised 79.6 percent of all internet users. Gruen written direct, 21.

372. Cable operators that want to market the newly available premium suites, the expanded pay-per-view offerings, broadband Internet access, and voice mail and enhanced telephone services want to target subscribers in the 18-49 age group. Gruen written direct, 22.

373. On balance, cable systems allocated their license fee payments in 1998 and 1999 among the top, middle, and bottom networks closely to the way advertisers did. Gruen written direct, 23-25.

374. Because advertising is a reasonable proxy for 18-49 viewing, we can conclude that cable operators similarly valued 18-49 viewership. Gruen written direct, 25.

375. The actual marketplace behavior of cable system operators shows that not only do they pay higher license fees to cable networks with higher ratings, but also, in even greater measure, cable operator license fee spending more closely follows the pattern of advertiser

spending, which in turn is principally influenced by the 18-49 demographic. Gruen written direct, 25.

376. Cable operators' marketplace behavior demonstrates that 18-49 ratings represent a more important measure than household ratings in valuing programming. Gruen written direct, 25.

377. If a free market existed for distant signals, cable operators would value programming on distant signals in the same way they value programming on cable networks, and 18-49 ratings would be the superior metric to value distant signal programs. Gruen written direct, 25.

378. Nielsen viewing data are relevant to the value of distant signal programs to cable operators, and viewing among people in the 18-49 age group is the best measure of that value. Gruen written direct, 26.

379. For the four sweeps periods (February, May, July, and November) Program Suppliers accounted for the largest number of viewing minutes among people in the 18-49 demographic with more than six times the total for Local, the next highest category. Gruen written direct, 27.

380. On a percentage basis, Program Suppliers represented 72.1 percent of total viewing in this demographic with Local at 11.2 percent; PBS, 10.2 percent; Sports, 5.7 percent; and Devotional at 0.8 percent. Gruen written direct, 27.

381. On a full-year basis, Program Suppliers also had the highest number of viewing minutes at 6.2 million. Gruen written direct, 27.

382. Program Suppliers viewing minutes were more than six times Local, which were second at 1.033 million, followed by PBS at 1.004 million, Sports at 608,143, and Devotional at 68,947. Gruen written direct, 27.

383. Program Suppliers accounted for 69.6 percent of total viewing with Local at 11.6 percent, PBS at 11.3 percent, Sports at 6.8 percent, and Devotional at 0.8 percent. Gruen written direct 27-28.

384. The relative shares of viewing represent a combination of program volume (quarter hours) for each category and program popularity. Gruen written direct, 29.

385. Viewing minutes per quarter hour measures viewership per program, which is analogous to ratings. Gruen written direct, 29.

386. If viewing minutes per quarter hour were equal for all categories, each program would, on average, be watched by the same number of viewers, and on a program basis, each category would have equal appeal or avidity to viewers. Gruen written direct, 29.

387. The avidity of viewers to each program category can be discerned by whether the proportionate share of viewing minutes per quarter hour is above (more avidity) or below (less avidity) 1.0. Gruen written direct, 29.

388. With respect to the Local, PBS, and Devotional categories, there are more quarter hours than viewers. Gruen written direct, 29.

389. In the case of Local, for example, the ratio of viewing minutes to quarter hours is 0.90 for the sweep periods, which means that the number of viewers is 10 percent lower than the

number of quarter hours, thus showing less avidity by viewers for local programs. Gruen written direct, 29.

390. With PBS, the ratio of viewing minutes to quarter hours is only 0.36, which is reflective of low program appeal, or avidity. Gruen written direct, 29.

391. Program Suppliers' programs have a higher than average avidity, which means the appeal of the programming contributes more to their viewing shares than program volume. Gruen written direct, 30.

392. With Program Suppliers, the ratio of viewing minutes to quarter hours is 1.46, indicating that the popularity of the shows contributes 46 percent more to viewing minutes than the number of quarter hours. Gruen written direct, 30.

393. Avidity among 18-49 viewers of the average Program Suppliers program is 7.7 times higher than the average Devotional program, 4.1 times higher than the average PBS show, and 62 percent higher than the average Local show. Gruen written direct, 30.

394. Full-year Nielsen data show less than average avidity for Local, PBS, and Devotional, with volume being the primary contributor to viewing shares. Gruen written direct, 31.

395. In contrast, a higher than average avidity demonstrates that program appeal is the primary contributor for Program Suppliers and Sports. Gruen written direct, 31.

396. Program appeal or avidity is more important than the number of program hours in determining the value of programming to cable system operators. Gruen written direct, 31.

397. Viewing shares by themselves understate the value of programming for Program Suppliers, while overstating the value of Local, PBS, and Devotional programming. Gruen written direct, 31.

398. Since the proceedings allocating cable royalties for the 1990-1992 period, there has been a significant change in the marketplace. Gruen written direct, 32.

399. In 1990-1992, WTBS, the superstation with the largest reach, was a distant signal on virtually every cable system. Gruen written direct, 32

400. In 1998, that superstation became TBS, a cable network, and ceased to be a distant signal. Gruen written direct, 32.

401. Of all the claimant groups, PBS was the only one whose programming did not appear on WTBS. Gruen written direct, 32.

402. The number of PBS stations included in the Nielsen samples rose from 35 in 1992 to 44 in 1999 with a commensurate increase in the number of quarter hours for PBS. Gruen written direct, 32.

403. Between the 1992 and 1999 sweep periods, the number of quarter hours of PBS programming rose by 108,491. Gruen written direct, 32.

404. When measured on a full-year basis, the number of PBS quarter hours increased by 378,501 between 1992 and 1999. Gruen written direct, 32.

405. Notwithstanding the increase of 108,491 in quarter hours between the 1992 and 1999 sweep periods, the number of viewing minutes for PBS fell by 16,485. Gruen written direct, 33.

406. On a full-year basis, the 378,501 increase in quarter hours for PBS was more than five times the 67,512 gain in viewing minutes. Gruen written direct, 33.

407. On a percentage basis, despite increases of more than 30 percent in quarter hours, the number of viewing minutes for PBS fell by 4.0 percent between the 1992 and 1999 sweep periods, and rose by only 5.4 percent for the full year. Gruen written direct, 33.

408. The audience appeal of PBS programming, and the value of that programming to viewers and cable operators, declined between 1992 and 1999. Gruen written direct, 33.

409. The fact that WTBS became a cable network did not affect viewing minutes for PBS as it did for all other program categories. Gruen written direct, 34.

410. One reason for a decline in PBS viewing could have been the launch of new cable networks with programming appealing to viewers interested in PBS programming. Gruen written direct, 34.

411. HGTV, the History Channel, and Animal Planet were launched in 1994, 1995, and 1996, respectively, and by year-end 1999, each reached more than 50 million households. Gruen written direct, 34.

412. Several digital channels with possible appeal to PBS viewers were also launched, including a suite of Discovery channels, BBC America, and the Science Channel. Gruen written direct, 34.

413. These new channels may have contributed to the decrease in PBS viewing on distant signals. Gruen written direct, 34.

414. PBS is also the only claimant category where the entire station consists of one type (PBS) of programming. Gruen written direct, 34.

415. Consequently, unlike the other claimant groups, royalty fees paid by cable operators for distant carriage of PBS programs can be separately identified. Gruen written direct, 34.

416. PBS programming declined in appeal between 1992 and 1999 when measured on a household basis, and attracted fewer 18-49 viewers per quarter hour than any other claimant group except Devotional. Gruen written direct, 34.

417. If PBS's award is higher than the royalties paid for PBS stations, the difference will be generated from stations carrying no PBS programming. Gruen written direct, 35.

418. The market for syndication has grown more competitive in the late 1990s as cable networks began more aggressively competing for syndicated programs with television stations. Gruen written direct, 35.

419. The programs being sought by cable networks were not limited to hour-long dramas, the traditional market for syndication on cable, but also included popular half-hour comedies, the traditional market for syndication on television stations. Gruen written direct, 35.

420. Popular half-hour comedies such as *Seinfeld*, *Home Improvement*, *Ellen*, and *Cheers* were among the half-hour comedies slated for carriage on cable networks. Gruen written direct, 35-36.

421. In the face of new competition, television stations have increased the license fees paid for syndicated programs to secure their over-the-air syndication exposure prior to cable. Gruen written direct, 36.

422. License fees per episode for syndicated programs in the 1995-1998 period averaged $2.5 million, well in excess of the $1.7 million average for the 1986-1994 period. Gruen written direct, 36.

423. High price points for syndicated programs reflect the value placed by stations on such shows. Gruen written direct, 36

424. Excluding PBS, Program Suppliers account for 80.4 percent of 18-49 viewing in the 1998-1999 sweep periods, and 78.4 percent on a full year basis. Gruen written direct, 37.

425. Parity is defined as the point where the ratio of viewing minutes per quarter hour equals one. Gruen written direct, 38.

426. By selecting the midpoint between the parity level and the actual ratio of viewing per quarter hour as an adjustment factor, popular formats are given greater weight without

negating the role of programming volume in allocating copyright payments. Gruen written direct, 38-39.

427. For example, viewing minutes per quarter hour for the sweep periods for Program Suppliers was 1.46, and by taking half the differential between 1.46 and 1, the viewing minutes for Program Suppliers are raised by a factor of 1.23. Gruen written direct, 39.

428. In the case of Local, the ratio of viewing minutes per quarter for the sweep periods was .90, and taking half the differential between .90 and 1, viewing minutes for Local are adjusted by a factor of 0.95. Gruen written direct, 39.

429. When these adjustments are made for each category and the shares recomputed, the share for Program Suppliers is 72.8 percent for the sweep periods, and 69.0 percent on a full-year basis. Gruen written direct, 39.

430. Applying these revised share computations, the share for Program Suppliers is approximately 70 percent when computed for the sweeps and 66 percent when computed on a full year basis, and an average of the two yields a share of 68 Percent. Gruen written direct, 40.

431. An outlier is a data point that is relatively far away from the average value of a series, on either the high end of the range or the low end of the range. Gruen, tr. 8025.

432. When calculating the average license fees for the first tier, second tier, and third tier in Appendix A, Dr. Gruen performed additional calculations that excluded outliers and found that the relationship between the tiers stayed basically the same. Gruen, tr. 8027.

433. If ESPN, whose license fee is significantly higher than the average, is removed from the first tier, the average license fee is still substantially higher than the mid-level networks. Gruen, tr. 8026.

434. If both ESPN and TNT are removed from the first tier, the average for the remaining nine networks in the tier is still substantially higher than for the second tier. Gruen, tr. 8026.

435. ESPN has an array of sports programming, and does not carry only live college and professional team sports. Gruen, tr. 8028.

436. A smaller grouping of networks for these comparisons, for example, using a network-by-network analysis, will miss the overall relationship among the data, and, instead, provide limited information about specific features of individual networks. Gruen, tr. 8028-29.

437. In analyzing whether or not to carry a particular signal, a cable system operator would want to look at issues such as how long subscription revenues for that signal are likely to last. Gruen, tr. 8031.

438. One important consideration in whether subscription revenues associated with a particular signal are likely to last is the demographic profile of that signal. Gruen, tr. 8031-33.

439. The NAB Regression Model does not provide a marketplace valuation of programs to cable system operators. Gruen written rebuttal, 1.

440. NAB's Model relies on royalties as the valuation measure, rather than on the mandate of the CARP, which is to simulate what would occur in a free market. Gruen written rebuttal, 1.

441. NAB's Model is materially deficient analytically, and has no practical use for royalty allocation purposes. Gruen written rebuttal, 1.

442. Dr. Ducey's testimony does not take into account the changing environment faced by cable system operators between 1990-92 and 1998-99, and ignores the importance and effects of new ancillary revenues and competition from DBS that were important in 1998-99, but not in 1990-92. Gruen written rebuttal, 1.

443. The higher fees received from the conversion of WTBS to a cable network demonstrates the significant marketplace value of movies, syndicated series and sports. Gruen written rebuttal, 1.

444. The share of the 2-to-5 population, a demographic important to PTV, declined between 1990-92 and 1998-99. Gruen written rebuttal, 2.

445. In 1998-99, cable operators elected to carry a lower share of distant signal PTV stations among all PTV stations when compared to the carriage of commercial stations as a share of their respective universe. Gruen written rebuttal, 2.

446. That behavior indicates that public television had a lower marketplace value than other program categories. Gruen written rebuttal, 2.

447. PTV, along with other claimants, benefited from the presence of WTBS in the royalty pool in 1990-92. Gruen written rebuttal, 2.

448. The license fees for TBS as a cable network were three or four times the copyrights fees paid for WTBS as a distant signal, indicating that TBS was substantially undervalued as a distant signal. Gruen written rebuttal, 2.

449. Since there is no comparable evidence to show that PTV programming was more undervalued than programming on WTBS, there is no analytical basis to support an increased share for PTV. Gruen written rebuttal, 2.

450. By operation of statute, the Canadian claimants should only be entitled to participate in an allocation of minimum fees related to stations in the Canadian compulsory licensing zone while other claimant groups would also share in the minimum fees paid in the Canadian zone. Gruen written rebuttal, 2.

451. No evidence shows that the appeal of Canadian programming was a lure for distant subscribers. Gruen written rebuttal, 2.

452. Canadian distant signals would be worth more to U.S. cable system operators if they broadcast more U.S. programming. Gruen written rebuttal, 2.

453. Music does not differ from other integral components of programming, such as special effects or the quality of on-screen talent or scripts. Gruen written rebuttal, 3.

454. If share were allocated to program components, any increase in the volume of music may be offset by increases in other program components. Gruen written rebuttal, 3.

455. In NAB's Regression Model, the independent variables are used to explain variation in royalty payments for distant signals. Gruen written rebuttal, 4.

456. The CARP is not charged with explaining variations in royalty payments, which are set by statute, not determined by the marketplace. Gruen written rebuttal, 4.

457. Dr. Rosston's regression model does not address, let alone measure, the market value of different categories of programming on distant signals, which is the task assigned to the CARP in distribution proceedings. Gruen written rebuttal, 4.

458. Royalty fees are calculated using Gross Receipts and DSE values. Gross Receipts is determined by multiplying number of subscribers by monthly subscriber rates. Across cable systems, there is far more variation in subscriber counts than in the number of DSEs or monthly subscriber rates. Gruen written rebuttal, 5.

459. Most of the variation in royalty payments across systems shown in NAB's Model can be accounted for by the variation in subscribers. Gruen written rebuttal, 5.

460. Very little of the variation in royalty payments shown in NAB's Model is explained by program category minutes. Gruen written rebuttal, 5.

461. When the control variables (which include subscriber counts) in the NAB Regression Model are isolated, they explain 68.8 percent of the variation in royalties across cable systems. The number of subscribers is the dominant contributor. Gruen written rebuttal, 5.

462. The number of program minutes for all program categories together explained only 1.8 percent of the variation in royalties across cable systems, and thus, at best, play only an incidental role in the determination of royalty payments. Gruen written rebuttal, 5.

463. Because NAB's regression analysis measures only the variations in royalties and not the marketplace value of the program categories, the resultant values simply reflect the control variables, and have very little to do with differences in the value of program categories. Gruen written rebuttal, 6.

464. Marginal or incremental value is the value of the last unit. Gruen written rebuttal, 7.

465. Average value is the value of the "typical" unit, giving equal weight to all units. Gruen written rebuttal, 7.

466. Marginal value can be the same as average value only if the value of the last unit is the same as the value of all previous units. Gruen written rebuttal, 7.

467. Total value is the cumulative value of all units. It can be derived by adding the value of the first unit plus the value of the second unit and so on. Gruen written rebuttal, 7.

468. In general, the average value (or "price") of all units is substantially higher than the marginal value of the last unit. Gruen written rebuttal, 7-8.

469. The NAB Regression Model's coefficients measure the marginal value of program minutes for the different claimant categories, and not the average value. Gruen written rebuttal, 8.

470. Dr. Rosston multiplies the coefficient of program minutes for each claimant group by the number of minutes to derive his measure of total value. Gruen written rebuttal, 8.

471. As the program coefficients measure marginal value, Dr. Rosston's total value calculations must implicitly assume constant (rather than diminishing) marginal utility, contrary to established economic principles of diminishing marginal utility. Gruen written rebuttal, 9.

472. Because the value of earlier units is greater than the value of the last unit, measuring total value based on the marginal value of the last unit necessarily understates the total value. Gruen written rebuttal, 8.

473. If cable television stations and cable system operators made their purchase decisions on the basis of constant marginal utility, according to Dr. Rosston's calculations, cable system operators would choose to carry only sports (with the highest coefficient) to maximize their profits. Gruen written rebuttal, 10.

474. Since cable operators do not act in that manner, the Model's approach is invalid. Gruen written rebuttal, 10.

475. The number of programming minutes for Program Suppliers in the NAB's analysis is approximately three times that of public broadcasting, more than four times that of commercial TV, 16 times that of sports, 18 times that of devotional, and nearly 30 times that of Canadian. Gruen written rebuttal, 10.

476. The degree of understatement by calculating total value based on the marginal value of the last unit (rather than an average value of all units) would be greatest for Program

Suppliers' programming simply because the principle of diminishing marginal utility affects it the most. Gruen written rebuttal, 10-11.

477. According to NAB's Model, royalty payments are determined by two categories of variables—control variables and program minutes. Gruen written rebuttal, 11.

478. NAB's model totally ignores the control variables as a possible explanatory variable for royalty payments. Gruen written rebuttal, 11.

479. The "control" variables are those variables unrelated to program minutes. Gruen written rebuttal, 12.

480. NAB's Model includes three statistically significant control variables—number of subscribers, indicator for special 3.75 royalty rate, and indicator for carriage of partially distant signal—plus the constant. Gruen written rebuttal, 12.

481. The total values for each claimant category can be computed by adding the calculated value of the program minutes to the control values. Gruen written rebuttal, 12.

482. Multiplying the coefficient of each control variable by its mean value and adding that sum to the constant gives a cumulative value of 10,610 for the control variables for the average system. Gruen written rebuttal, 12.

483. The coefficient for Canadian program minutes shown in NAB's Model was not statistically different from zero, while the Devotionals' coefficient was shown as negative. Gruen written rebuttal, 12.

484. Dr. Rosston could not explain why Canadian and devotional programming are carried in the face of their calculated negative value, but use of total value based on the control variables provides an explanation. Gruen written rebuttal, 13.

485. The control variables contribute far more to total value than program minutes for all claimant groups, and their use leads to derived total value measures that do not vary much by program category. Gruen written rebuttal, 13.

486. The principal determinants of royalty payments in NAB's Model are the control variables that have little to do with program valuation. Gruen written rebuttal, 13.

487. In addition to the conversion of WTBS to a cable network, a number of other changes in the marketplace since 1992 affected both the volume and the value of programming in 1998-99. Gruen written rebuttal, 15.

488. One provision of the 1992 Cable Television Consumer Protection and Competition Act required cable systems with fewer than 36 channels and no local noncommercial stations to carry distant noncommercial (PTV) stations on a "must carry" basis whether cable operators valued them or not. Gruen written rebuttal, 15.

489. This caused the number of non-commercial stations carried as distant signals to increase by 22.5 percent between 1992 and 1998 despite the fact that the overall population of non-commercial stations rose by only 1.4 percent. Gruen written rebuttal, 15.

490. The share of program minutes for distant non-commercial programs likewise increased, without necessarily providing any corresponding increase in value to cable system operators. Gruen written rebuttal, 15.

491. The retransmission consent/must carry feature of the 1992 Act gave commercial stations the option to negotiate with cable systems for carriage or to opt for must carry. Gruen written rebuttal, 16.

492. The net impact of these (and other) provisions was an artificial 7.4% increase in the number of network affiliates carried as distant signals in 1998-99 compared with 1990-92, despite the fact that the total number of network affiliates decreased by 1.4 percent between 1992 and 1998. Gruen written rebuttal, 16.

493. As 78 percent of NAB's program minutes in 1998-99 came from network affiliates, up from 71.4 percent in 1992, the increase in affiliate distant carriage artificially boosted NAB's programming minutes. Gruen written rebuttal, 16.

494. Cable system operators had fewer opportunities to add subscribers through expansion and were faced with possible defections in their existing subscriber base to DBS. Gruen written rebuttal, 17.

495. Cable operators were interested in getting subscribers to upgrade to digital, to subscribe to cable modem service, and to subscribe to telephony in 1998-99, but not in 1990-92. Gruen written rebuttal, 17.

496. Cable operators looked to pay-per-view and video-on-demand to be a larger source of revenue growth in 1998-99 than in 1990-92. Gruen written rebuttal, 17.

497. None of these factors were addressed by Dr. Ducey. Gruen written rebuttal, 17.

498. Kagan World Media in mid-1999 was projecting that cable revenues from ancillary services would increase from $1.2 billion in 1998 to nearly $10 billion by 2002. Gruen written rebuttal, 17.

499. Ancillary services' share of total cable operator revenues was projected to rise from less than 4 percent in 1998 to nearly 20 percent by 2002. Gruen written rebuttal, 17.

500. Of the $18.4 billion projected increase in overall cable operator revenues between 1998 and 2002, over $9 billion (49%) was projected to be attributable to ancillary services. Gruen written rebuttal, 17-18.

501. In 1998, cable system operators paid a total of $165 million in license fees for TBS, seventh highest of all basic cable networks. Gruen written rebuttal, 18.

502. Despite these significantly higher license fees for TBS carriage, TBS remained the most widely available program source on cable in 1998 with the number of TV households increasing 4.4 percent in 1998, an increase comparable to other leading cable networks. Gruen written rebuttal, 19.

503. The marketplace behavior of cable system operators in 1998 demonstrates that TBS was among the most highly valued services. Gruen written rebuttal, 20.

504. Since TBS programming was heavily weighted to syndicated series and movies, the marketplace behavior of operators indicates that these program categories were highly valued. Gruen written rebuttal, 20.

505. Nine series entering television syndication in the 1995-99 period, including hits such as *Seinfeld*, *Frasier*, and *Friends*, generated an average of $2.3 million per episode and a total of $3.4 billion in aggregate license fees. Gruen written rebuttal, 20.

506. Cable networks were likewise active in licensing syndicated programs in the 1995-99 period, with a total of 33 programs syndicated at an average cost of $442,000 per episode and total license fee commitments for cable networks of $1.8 billion. Gruen written rebuttal, 20.

507. Because the Panel for the 1990-92 distribution did not have the benefit of knowing the market value of TBS or of syndicated programs, they may have undervalued syndicated series and movies. Gruen written rebuttal, 22.

508. The principal impact of the reclassification of WTBS between the two periods was the reduction in the size of the royalty pool. Gruen written rebuttal, 22.

509. All claimant groups, including PBS, received some share of the royalties generated by carriage of WTBS in 1990-92. Gruen written rebuttal, 22.

510. Between 1990-92 and 1998-99, the 2-5 demographic targeted by PTV as a share of the overall 2+ population fell from 6.1 percent to 5.8 percent, a drop of 4.9 percent. Gruen written rebuttal, 24.

511. This drop in share suggests that the relative value of programming targeted to the 2-5 demographic decreased between the two periods. Gruen written rebuttal, 24.

512. Less than 48 percent of all PTV stations were retransmitted as distant signals by cable operators in 1998 as compared with 60 percent of all commercial stations. Gruen written rebuttal, 25.

513. PTV was awarded a share of 5.5 percent of the royalty pool for 1990-92, even though PTV stations generated only 2.1 percent of that royalty pool. Gruen written rebuttal, 25.

514. A majority (62%) of the royalties received by PTV in 1990-92 were thus generated from stations that did not carry PTV programming, and in particular from WTBS. Gruen written rebuttal, 25.

515. Since the royalty payments made by cable system operators are determined by statute, they undervalue the true worth of the programming to cable system operators. Gruen written rebuttal, 26.

516. Payment of license fees for TBS in 1998 as a cable network that were three or four times greater than the copyright fees paid for WTBS as a distant signal indicates that TBS was substantially undervalued as a distant signal. Gruen written rebuttal, 26.

517. By extension, the programming on TBS, principally movies, syndicated shows, and sports, was also substantially undervalued. Gruen written rebuttal, 26.

518. No comparable evidence shows that PTV programming was similarly undervalued. Gruen written rebuttal, 26.

519. Although distant PTV stations are relatively inexpensive to carry, they are not widely carried as a distant signal. Gruen written rebuttal, 26.

520. TBS, on the other hand, is expensive, but almost universally carried by cable system operators. Gruen written rebuttal, 26.

521. These choices reflect how cable system operators value PTV programming as compared with movies, syndicated shows, and sports. Gruen written rebuttal, 26.

522. If PTV stations were the only signals in the distant signal universe, then the royalties going to PTV would equal the amount cable operators paid to carry those PTV stations. Gruen written rebuttal, 26.

523. Adding non-PTV stations to the mix with no PTV programs on them does not justify giving PTV more dollars than operators paid for PTV distant carriage. Gruen written rebuttal, 26.

524. The option provided by the compulsory license provision for cable system operators to carry distant signals without having to negotiate copyright fees has an economic value to cable system operators whether it is exercised or not. Gruen written rebuttal, 27.

525. The Minimum Fee is one way to capture the economic value of that option, and all claimant groups are entitled to participate in the distribution of royalties generated from Minimum Fees. Gruen written rebuttal, 27.

526. Cable systems are statutorily prohibited from carrying a Canadian station that is outside the Canadian compulsory licensing zone. Gruen written rebuttal, 28.

527. Between 1990-92 and 1998-99, the total number of U.S. cable subscribers increased by 24.8 percent, while the number of subscribers to systems carrying Canadian distant signals rose by 28.4 percent. Gruen written rebuttal, 28.

528. With respect to the difference between overall subscriber growth and Canadian subscriber growth, no evidence shows the difference was not attributable to demographic trends in the areas close to the Canadian border. Gruen written rebuttal, 28.

529. With respect to the difference between overall subscriber growth and Canadian subscriber growth, evidence shows that the appeal of Canadian distant signals related to U.S. programming. Gruen written rebuttal, 28.

530. In the Debra Ringold-Gary Ford survey, respondents valued Canadian programming on Canadian distant signals at 59%, but Canadian content comprises approximately 80% of the programming on Canadian distant signals. Gruen written rebuttal, 29.

531. Taken together, these two factors mean Canadian programs implicitly are valued 26 percent lower than would be expected given the amount of time they occupy. Gruen written rebuttal, 29.

532. Conversely, U.S. programming is valued higher than the proportionate time it occupies on Canadian distant signals. Gruen written rebuttal, 30.

533. Music, as an integral component of programming, does not differ in principle from other integral components of programming, such as special effects or quality of on-screen talent or scripts. Gruen written rebuttal, 31.

534. Because of the demonstrated audience appeal of special effects, as well as improvements in technology, special effects were more widely used in movies and other programs, such as increased weather graphics on news shows, in 1998-99 than in 1990-92, and were more widely available via distant signals. Gruen written rebuttal, 31.

535. To the extent that special effects could be valued separately from other components, the "volume" of special effects likely increased as well between the two periods. Gruen written rebuttal, 31.

536. Any increase in music volume may be offset by increased volume of special effects in programs in general. Gruen written rebuttal, 31.

537. By itself, the volume of music is not a valid measure of its value. Gruen written rebuttal, 31.

538. In allocating royalties to its copyright holders, ASCAP uses a complex formula that differentiates the type of music in determining its distribution. Gruen written rebuttal, 31.

539. ASCAP values foreground music more than background music, music with vocal components more than music without a vocal component, and theme songs more than non-theme songs. Gruen written rebuttal, 31.

540. In the music claimants' testimony, there was no analysis of whether or how these different types of music changed between 1998-99 and 1990-92. Gruen written rebuttal, 32.

541. Since music is an integral component of almost all programming, there is no way to attribute music's share to one program category more than another. Gruen written rebuttal, 32.

542. The blanket licenses paid by television stations for music do not factor in the volume of use. Gruen written rebuttal, 32.

543. College and professional sports teams uses theme music that "brands" the team's telecast during time-outs and between-innings breaks. Gruen written rebuttal, 32.

544. News programs are accompanied by branded theme music. Gruen written rebuttal, 32.

545. Music plays a large role in public television. Gruen written rebuttal, 32.

546. There is no evidence that the increase in the license fees to TBS following its conversion to a cable network inured to the benefit of the Program Suppliers. Gruen, tr. 10582.

547. Decisions of cable operators about when, and in what percentages, to carry PTV, in conjunction with similar information about other claimant categories, would be valuable evidence regarding the economic value of each category. Gruen, tr. 10585-86.

548. In the case of WTBS, where a formerly distant signal turned into a cable network and generated license fees, this would be particularly relevant to determining the value of the type of programming carried on WTBS. Gruen, tr. 10586.

Dr. Robert J. Thompson

549. By the 1950's, nearly everyone in the country was feeding from the same cultural trough—television—for at least a few hours a week. Thompson written direct, 4.

550. Mainstream entertainment TV is the one element that unites the entire U.S. population. Thompson written direct, 4.

551. Many series, such as *The Brady Bunch*, enjoyed a renaissance in the 1980s and 1990s based on their availability as stripped syndicated series watched by people who were too young to have seen them when they aired on the networks. Thompson written direct, 5.

552. *The Brady Bunch* never spent a single season in the Nielsen top-30 during its network run—it gathered its cultural equity while in reruns, not on prime time, and the same is true for many other series as well. Thompson written direct, 5-6.

553. Syndicated series are now available on cable networks, like TV Land, Nick at Nite, Bravo, A&E, and a number of other cable outlets as well as local stations. Thompson written direct, 6.

554. A first-run network television series plays weekly on the network, which establishes the show's brand value; the most popular of these shows are then licensed in syndication for the best time slots by local stations, where they are usually "stripped" (run Monday through Friday or Saturday in the same time slot). Thompson written direct, 6.

555. In syndication, a show not only picks up a new generation of viewers, but often continues to attract and to retain audiences that enjoyed the show the first time around. The repetition that comes from daily broadcasts deepens familiarity with the show. Thompson written direct, 6.

556. Series that were the biggest hits on the networks usually are syndicated to the local stations first because local stations assume viewers will want to watch them in reruns as well. That assumption is usually correct, which is why local stations pay premium prices for these programs. Thompson written direct, 7.

557. Rather than diminishing the long-term value of syndicated series, heavy daily play on local stations ultimately increases their value. Thompson written direct, 7.

558. During the May sweeps period in 2002, networks tried to maximize their ratings by broadcasting over two dozen specials that repackaged beloved old series in highlights shows and anniversary specials. Thompson written direct, 7.

559. Some series that were not big hits when they were on the network (*Leave It to Beaver*, *The Brady Bunch*) become more popular through their successful syndication runs. Thompson written direct, 8.

560. Local stations pay maximum prices for shows performing well in local syndication today—*The Simpsons*, *Friends*, *Seinfeld*—because they deliver a maximized audience. Thompson written direct, 8.

561. The early success of several "superstations" widely carried as distant signals—WTBS, WGN, WPIX—was in part due to their broadcast of popular off-network reruns. Thompson written direct, 8.

562. The presence of popular off-network series on superstations was one reason many people were initially attracted to cable. Thompson written direct, 8.

563. *TV Guide* tributes to "greatest episodes," Trivial Pursuit questions, jokes on *Saturday Night Live* and by stand-up comics, spontaneous eruptions of TV theme songs on school buses and at parties: all this is the evidence of how syndicated series permeated American culture. Thompson written direct, 9.

564. Americans exhibit a similarly extensive literacy with regard to movies, which are an important part of our shared cultural experience. Thompson written direct, 9.

565. Movies continue to make up a significant part of the programming mix on broadcast television stations. Thompson written direct, 9.

566. For most of the history of television in America, the Nielsen rating system has been the accepted method by which the size of the audience has been measured. Thompson written direct, 10-11.

567. Television executives use the Nielsen data to decide whether or not to keep a show on the air, and how much to charge for commercial slots. Thompson written direct, 11.

568. Advertisers use the Nielsen data to select programs on which to advertise. Thompson written direct, 11.

569. Producers use Nielsen ratings to gauge the relative success or failure of their products, and often make aesthetic adjustments in response to ratings. Thompson written direct, 11.

570. Nielsen ratings are the means by which a value is assigned to programs. The size and the demographics of the audience are used to calculate that value. Thompson written direct, 11.

571. The bigger the audience a program draws, and the stronger that audience is in prime demographics (18-49 year-olds), the more valuable the program is. Thompson written direct, 11.

572. Syndicated series usually command the highest ratings, often in the prime demographic categories. Thompson written direct, 11.

573. The Nielsen ratings are the coin of the realm, the foundation upon which the business of commercial television is conducted. Thompson written direct, 11.

574. Nielsen data collection has evolved over the years, introducing larger samples and new technologies, like the People Meter, thus enhancing its role as the accepted model for measuring audience size. Thompson written direct, 11.

575. Alternative systems to Nielsen have never been introduced with much success. Thompson written direct, 11.

576. If one wants to measure the commercial value of television programming, the only currency recognized by the industry is the Nielsen ratings. Thompson written direct, 12.

577. The popularity of series and movies is often reflected by the way in which they can transform the hairstyles, clothing styles, and linguistic vernacular of the culture overnight. Thompson written direct, 13.

578. Homer Simpson's phrase "D'oh" recently made it into the Oxford English Dictionary, which traces the phrase back to a 1945 BBC Radio show. Thompson written direct, 13.

579. Archie Bunker's chair, Fonzie's leather jacket, and an assortment of other TV relics now reside in a special exhibit at the Smithsonian Institution. Thompson written direct, 13-14.

580. Series television is enjoyed by an audience so large that it becomes part of the cultural fabric of the nation. Thompson written direct, 14.

581. *Seinfeld* added a number of new phrases to the American vernacular--"Yada, yada, yada," "Not that there's anything wrong with that," "shrinkage," "double-dipping," "master of your domain," "spongeworthy"-- and the ubiquity of those phrases argues for the centrality of this series in current American culture. Thompson written direct, 14.

582. Syndicated series are a principal part of American folk culture, and their characters are part of our pantheon of shared ideas of personality types. Thompson written direct, 14.

583. Television has also given shape to the American calendar and the formation of annual traditions, with the annual broadcast of holiday movies and shows, like *A Christmas Carol*, *Miracle on 34th Street*, and *A Charlie Brown Christmas*, becoming parts of the American celebration of the holiday. Thompson written direct, 15.

584. The cultural value of such specials grows each year they are rebroadcast and introduced to new audiences. Thompson written direct, 15.

585. The field of "television studies" has experienced striking growth since the early 1980s. Thompson written direct, 16.

586. TV scholarship and research tends to be about the shows that the most people watch: doctor shows, lawyer shows, talk shows, comedies, and so forth. Thompson written direct, 16.

587. College professors acknowledge the centrality of television in American culture by using *The Simpsons* and *Seinfeld* to teach subjects that many students neither like nor know well. Thompson written direct, 17.

588. Robert Pinsky's use of *The Simpsons* as a way of getting at contemporary religious questions presupposes one fact: that many people know *The Simpsons* in more detail than they know most other cultural products and that such knowledge can be used as a foundation for addressing other issues. Thompson written direct, 17-18.

589. Knowledge of a show like *The Simpsons* comes from regular and repeated viewing of the show on daily syndicated reruns. Thompson written direct, 17-18.

590. A wide variety of social ills, from teenage pregnancies to school shootings, are blamed on entertainment television by a wide variety of critics across the political spectrum. Thompson written direct, 18.

591. In making these attacks, political leaders acknowledge the centrality and popularity of the programming at which they aim their attacks. Thompson written direct, 18.

592. Syndicated shows with plot lines about breast cancer have inspired people to get a breast exam that saved their lives. Thompson written direct, 19.

593. Libraries nationwide reportedly saw an enormous surge in applications for library cards the week after Fonzie got a card on an episode of *Happy Days*. Thompson written direct, 19.

594. Oprah Winfrey single-handedly inspired the widespread reading of serious books by millions of people. Thompson written direct, 19.

595. In contrast to other programming categories, nearly everyone views and experiences dramas, comedies, movies, and game shows; their shared experience forms a cultural glue that joins an otherwise diverse population together. Thompson written direct, 20.

596. Syndicated programming provides this cultural glue because it is what people watch most, both when it is new and, in many cases, for decades after it was made. Thompson written direct, 20.

597. The audiences of syndicated shows, as indicated by ratings and cultural evidence, are what define their value in the television industry. Thompson written direct, 20.

598. The folk art of America is syndicated television shows. Thompson, tr. 8096.

599. Syndicated shows have so permeated the culture that you can count on virtually everyone having a pretty good basis of tele-literacy in a way that you can't with any literary form, musical form, painting, or anything else. Thompson, tr. 8100.

600. Heavy play of syndicated programming increases its value because it keeps introducing programming to new generations. Thompson, tr. 8105.

601. Syndicated programming, including sitcoms, dramas, soap operas, game shows, and talk shows has a level of cultural presence or penetration that has no equal in our culture now, or at any other time or place in human history. Thompson, tr. 8108-10.

602. Movies have a similar, albeit slightly less, degree of cultural penetration as syndicated programming. Thompson, tr. 8110.

603. Knowledge of syndicated programs and movies is one of the things that identifies people as part of the U.S. culture. Thompson, tr. 8111.

604. Programs that generate the most "cultural buzz" typically sit atop the Nielsen ratings. Thompson, tr. 8113.

605. A correlation between high ratings and a big impact on the culture is exactly what we would expect. Thompson, tr. 8114.

606. The relationship between ratings and cultural penetration is this: the shows that penetrate are the shows that people watch en masse. Thompson, tr. 8119.

607. News, sports and documentary programs do not have the same degree of cultural penetration as syndicated shows and movies. Thompson, tr. 8123.

608. Cultural penetration is a valid indicia of the market value of syndicated programming. Thompson, tr. 8123.

609. The cultural penetration of PBS shows such as *Barney*, *Sesame Street*, and *Arthur*, are similar to that of *Pokemon,* but not similar to syndicated shows like *The Simpsons* and *Andy Griffith*. Thompson, tr. 8161.

610. PBS was one of the places viewers traditionally went, by old aesthetic standards, for good television. Thompson, tr. 8174.

611. The days where PBS was the only choice for good television are long gone. Thompson, tr. 8174.

612. The following cable networks carry programming that is similar to or competitive with programming carried by Public Television Stations: Discovery, Nickelodeon, A&E, The Weather Channel, The Learning Channel, History Channel, Disney, Comedy Central, Animal Planet, HGTV, Food Network, Bravo, Travel, Toon Disney, BBC America. Thompson, tr. 8198-8201.

613. Given a choice between *Spongebob* and *Mr. Rodgers* many kids will select *Spongebob*. Thompson, tr. 8215.

614. The process of attracting subscribers to cable and the process of retaining them is often used interchangeably in this and other CARP proceedings. Thompson written rebuttal, 1.

615. The initial decision to sign up for cable--or for digital or satellite services--is based in a significant way on the promise of the cornucopia of choices that the new service offers. Thompson written rebuttal, 1.

616. Once customers subscribe to cable, many find that they do not use all of the channels that the new service offers. Thompson written rebuttal, 1.

617. When customers pay their cable bill each month, or when they decide not to terminate their cable service, they base their decision on the sense of satisfaction they derive from the programs they, or members of their families, have actually watched over the past month. Thompson written rebuttal, 1.

618. A cable subscriber measures the degree of pleasure their TV service is giving them not by what they had the option of seeing, but by what they actually saw. Thompson written rebuttal, 2.

619. Ratings are the best measure of why customers keep paying their monthly cable bill. Thompson written rebuttal, 2.

620. If a subscriber never watches a channel, that channel is not playing a significant role in the decision to remain a subscriber, regardless of what that subscriber might say about that channel in a survey. Thompson written rebuttal, 2.

621. By the standards of many viewers and critics, HBO is now the most exciting place in television from an aesthetic standpoint, and has been for about five years. Thompson written rebuttal, 3.

622. Commercial broadcast TV has also been at the center of a flowering of American television drama for two decades, with shows such as *Hill Street Blues*, *St. Elsewhere*, *Moonlighting*, *Twin Peaks*, and *The West Wing* demonstrating the maturation of television as an art form. Thompson written rebuttal, 3.

623. Series like *Seinfeld* and *The Simpsons* are nearly unanimously seen as not only impressive commercial successes, but significant artistic successes as well. Thompson written rebuttal, 3.

624. The introduction of a wide variety of other sources of kid TV has clearly drawn young viewers away from PBS. Thompson written rebuttal, 4.

625. Between the pledge drives, auctions, and more aggressive sponsorship spots, PBS is by no means commercial-free. Thompson written rebuttal, 4.

626. Children are exposed many licensed products based on PBS children's programs. Fifty percent of *Sesame Street*'s budget comes from tie-in merchandising. Thompson written rebuttal, 4.

627. PBS's original charge was to provide programming that the marketplace would probably not support and that has significantly lower commercial value than the other choices. Thompson written rebuttal, 5.

Dr. Martin Frankel

628. Dr. Frankel is an expert statistician with specific experience with the use of regression analyses. Frankel written rebuttal, Appendix A; tr. 9344-49.

629. The NAB Regression Model places great reliance on program minutes as a variable. Frankel written rebuttal, 3.

630. A properly specified regression model is a model that includes all of the variables that are appropriate and that conforms to the basic regression assumptions about the error terms. Frankel, tr. 9430.

631. The "null hypothesis" is a term that statisticians often use to indicate the statistical hypothesis tested. The purpose of most statistical tests is to determine if the obtained results provide a reason to reject the hypothesis or if they are merely a product of chance factors. Frankel written rebuttal, 6 n. 4.

632. Dr. Frankel ran three tests to test assumptions underlying the NAB Regression Model: Ramsey's test checks for evidence of omitted variables; Szroeter's test; and Cameron and Trivedi's decomposition IM-test. The latter two are used to determine if the basic assumptions required for statistical inferences are satisfied. Frankel written rebuttal, 6.

633. The Ramsey test result does not specify missing variables, but it does indicate whether there is evidence that the regression model is not fully specified. Frankel, tr. 9400.

634. When Dr. Frankel applied all three tests, they produced highly significant rejection of the respective null hypotheses. Frankel written rebuttal, 7.

635. Dr. Rosston's original performance of the Hausman test on his regression analysis excludes a variable - - household income. Frankel written rebuttal, 7.

636. When household income is included as a variable in the Hausman test, it results in both positive and negative values for certain coefficients. The difference in signs for coefficients is often taken as a warning that there are specification problems in the basic regression model. Frankel written rebuttal, 7-8.

637. Program minutes explain very little of the variations in royalty payments. Factors other than program minutes more substantially affected Dr. Rosston's regression results. Frankel written rebuttal, 3, 9; tr. 9415.

638. It is generally accepted practice in regression analysis to determine the R-squared value. That is, the extent to which predictor variables explain predictand variables (predictand variables in this case are the royalties). Frankel written rebuttal, 8.

639. Here, the R-squared value indicates the extent to which a variable or a group of variables explain the variations in royalty payments. Frankel written rebuttal , 8.

640. The NAB Regression equation utilizes two groups of variables - programming minutes variables for different program categories and non-programming minute variables identified collectively as Control Factors. Frankel written rebuttal, 8.

641. One method for examining the explanatory power of each variable (or group of variables) used in a regression model is to calculate the regression using only the particular variable or group of variables. Frankel written rebuttal, 9.

642. Another method for examining the explanatory power of each variable (or group of variables) used in a regression analysis is to run two regression equations (one which includes

all variables except the variable(s) to be isolated and the other which includes all variables) and then take the difference in the resulting R-squared values. Frankel written rebuttal, 9.

643. The NAB Regression equation produces a multiple R-squared of 0.7024, indicating that approximately 70 percent of the variance in royalties is explained by the totality of the program minutes and control variables used in the equation. Frankel written rebuttal, 9.

644. Isolating Control Factors (i.e., the non-program minutes variables) in the same NAB Regression equation produced an R-squared value of 0.6883. Meaning, non-program minute factors explain 68.83% of the variance in royalty royalties. Frankel written rebuttal, 9.

645. For cable systems with positive DSEs, isolating the program minutes in the same NAB Regression equation results in an R-squared of 0.0183. This means that program minutes only explain 1.8% of the variation in royalties as measured by the Regression model. Frankel written rebuttal, 9.

646. For cable systems with DSE values of 1.0 or more, the R-squared for program minutes variables explain only 1.51% of the variation in royalties, while Control Factors explain 68.78% of the variations in royalty payments. Frankel written rebuttal, 10.

647. Correlation is a measure of the relationship between two or more variables. Frankel written rebuttal, 10, note 6.

648. The correlation between royalties and lagged subscribers in the NAB Regression is higher than all other correlation values for the regression variables. However, the correlation value between royalties and lagged subscribers is lower than the correlation value between royalties and non-lagged subscribers. Frankel written rebuttal, 11.

649. When a properly specified regression model purports to explain the separate impact of a key variable or a group of variables, the resulting coefficients should not vary significantly with changes to the non-key variables. Frankel written rebuttal, 11.

650. When non-program minutes variables in Dr. Rosston's regression model are altered, the coefficients associated with program minutes change dramatically. Frankel written rebuttal, 12-16, Table 1.

651. The NAB Regression results are highly sensitive to changes in non-key variables. The shifting coefficients radically alter the implied share of royalties, in extreme and absurd manners. Frankel written rebuttal, 16.

652. The volatile nature of the programming minutes coefficients makes the NAB Regression analysis very unreliable and the resulting implied shares unusable. The fragile and unstable coefficients do not conform with sound statistical practice, thus, cannot be used for distribution of royalties. Frankel written rebuttal, 16; tr. 9382-86, 9463-67.

653. A probability sample is a sample selected in such a way that gives each element in the population a known, calculable, non-zero probability of selection. Frankel written rebuttal, 16.

654. A random (without replacement) sample is a probability sample that is selected in such a way that gives each element in the population an equal probability of selection and gives all possible subsets of elements of a given population an equal probability of selection. Frankel written rebuttal, 16.

655. A probability sample (with appropriate weighting for non-equal probabilities) allows for the unbiased estimation of population means, proportions and totals. Meaning, if one were to repeat the sampling process a large number of times, the average of the sample results would be the same as the true results for the whole population. Frankel written rebuttal, 17.

656. A purposive sample is a sample resulting from a sampling process where one selects elements of the sampled universe with predetermined characteristics. Frankel written rebuttal, 17-18.

657. A purposive sample is not a probability sample. Frankel written rebuttal, 17.

658. Dr. Fratrik's sampling methodology for selecting sample dates does not fit into any commonly known method of selecting a probability sample. Frankel written rebuttal, 17.

659. Dr. Fratrik ensures that all days of the week are represented in equal amounts in his sample. Frankel written rebuttal, 17.

660. Dr. Fratrik's sample dates may be a purposive sample. Frankel written rebuttal, 18.

661. Dr. Fratrik's sample dates is neither a random sample nor a probability sample. Dr. Fratrik's sample dates do not constitute a statistically valid sample. Frankel written rebuttal, 17; tr. 9349-62.

662. Dr. Fratrik did not adequately describe the process he used to derive a random sample of program days for his program time study. Frankel written rebuttal, 17; tr. 9356.

663. When one makes a claim that a sample is a probability sample, there must be an explicit exposition of how the selection process produces the required known and calculable probabilities of selection. Frankel written rebuttal, 17.

Alan Whitt

664. The unweighted program minutes in the Fratrik study for 1998 are derived from the stations types and attributed to the program categories in the following percentage proportions:

	Independents	Network Affiliates	Canadian	Non-Commercial
Program Suppliers	64.98%	33.34%	1.68%	
Commercial TV	21.76%	78.24%		
Public Broadcasting				100.00%
Sports	75.12%	15.85%	9.03%	
Canadian			100.00%	

Whitt written rebuttal, 6; Whitt, tr. 9533-35; NAB Ex. 46-RX.

665. The unweighted program minutes in the Fratrik study for 1999 are derived from the station types and attributed to the program categories in the following percentage proportions:

	Independents	Network Affiliates	Canadian	Non-Commercial
Program Suppliers	64.60%	33.70%	1.70%	
Commercial TV	21.85%	78.15%		
Public Broadcasting				100.00%
Sports	75.60%	17.00%	7.40%	
Canadian			100.00%	

Whitt written rebuttal, 7; Whitt, tr. 9533-35; NAB Ex. 46-RX.

666. The unweighted program minutes in the Fratrik study are allocated to the program categories in the following percentage shares:

	1992	1998	1999
Program Suppliers	56.76%	55.32%	54.41%
Commercial TV	10.18%	11.34%	11.23%
Public Broadcasting	22.86%	24.70%	24.70%
Sports	.79%	.95%	1.15%
Canadian	2.43%	1.95%	1.80%

Whitt written rebuttal, 4; Whitt, tr. 9536-38; NAB Ex. 47-RX.

667. When comparing the change in shares of unweighted program minutes in the Fratrik Study from 1992 to the average of 1998 and 1999, the results are as follows:

	1992	1998-1999 avg.	Change
Program Suppliers	56.76%	54.85%	-1.91%
Commercial TV	10.18%	11.28%	1.10%
Public Broadcasting	22.86%	24.70%	1.85%
Sports	0.79%	1.06%	0.26%
Canadian	2.43%	1.87%	-0.55%

Whitt written rebuttal, 3; Whitt, tr. 9540-43; NAB Ex. 48-RX.

668. When comparing the change in shares of weighted program minutes in the Fratrik Study from 1992 to the average of 1998 and 1999, the results are:

	1992	1998-1999 avg.	Change
Program Suppliers	77.87%	60.38%	-17.49%
Commercial TV	8.79%	13.00%	4.21%
Public Broadcasting	5.04%	14.87%	9.83%
Sports	4.75%	4.91%	0.16%
Canadian	1.00%	3.68%	2.68%

Whitt written rebuttal, 3; Whitt, tr. 9540-43; NAB Ex. 48-RX.

669. When comparing the percentage change in shares from 1992 to the average of 1998 and 1999 (change divided by 1992 share) of both unweighted and weighted program minutes in the Fratrik Study, the results are:

	Unweighted % change from 1992 to '98-'99 avg.	Weighted % change from 1992 to '98-'99 avg.
Program Suppliers	-3.36%	-22.46%
Commercial TV	10.80%	47.90%
Public Broadcasting	8.07%	195.04%
Sports	33.01%	3.37%
Canadian	-22.84%	268.00%

Whitt, tr. 9547; NAB Ex. 10; NAB Ex. 49-RX.

670. The number of stations in the Fratrik Study sorted into station types are:

	1992	1998	1999
Independents	244	274	275
Network Affiliates	378	406	406
Canadian	24	20	20
Non-commercial Educational	144	174	181

Whitt written rebuttal, 8.

671. When the minutes in Dr. Fratrik's program time study are not weighted, the difference in program time from 1992 to 1998-1999 is less than 2.5 % for all parties. Whitt written rebuttal, 5.

672. In Dr. Fratrik's program time study, Commercial Television derives over 75% of its unweighted program time minutes from Network Affiliate stations. Program Suppliers derive roughly one third of its minutes from Network Affiliates whereas Sports and Devotional Claimants derive less than a quarter of their minutes from these stations. Whitt written rebuttal, 7.

Robert Sieber [Testimony from the 1990-92 CARP Proceedings]

673. Average audience or ratings measure the average number of households or persons watching at, or for, a particular amount of time. Sieber, 1990-92 written direct, 11.

674. While attitudinal studies explain the "why" of subscriber behavior, television viewer ratings describe that behavior in some detail. Sieber, 1990-92, tr. 3767.

675. In a free market, superstations would be able to offer local advertising time to cable operators, just as cable networks are able to do. Sieber, 1990-92, tr. 3954.

676. The principal consideration in putting together a program lineup, in the superstation context, is maximizing the audience, which is the same as satisfying cable subscribers. Sieber 1990-92, tr. 4108-09.

677. Television ratings measure consumers' actions. Sieber, 1990-92, tr. 4166.

678. Television ratings reflect both viewer intensity and the extent to which they watch the program regularly. Sieber 1990-92, tr. 4166.

679. Survey respondents often tell surveyors what the respondents think the surveyors will want to hear. Sieber 1990-92, tr. 4171-72.

680. Mr. Sieber developed Nielsen television ratings for WTBS and used them to make program purchasing and scheduling decisions for the station. Sieber, 1990-92 written direct, 21; 1990-92 tr. 3747.

681. Nielsen ratings are important to WTBS in purchasing programs, in negotiating advertising rates, and are used by cable operators in considering which services to provide to subscribers. Sieber 1990-92, tr. 3747.

682. The use of Nielsen ratings is widespread. Cable operators are familiar with national ratings and they further rely on Nielsen ratings for information about their region. Seiber, 1990-92, tr. 3751-52, 4160-61.

683. The regression analysis separates out the individual impacts of independent, or right-hand side, variables (the explanatory variables) on the dependent variable. Rosston, tr. 2683-84.

684. Because Dr. Rosston's regression analysis relies upon Dr. Fratrik's time study, to the extent Dr. Fratrik's sample is not representative of the programming that was retransmitted during 1998-99, it would adversely affect the regression results. Rosston, tr. 2689.

685. A control factor in a regression analysis controls for other factors that might affect the dependent (left hand side) variable, but were not analyzed. Rosston, tr. 2715.

686. All programming minutes used in the Dr. Rosston's Regression Model are valued equally. Rosston, tr. 2732-36.

687. Specification error occurs when a regression model is misspecified. For instance, an important explanatory variable may be omitted. A fixed effects regression is a means of testing for misspecification. Rosston, tr. 2711-12.

688. Dr. Rosston did not use the DSE values of the distant signals included in his regression analysis as an explanatory variable. Rosston, tr. 2716-18.

689. Because of the use of lagged subscribers, the regression model includes subscriber counts from 1997-2, an accounting period in which WTBS was a distant signal. Rosston, tr. 2767-69.

690. The R-squared is a measure of the variation in the dependent variable that the regression analysis explains. Dr. Rosston reported an R-squared of 0.702 for his analysis of systems with a positive DSE. R-squared ranges from zero to one. Some consider this a measure of goodness and fit. Rosston written direct, 19; tr. 2776.

691. Dr. Rosston did not perform a regression analysis using only programming minutes. Rosston, tr. 2778-79.

692. The reported coefficients associated for in each of the program categories in the NAB Regression Model indicate the effect of an additional minute of programming, holding all other factors constant. Rosston written direct, 22.

693. This reported coefficients associated provides the average marginal value of the last minute sold by the station. Rosston, tr. 2797, 2802-03.

694. Price per unit multiplied by the number of units equals total value. Rosston, tr. 2809.

695. In the NAB Regression Model, the coefficients are multiplied by the program minutes for each program category to calculate an implied share of royalties for each category. Rosston written direct, 23.

696. The full application of NAB's regression model would yield negative values for Devotional and Canadian claimants. Rosston, tr. 2828.

Marcellus Alexander, Jr.

697. When negotiating for licenses of syndicated programming, station general managers considered ratings, demographics and day parts. Alexander, tr. 2278, 2282, 2284.

698. The number of persons who watch television at particular times of day factors into how programming is valued. Because more people watch television in the evening than in the morning, a program broadcast at 7:00 p.m. has a greater potential audience, therefore, it would have higher revenue potential, than a morning show. Thus, stations pay more for programs broadcast in higher audience day parts. Alexander, tr. 2284-85. In general, higher audience levels translate into higher revenues for the stations. Alexander, tr. 2291-92.

699. Stations engage in counter programming and audience promotion activities to increase audience levels. Alexander, tr. 2285, tr. 2289-90.

700. When negotiating with buyers of advertising spots, station general managers consider primarily ratings generated by the particular program and demand for ad spots. Alexander, tr. 2288.

701. Assumed carriage by cable operators was an important value received by broadcasters during the must carry/retransmission consent negotiations with cable systems. Alexander, tr. 2300.

702. A network affiliate broadcast news is approximately 4.5 hours per day. Alexander, tr. 2309-10.

703. A small segment of a station's newscast comes from other stations, another segment comes from a national or regional news service, such as CNN and another small segment comes from network news feeds. Alexander, tr. 2304-05, tr. 2307-08.

704. For hour-long newscasts, some segments in the first half hour of a broadcast are repeated in the second. Alexander, tr. 2315-16.

705. Between 1992 and 1998, local newscasts on broadcast stations faced increased competition from basic cable networks such as MSNBC and CNBC, from specialty channels such as The Weather Channel or cable business networks, and from regional news, cable news, and sports networks, as well as from the internet. Alexander, tr. 2323-38, 2350-51.

706. WJZ and KYW experienced between 5% - 10% decreases in local news ratings between 1992 and 1998 due to this increased competition. Other stations across the country possibly experienced similar decreases. Alexander, tr. 2381-89.

707. A station manager assesses the quality and attractiveness of the station's programming in attracting and keeping audience primarily by reviewing ratings. Alexander, tr. 2357-58.

Dr. Mark R. Fratrik

708. Sampling seeks to produce a representative sample of the population being studied. Fratrik, tr. 2437.

709. In a random sampling, each member of the population has an equal chance of being selected. Fratrik, tr. 2438.

710. To determine the proper sample size for a study, the group must be large enough to provide enough information to give a meaningful result. Fratrik, tr. 2442-43.

711. To create his study sample, Dr. Fratrik sought to include the different days of the week on a proportionate basis. To do this, he used two-month increments from which he selected dates to represent each day of the week. For example, he picked from the January - February 1992 increment, a Monday, a Tuesday, a Wednesday, a Thursday, a Friday, a Saturday, and a Sunday. This results in 42 days selected (6 two-month periods x 7 days of the week) for each of the three years (1992, 1998, 1999) being analyzed. For each two-month increment across 1998 and 1999, Dr. Fratrik alternated the weekday selection, so that if in 1998, he selected three days (Tuesday, Thursday, and Saturday) from January, and four days (Monday, Wednesday, Friday, and Sunday) from February, 1999 he would reverse the selection process. Consequently, the sample selected 84 days (12 months of the year x 7 days of the week) across these two years. NAB Ex. 10, 6-7.

712. This meant that Dr. Fratrik's sample had two predetermined characteristics: one, the days of the week; and, two, a specific time period in which he wanted those dates selected. Fratrik, tr. 2437-38, 2446-48, 2453-56.

713. The selection of an equal number of days of the week for a given period is a predetermined characteristic. Fratrik, tr. 2453-56.

Laurence J. DeFranco

714. Mr. DeFranco's station distance analysis excludes superstations. DeFranco, tr. 2515.

715. Mr. DeFranco's 1998-2 analysis studied 1,947 instances of distant signal carriage as compared to the entire instances of carriage for Form 3 systems in 1998-2 of 4,199 instances of carriage. NAB Ex. 11. PS Ex. 6-X .

716. Mr. DeFranco's 1999-2 analysis studied 2060 instances of distant signal carriage as compared to the entire instances of carriage for Form 3 systems for 1999-2 of 4,307. NAB Ex. 11; PS Ex. 6-X.

717. The number of instances of carriage studied by Mr. DeFranco declined between 1992 and the 1998-99 period. DeFranco, tr. 2556-57.

Dr. Richard Ducey

718. Changes that affected the distant signal marketplace between 1990-92 and 1998-99, included legislative changes of cable regulations, changes in the lineup of distant signal carriage by cable systems, increased amount of cable network programming changes to the definition must-carry local signal, rate regulation for cable systems, and increased competition by providers of direct-to-home satellite services. Ducey, tr. 1592-93.

719. The passage of the Satellite Home Viewer Act resulted in an expansion of what was considered must carry, such that many signals that used to be distant, became local. Ducey, tr. 1598, 1607.

720. Changes other than the conversion of WTBS to a cable network contributed to the decline in the royalty pool after 1992 but before 1998. Ducey, tr. 1604.

721. One change occurred around 1994 when cable rate regulation contributed to the decline in compulsory license royalties. Regulation led to monthly subscriber rates being reduced by 10% and then by 7%. This, in turn, reduced gross receipts reported by cable operators on their statements of account and decline in the compulsory license royalties. Ducey, tr. 1604.

722. Other factors responsible for reduced royalties prior to WTBS's conversion include change in status of stations from distant to local and re-tiering of distant signals by cable operators to lower priced packages. Ducey, tr. 1620.

723. NAB's clustering evidence does not show an increased relative value of NAB's programming compared to other programming on distant signals. Ducey, tr. 1625.

724. NAB Exhibit 5 was not intended and does not provide a basis for allocating royalties. It is merely an empirical measure of how much programming minutes grouped by the different claimant categories were available on distant stations. It was not intended to speak to the value that cable operators placed on that programming. Ducey, tr. 1620-21.

725. News programming represents the largest portion of NAB's programming. Ducey, tr. 1623.

726. Dr. Ducey's only work experience with program selection by cable operators is limited to his first job out of college - an eight-month employment with a cable operator from 1978 to 1979. Ducey, tr. 1678-1680, 1684-85.

727. Dr. Ducey has no recent meaningful or relevant experience, academic or otherwise, with (a) evaluation of programs in the cable industry, (b) cable subscriber behavior, and (c) cable subscriber attitudes. Ducey, tr. 1691-93.

728. Dr. Ducey's most recent work has related mostly to computer-based telecommunications technologies. Ducey, tr. 1694.

729. The cable industry radically differs from how it was when Dr. Ducey last worked for a cable company in 1979. Ducey, tr. 1701-02.

730. Station-produced programs may also be syndicated programs, and thus properly in Program Suppliers' category. Ducey, tr. 1707.

731. Dr. Fratrik's program time study, from which Dr. Rosston's regression analysis was derived, is a time-based study. Ducey, tr. 1710-11.

732. NAB presented time-based studies, including a regression analysis, in the 1978 and 1979 royalty distribution proceedings. Ducey, tr. 1747, 1751-55.

733. Program time is a measure of availability, while viewing is a measure of actual use. Ducey, tr. 1718-20.

734. Program hours are not an appropriate measure of value. Ducey, tr. 1728-29.

735. Dr. Fratrik's program minutes study does not indicate whether people tune in to watch the programs. Ducey, tr. 1756-57.

736. Dr. Fratrik's program time study values all minutes the same, regardless of when a program is retransmitted or what its audience is. Ducey, tr. 1761-62.

737. As more people watch television during prime time than in the middle of the night, and advertisers prefer programs that draw 18-34 demographics, all program minutes do not have the same value. Ducey, tr. 1767, 1957.

738. Distribution of programs across program categories for 1992 is substantively similar to that of the 1998-1999 period. Ducey, tr. 1783-84.

739. The Fratrik study weighting of program minutes creates the apparent difference in the distribution of programs between 1992 and the 1998-1999 period shown in NAB's exhibits. Ducey, tr. 1787.

740. Network affiliates carry more NAB local programming than do independent stations. Ducey, tr. 1793.

741. The instances of carriage for network affiliates declined by approximately 25% in the period from 1992 to 1998. PS Exs. 6-X, 7-X; Ducey, tr. 1807-09.

742. One of the reasons WTBS converted to a cable network was in anticipation of significant additional revenue - - about $100 million over a three-year period. Ducey tr. 1814-16; PS Ex. 8-X.

743. When TBS converted to a cable network it increased the amount of syndicated programming relative to the other claimant categories. Ducey, tr. 1818.

744. Carriage of WTBS by cable operators increased from 95% to 97% after WTBS converted to a cable network. Ducey, tr. 1818.

745. The conversion of WTBS from a distant signal to a cable network is an actual example of how a distant signal would operate in an open marketplace. Ducey, tr. 1821.

746. Prior to WTBS's conversion, cable royalties decreased between 1992 and 1997: by 1.68% between 1992 and 1993; by 13% between 1993 and 1994; and by 13% between 1996 and 1997. Ducey, tr. 1827-28; PS 9-X.

747. Dr. Ducey failed to provide any analysis on the singular or collective effects of factors, other than the absence of WTBS, that contributed to the decline of the royalty pool from 1992 to 1998. Those factors include cable rate regulation, cable re-tiering, effects of the must carry/retransmission consent legislation, consolidation of cable systems, removal of WWOR from satellite delivery. Ducey, tr. 1828-33.

748. An increase in basic revenues received by cable operators does not translate into an increase in compulsory license royalties because only a portion of basic revenues counts a gross receipts used calculate royalty payments. Ducey, tr. 1843-44; PS Exs. 10-X, 11-X.

749. Thirty-three of the 50 titles cited as representative of local programs in Dr. Ducey's 1990-92 testimony and on which Dr. Ducey relied in this case did not air during the 1998-1999 period. Of the 17 that aired, four had become syndicated programs. Ducey, tr. 1852-53; PS 12-X.

750. In 2001, there were about 73 million cable subscriber households, which translated to about 69.2 percent of all television households. Ducey, tr. 1697; PS Ex. 1-X.

751. The most popular demographic, in terms of advertising availability requests, is the 25-54 demographic. Ducey, tr. 8800.

752. In a free marketplace, cable operators could derive advertising revenues from distant carriage because they would be allowed to include local advertising spots in retransmitted programs. Ducey, tr. 8829-30.

753. The ability to derive advertising revenues from distant carriage in a free marketplace, is demonstrated by the conversion of WTBS to a cable network. Ducey, tr. 8831.

754. Local availability (local avail) refers to advertising time sold by a television station or a cable operator to local advertisers. Ducey, tr. 8829.

755. For cable networks, there is a direct relationship between ratings and license fees. Ducey, tr. 8837.

756. In general, for cable networks, there is a direct relationship between ratings levels and subscriber levels. Ducey, tr. 8837-38.

757. Cable subscription is driven by content. Ducey, tr. 8851.

758. Cable networks with relatively lower viewership would have advertising rates that are lower than those networks that have a higher viewership from the 18-49 demographic group. Ducey, tr. 8869.

759. If the majority of a cable operator's subscribers are within the 18-49 demographic group, it would make economic sense, for retention purposes, to provide content that would interest that demographic group. Ducey, tr. 8878.

760. Cable operators try to maximize revenue-generating units ("RGUs"). A single cable subscriber can comprise multiple RGUs. For example, basic tier subscription is one RGU,

while HBO subscription by the same subscriber is another RGU. Cable operators grow their market horizontally by adding more subscribers, and then they try to grow vertically by selling additional RGUs. Ducey, tr. 8874-75.

761. If the cable operator has, in addition to subscription revenue, the ability to earn advertising revenue, then economic incentives relative to an advertising marketplace would apply. Ducey, tr. 8891.

762. In a majority of communities, only one cable system operates. Ducey tr. 8898.

763. Almost 50% of the projected total increase in cable operator revenue for 1998 and 2002 is estimated to come from ancillary services. Ducey, tr. 8910-11; PS Ex. 5-RX (general).

764. The Beta Research Cable Subscription Study ("Beta Research Study") involves market research relative to cable programming and its appeal to subscribers. Ducey, tr. 8919; PS 7-RX.

765. The Beta Research Study results were intended to be used to improve television for viewers. Ducey, tr. 8921; PS Ex. 7-RX.

766. The Beta Research Study is representative of the cable subscriber population. Ducey, tr. 8921.

767. The Beta Research Study ignores persons within the 2-17 demographic group. Ducey, tr. 8921; PS 7-RX.

768. Approximately half of the networks identified in the Beta Research Study as "Emerging/Digital Networks" would carry programming that would fall in its entirety in the syndicated program category. Ducey, tr. 8924-26; PS Ex. 7-RX at 15.

769. 68.75% of the Beta Study subscribers that are aware of emerging networks fall within the 18-49 demographic group. Ducey, tr. 8930; PS Ex. 7-RX at 31.

770. Sixty-eight percent of the Beta Study subscribers who would definitely or probably subscribe to a digital tier of cable programming fall in the 18-49 demographic group. Ducey, tr. 8934; PS Ex. 7-RX at 33, PS Ex. 8-RX.

771. Seventy-two percent of Beta Study subscribers extremely, very or fairly interested in the satellite dish television service programming services are within the 18-49 group. Ducey, tr. 8935; PS Ex. 7-RX at 38, PS Ex. 8-RX.

772. Seventy-nine percent of the Beta Study subscribers that are extremely or very interested in high speed internet are within the 18-49 demographic group. Ducey written rebuttal, 5; NAB Ex. 16-R, PS Ex. 7-RX at 43.

773. There is a big difference between expressing an attitude and actually doing something about it. Ducey, tr. 8938.

774. Dr. Ducey had no role in the preparation of NAB Ex. 18-R. Ducey, tr. 8944-45.

Dr. Andrew Joskow

775. Programming decisions on superstations are driven by national market conditions and negotiations, rather than by local conditions. Joskow, tr. 9047.

776. While traditional local stations that are re-transmitted as distant signals make programming decisions based upon local conditions, superstations make decisions based upon national market conditions. Joskow, tr. 9047-48.

PUBLIC TELEVISION CLAIMANTS

John F. Wilson

777. The PBS pilot schedule project was designed to allow PBS to look at its prime time schedule in order to make some significant changes to it. Wilson, tr. 3066.

778. The chief goal of the PBS pilot schedule project was to create the opportunity for audiences to stay tuned and increase the time spent viewing. Wilson, tr. 3067.

779. PBS programming is programming that PBS distributes, represents, and warrants to its stations, and that carries the PBS logo on the end of it. Wilson, tr. 3072-73.

780. PBS programming is a subset of what is shown on PBS member stations. Wilson, tr. 3073.

781. PBS programming accounts for approximately 60% of the programming on PBS stations. Wilson, tr. 3073.

782. Quality is in the eye of the beholder. Wilson, tr. 3075.

783. Quality programming is not exclusive to PBS. Wilson, tr. 3075.

784. There could be high-quality programs that have low market value. Wilson, tr. 3076.

785. There could be low-quality programs that have high market value. Wilson, tr. 3076.

786. A book that wins a publishing award that nobody reads is not a marketplace success. Wilson, tr. 3076.

787. One criteria that PBS uses to measure the success of a program is Nielsen ratings. Wilson, tr. 3079.

788. Mr. Wilson reviews Nielsen overnight ratings every morning in order to figure out who watched PBS programming the night before. Wilson, tr. 3080.

789. A viewer-friendly program schedule would allow an audience to watch program A and stay tuned for program B. Wilson, tr. 3080-81.

790. PBS measured the success of the pilot schedule project by Nielsen ratings. Wilson, tr. 3081.

791. PBS's ratings had been trending downward slightly in the couple of years prior to initiating the pilot schedule project. Wilson, tr. 3083.

792. PBS's prime time average rating in '98 and '99 was in the neighborhood of 2.0. Wilson, tr. 3083.

793. PBS's current prime time average rating is 1.7. Wilson, tr. 3083.

794. Before PBS attempted to reinvigorate its schedule in 1998 it had suffered audience erosion. Wilson, tr. 3083.

795. Because its audience was going away, PBS attempted to change its schedule in 1998 to get more people to watch. Wilson, tr. 3083.

796. In the commercial marketplace, the desired advertising demographic is 18 to 49. Wilson, tr. 3087.

797. The median age of PBS viewers is 56. Wilson, tr. 3087.

798. The median age of PBS viewers has gotten older over time. Wilson, tr. 3087.

799. In 1998 and 1999, PBS viewers were older than any of the commercial networks. Wilson, tr. 3091.

800. The Pilot schedule project was designed to move signature series such as Masterpiece Theatre, which was losing viewers, out of time slots where they had to compete for viewers against the commercial networks' dramas. Wilson, tr. 3091-92.

801. One goal of the Pilot schedule project was to increase audience flow from one show to the next so people stayed tuned to PBS. Wilson, tr. 3094.

802. PBS was engaging in counter-programming in the Pilot schedule project. Wilson, tr. 3096.

803. An objective at PBS is to get people to watch its programs. Wilson, tr. 3098.

804. The majority of PBS underwriters are for-profit corporations. Wilson, tr. 3112.

805. In order for an underwriter to make the decision to sponsor a PBS program, they must see some benefit to themselves deriving from the sponsorship. Wilson, tr. 3112.

806. Underwriters are interested in how many people are watching the shows they sponsor. Wilson, tr. 3112-13.

807. In the mid 1980s, there was a shift that occurred when approaching a corporation about underwriting, where instead of talking about the benefit to society, brand managers wanted

to know how the underwriting was going to help the product they were in charge of. Wilson, tr. 3114.

808. In seeking to attract as subscribers households with children, the real advantage to a cable operator of having Arthur, Barney and Friends, and Teletubbies on its system, is that these were highly rated children's programs in 1998 and 1999. Wilson, tr. 3116.

809. A PBS "look-alike" is a specialty channel, such the History Channel, the Learning Channel, Home and Garden, Food Network, and Discovery, among others. Wilson, tr. 3117.

810. Look-alike channels are competitors of PBS. Wilson, tr. 3117-18.

811. Look-alike channels have contributed to PBS audience erosion. Wilson, tr. 3118.

812. In 1998 and 1999, PBS' competitive environment was fierce. Wilson, tr. 3123.

813. In 1998/1999, *The Magic School Bus* left PBS and went to Fox. Wilson, tr. 3125.

814. The British dramas shown on *Mystery* have aired on Mystery A&E, a look-alike channel, after they finished their exclusive rights run on PBS. Wilson, tr. 3125-26.

815. Qualities that used to be attributed solely to PBS are being attributed to look-alike channels. Wilson, tr. 3128.

816. The competitive environment is one of the major concerns at PBS. Wilson, tr. 3136.

817. There was a 23% decline between 1990 and 2000 with respect to PBS' overall rating. Wilson, tr. 3138.

818. There is no evidence in the record that viewer value and trust of PBS programming translates into market value for PBS. Wilson, tr. 3147-48.

819. 90 percent of cable subscribers do not receive PBS as a distant signal. Wilson, tr. 3151.

John W. Fuller

820. One could look to TBS revenues to determine whether or not it is a successful organization. Fuller, tr. 3402.

821. The conclusion of Mr. Sieber's testimony from the 1990-92 proceeding, PS Demo 6, tends to say that attitudinal studies are fine, but the proof is in the pudding—we need to look at the ratings and see what people are doing. Fuller, tr. 3404.

822. The PBS research group writes a variety of reports for both internal and external use. Fuller, tr. 3408-09.

823. In the reports it prepares, the PBS research group often includes comprehensive information about ratings and demographics, using all the variables that Nielsen provides. Fuller, tr. 3408-3409.

824. In the reports it prepares, the PBS research group uses the same demographic categories used by Nielsen. Fuller, tr. 3409.

825. The PBS research group provides reports to underwriters containing comprehensive information about ratings and demographics. Fuller, tr. 3409.

826. The PBS research group regularly provides reports containing comprehensive information about ratings and demographics in conjunction with staff efforts to secure underwriting. Fuller, tr. 3409-10.

827. The PBS research group does follow-up work with particular underwriters to see how audiences are responding to particular PBS programs. Fuller, tr. 3410.

828. There are cable systems that have no PTV signal on them, either local or distant. Fuller, tr. 3412.

829. 93 percent of U.S. cable households have either no PTV signal or only a local PTV signal. Fuller, tr. 3413.

830. 77 percent of cable systems representing 90 percent of cable subscribers do not receive PTV on a distant basis. Fuller, tr. 3414.

831. The actions of cable operators--what they do--is evidence of behavior within the cable market. Fuller, tr. 3415.

832. In a study conducted by the Annenberg Public Policy Center entitled "Media in the Home – 1999," in the category of "Where parents believe best programs for young people can be found," PBS scores decreased almost 18% from 1997 to 1999. Fuller, tr. 3417.

833. In a study conducted by the Annenberg Public Policy Center entitled "Media in the Home – 1999," in the category of "Where parents believe best programs for young people can be found," the aggregate score of the broadcast and cable categories was higher than PBS' score. Fuller, tr. 3418.

834. In a study conducted by the Annenberg Public Policy Center entitled "Media in the Home – 1999," in the category of "Where 10 to 17 year olds believe the best programs can be found" the scores are substantially higher for broadcast and cable than they are for PBS. Fuller, tr. 3418-19.

835. In 1998 and 1999 PBS had not been directing a lot of its programming effort towards teenagers or pre-teens. Fuller, tr. 3419.

836. Most of PBS children's programming is directed toward the under 12 group. Fuller, tr. 3419.

837. PBS' programming emphasis has been on children 2 to 5, with 6 to 9 a more recent phenomenon. Fuller, tr. 3419.

838. *Arthur* and *Dragon Tales* are targeted at children age 6 to 9. Fuller, tr. 3419.

839. Underwriters will pick specific PBS programs to underwrite because of the content of the program, such as a cookware maker underwriting a cooking show. Fuller, tr. 3427.

840. Children's shows are often underwritten by companies selling products that appeal to kids. Fuller, tr. 3427.

841. Underwriting defrays the cost of producing programming. Fuller, tr. 3431.

842. The PBS research department, in conjunction with the PBS sponsorship group, helps the producer persuade a corporation to help fund the program by preparing audience projections and estimates of how many people will watch the show. Fuller, tr. 3433-34.

843. When PBS enters into contracts for *Barney* or *Teletubbies*, ancillary shares of the toy and book revenue are a part of the contract. Fuller, tr. 3442.

844. Deals for ancillary shares toy, book , and video revenue added $100 million to the PBS budget from 1994 to 1998. Fuller, tr. 3443.

845. During the 1998-1999 period, there was a big push by PBS with respect to their websites for children's programming, which were promoted as being another place that children could go and get further information for the particular show. Fuller, tr. 3445.

846. On the current *Sesame Street* home page, which is linked to the PBS kids home page, the logos for AOL, Spaghetti-Os, and Quaker Oatmeal appear on the bottom of the page. Fuller, tr. 3446-47.

847. The logos for AOL, Spaghetti-Os, and Quaker Oatmeal are hyper-links, which when clicked, pull up the home pages of each respective sponsor. Fuller, tr. 3446-47.

848. On the current *Arthur* home page, which is linked to the PBS kids home page, the logos for Juicy Juice, Alphabets, and Chuck E. Cheese appear on the bottom of the page. Fuller, tr. 3449.

849. The logos for Juicy Juice, Alphabets, and Chuck E. Cheese are hyper-links, which when clicked, pull up the home pages of each respective sponsor. Fuller, tr. 3449.

850. On the current *Barney* home page, which is linked to the PBS kids home page, the logo for Chuck E. Cheese appears on the bottom of the page. Fuller, tr. 3450.

851. The logo Chuck E. Cheese is a hyper-link, which when clicked, pulls up the home pages of this sponsor. Fuller, tr. 3450.

852. On the current *Dragon Tales* home page, which is linked to the PBS kids home page, the logos for Kellogg's Frosted Flakes and Fruit Loops appear on the bottom of the page. Fuller, tr. 3451-52.

853. The logos for Kellogg's Frosted Flakes and Fruit Loops are hyper-links, which when clicked, pull up the home pages of each respective sponsor. Fuller, tr. 3451-52.

854. There is no evidence in the record that the home pages for *Sesame Street*, *Arthur*, *Barney*, and *Dragon Tales* did not have hyperlinks to sponsors during 1998 and 1999. Fuller, tr. 3448.

855. The content of the programming aired on PBS is the same whether it has commercial interruptions or not. Fuller, tr. 3454.

856. The CARP is charged with compensating copyright owners that own program content. Fuller, tr. 3454-3455.

857. With a TIVO device, or a remote control, a viewer can avoid watching commercials. Fuller, tr. 3455-3456.

858. The equity of public television today rests largely on its trustworthiness image, and viewers' perception of public television as a non-commercial entity is the root of such trust. Fuller, tr. 3461.

859. PBS is perceived to be much less exciting than most comparable cable networks. Fuller, tr. 3461-3462.

860. Excessive moves towards commercialism would risk turning public television into simply another competing cable network. Fuller, tr. 3463.

861. Rating are important to PBS. Fuller, tr. 3464.

862. The highly rated programming that is on PBS is highly rated by those that are under 12. Fuller, tr. 3464.

863. For Mr. Fuller, "viewer avidity" means enthusiasm for the programming. Fuller, tr. 3476.

864. Cable network look-alikes are competitors to PBS. Fuller, tr. 3482.

865. In the competitive marketplace environment between 1994 and 1999, PBS ratings were going down, and cable network look-alike ratings were going up. Fuller, tr. 3498.

866. From 1994 to 1999, PBS ratings were going down, and cable network look-alike ratings were going up, despite the fact that it costs a cable operator much more to carry a look-alike cable network such as Nickelodeon, than it does to carry PTV as a distant signal. Fuller, tr. 3498-99.

867. A cable operator cannot totally ignore audience. Fuller, tr. 3511.

868. A cable operator would not want to leave out the most popular channels from its offerings. Fuller, tr. 3511.

Dr. Leland Johnson

869. If Congress did nothing and all other program sources left the compulsory license pool, Public Television would end up with all of the minimum fees. Johnson, tr. 3722.

870. As a general rule, economists greatly prefer the use of behavioral measures over attitudinal measures because behavioral measures take into account the way the world actually works, not the way businessmen say it works. Johnson, tr. 3725.

871. Economists greatly prefer to use behavioral indicators in their statistical analysis. Johnson, tr. 3725.

872. The marketplace reaction to WTBS converting from a distant signal to a cable network, was that most cable operators, over 95%, continued with TBS as a cable network. Johnson, tr. 3726.

873. It would be hard to imagine that a cable operator would carry a signal that, in general, provides programming that is not viewed. Johnson, tr. 9129.

874. PBS has not offered any evidence as to whether the Program Suppliers claimant group has a market value lower than what is paid to carry its programming. Johnson, tr. 9141.

875. If the amount awarded to PTV exceeds its fees generated, then other claimant groups would be receiving less than their fees generated. Johnson, tr. 9141.

876. In order to award a claimant group less than its fees generated, the Panel must reach the conclusion that a claimant group(s) is worth less than the fees paid to carry its signal. Johnson, tr. 9141.

877. Mr. Johnson uses the term "avidity" to mean the viewer would be willing to pay more for particular program minutes than for other minutes. Johnson, tr. 9162-63.

878. If a program is popular within one age group, it is likely to show at least some popularity in another age group. Johnson, tr. 9165.

Dr. William Fairley

879. Dr. Fairley did not consider substitution of non-compensable for compensable programming on WGN in any category other than movies and syndicated programs. Fairley, tr. 10615-16.

CANADIAN TELEVISION CLAIMANTS

Andrea Wood

880. There is no evidence in the record that *DaVinci's Inquest, North of 60,* or *Black Robe* were not available free over the air in the Northern United States in 1998-1999. Wood, tr. 5089.

881. There is no evidence in the record that *The Awful Truth* and *This Hour Has 22 Minutes* were broadcast in Canada in 1998-1999. Wood, tr. 5091.

882. There is no evidence in the record that *The Awful Truth* and *This Hour Has 22 Minutes* were retransmitted distantly by a cable system in 1998-1999. Wood, tr. 5092.

883. There is no evidence in the record that any Salter Street programming was broadcast in Canada in 1998-1999. Wood, tr. 5092.

884. There is no evidence in the record that any Salter Street programming was retransmitted distantly by a cable system in 1998-1999. Wood, tr. 5092.

885. There is no evidence in the record that any of the programs listed on exhibit CDN 3B actually aired in 1998 or 1999. Wood, tr. 5093.

886. There is no evidence in the record regarding the license fees paid for any of the programs listed on exhibit CDN 3B. Wood, tr. 5093.

887. Depending on the subject matter, the programs listed on exhibit CDN 3B may or may not have been typically Canadian. Wood, tr. 5093.

888. Ms. Wood testified in the 1990-92 CARP proceeding that Alliance Atlantis' programming was more marketable if it was made more generic. Wood, tr. 5107.

889. There is no evidence in the record regarding a marketplace change that effected Alliance Atlantis' views regarding the marketability of its programming. Wood, tr. 5107-5109.

890. During the period covered by it's 1999 Annual Report, Alliance Atlantis owned the following cable networks: *Showcase*, *Life Network*, *HGTV Canada*, and *History Television*. Wood, tr. 5111.

891. During the period covered by Alliance Atlantis' 1999 Annual Report, Showcase's prime time audience increased 60 percent for adults 25 to 54. Wood, tr. 5111-5112.

892. During the period covered by Alliance Atlantis' 1999 Annual Report, the number of Showcase subscribers increased 11 percent. Wood, tr. 5112.

893. During the period covered by Alliance Atlantis' 1999 Annual Report, Life Network demonstrated a 40 percent increase in viewers and increased its average minute audiences by 46 percent for viewers age 2 plus, and 31 percent for adults 25 to 54. Wood, tr. 5112.

894. During the period covered by Alliance Atlantis' 1999 Annual Report, Life Network experienced subscriber growth of 18 percent. Wood, tr. 5112.

895. During the period covered by Alliance Atlantis' 1999 Annual Report, HGTV Canada's weekly average hours tuned increased 41 percent for the network's key demographic

women age 25 to 54, and also saw average minute audiences increase 44 percent for viewers age 2 plus, and 33 percent for adults 25 to 54. Wood, tr. 5113.

896. During the period covered by Alliance Atlantis' 1999 Annual Report, HGTV Canada experienced subscriber growth exceeding 100 percent, almost 1.7 million subscribers. Wood, tr. 5113.

897. During the period covered by Alliance Atlantis' 1999 Annual Report, History Television showed an increase in viewing by adults 25 to 54. Wood, tr. 5113.

898. During the period covered by Alliance Atlantis' 1999 Annual Report, 7 percent subscriber growth was expected for History Television. Wood, tr. 5113.

899. During the period covered by Alliance Atlantis' 1999 Annual Report, ratings and subscribers increased for *Showcase*, *Life Network*, *HGTV Canada*, and *History Television*. Wood, tr. 5113-5114.

Lucy Medeiros

900. Nelvana considered Nick Junior to be the premier U.S. pre-school specialty service. Medeiros, tr. 5253.

901. Rather than involving specifically Canadian themes or story lines, many Nelvana shows deal with intrinsic values that are valuable to parents and to their children regardless of what country you are in. Medeiros, tr. 5258.

David Bennett

902. Many factors other than the conversion of WTBS to a cable network could have significantly impacted the decline in royalties paid by cable systems. Bennett, tr. 5442.

903. Between the end of the 1992-2 accounting period, and 1998 when WTBS became a cable network, there was an 18 percent decline in royalties paid by cable systems. Bennett, tr. 5443-44.

904. Before TBS became a cable network, the section 111 royalties paid by cable systems were already on a downward trend. Bennett, tr. 5444.

905. For the 1998-1 accounting period, the total number of cable systems with zero distant signals is 572, and the number within the Canadian Zone is 171. Bennett, tr. 5460.

906. For the 1998-1 accounting period, the total minimum fee is approximately $11.5 million, and of that total approximately $3.4 million is attributable to systems within the Canadian Zone. Bennett, tr. 5460-61.

907. For the 1998-2 accounting period, the total number of cable systems with zero distant signals is 551, and the number within the Canadian Zone is 181. Bennett, tr. 5461.

908. The corresponding dollar amount is about 30 percent of the total minimum fee. Bennett, tr. 5461.

909. For the 1999-1 accounting period, of the total minimum fee, approximately 30% is attributable to systems within the Canadian Zone. Bennett, tr. 5462.

910. For the 1999-2 accounting period, of the total minimum fee, approximately 30.7% is attributable to systems within the Canadian Zone. Bennett, tr. 5462.

911. Subscriber instances captures the extent to which a signal reaches subscribers, but it does not tell you if a subscriber is watching. Bennett, tr. 5466.

Debra Ringold

912. A cable operator makes a deliberate choice to pay the minimum fee and not carry certain signals that could be carried without any additional charge. Ringold, tr. 5762-64.

913. Dr. Ringold never analyzed the survey results regarding possible biases relating to the gender of the survey respondent. Ringold, tr. 5789-90.

914. Dr. Ringold did not seek to determine when the particular Canadian distant signal in question was first carried by the cable system. Ringold, tr. 5790-91.

915. Dr. Ringold did not seek to determine whether certain signals had been dropped or added to a system over the term of these surveys. Ringold, tr. 5791.

916. Survey respondents were never asked about whether the cable system was going to continue to carry the Canadian signal during this year. Ringold, tr. 5792-93.

917. Dr. Ringold's study did not differentiate between the decision to continue to carry a particular signal versus the decision to add a particular signal to a cable system. Ringold, tr. 5794.

918. Dr. Ringold's study did not determine whether any of the cable system operators that were interviewed for the French-speaking Canadian signal actually spoke French. Ringold, tr. 5794.

919. On page 6 of the survey questionnaire marked PS Exhibit 41-X, the survey respondent identified an allocation percentage of 20 for the "other" category and listed "Imported News at 10 p.m. from Detroit." Ringold, tr. 5807-5808.

920. On page 4 of the survey questionnaire marked PS Exhibit 42-X, the survey respondent listed "local news" in the "other" category. Ringold, tr. 5809-5810.

921. The academic literature has identified the dependent relationship between the data points as a problem with constant sum survey methodology. Ringold, tr. 5864-5865.

922. One assumption behind Dr. Ringold's survey is that the survey respondents know the programming, and what constitutes the various programming types, on the signals. Ringold, tr. 5867-5868.

923. One assumption behind Dr. Ringold's survey is that the survey respondents are conscientious when answering the questions. Ringold, tr. 5868-5869.

924. Dr. Ringold is not aware of survey respondent ever being asked if they needed to refer to other documents to answer the survey questions. Ringold, tr. 5873-5875.

925. On page 4 of survey questionnaire marked PS 51-X, under "other programming," the respondent said game shows and the like. Ringold, tr. 5873-5875.

926. On page 4 of survey questionnaire marked PS Ex. 52-X, under "other programming," the respondent said Warner Brothers programming. Ringold, tr. 5879-5880.

927. On page 5 of survey questionnaires marked PS Ex. 54-X, PS Ex. 55-X, PS Ex. 56-X, PS Ex. 57-X and PS Ex. 58-X, under "other programming," each survey respondent said "don't know" yet still identified an allocation percentage. Ringold, tr. 5889-5894.

928. On page 5 of survey questionnaire marked PS Ex. 51-X, the survey respondent identified an allocation percentage of 16.6 for each category. Ringold, tr. 5902.

929. On page 5 of survey questionnaire PS Ex. 55-X, the survey respondent identified an allocation percentage of 30 for sports and 11.6 for every other category. Ringold, tr. 5902-5903.

930. On page 5 of survey questionnaire PS Ex. 55-X, the survey respondent indicated as follows: "never seen channel cannot give intelligent answer so make equal after the 30 percent for sports, no one else could answer." Ringold, tr. 5903.

931. On page 5 of survey questionnaire marked PS Ex. 56-X, the survey respondent identified an allocation percentage of 30 for sports and 11.6 for every other category. Ringold, tr. 5903.

932. On page 5 of survey questionnaire PS Ex. 56-X, the survey respondent indicated as follows: "cannot give intelligent answer. Divide equally after 30 for sports. Never watch. No one else." Ringold, tr. 5903-5904.

933. On page 5 of survey questionnaires marked PS Ex. 59-X and PS Ex. 60-X, the survey respondents identified an identical allocation percentage for each category. Ringold, tr. 5904-05.

934. "Nay saying" and "yea saying," where a respondent simply gives identical answers to questions, is a possible reason for the identical allocation percentages seen in questionnaires PS Ex. 51-X, PS Ex. 55-X, PS Ex. 56-X, PS Ex. 59-X, and PS Ex. 60-X. Ringold, tr. 5905.

MUSIC CLAIMANTS

Dr. Peter Boyle

935. The Music Use Study was designed to examine changed circumstances in the use of music and whether music usage increased from the 1991-92 period to the 1998-99 period. Boyle, tr. 4445.

936. The Music Use Study shows large variations in music use per day, ranging from 11.47 minutes to 26.27 average minutes of music per hour on the studied days. Boyle, tr. 4471-72; Music Exhibit 39.

937. The Music Use Study weights stations total by fees generated (distant plus local), not by distant fees generated. Boyle, tr. 4572-73; JSC Ex. 34-X.

938. The station weighting methodology in the Music Use Study was not altered in response to the increase in minimum-fee paying systems in 1998-99. Boyle, tr. 4569-72.

939. Music Claimants used data supplied by Cable Data Corporation to select its sample for 1991-92. The stations chosen in this period comprised 80 percent of fees generated Boyle, tr. 4795-96.

940. Despite increasing the station sample size, Music Claimants used a sample that accounted for 60% of fees generated in 1998-99. Boyle, tr. 4798.

941. The Music Use Study sought to include the top distant signal stations by fees generated for both periods. Yet, it kept WTBS for comparison and continuity purposes in 1998-99, even though WTBS generated minimal royalty fees. Boyle, tr. 4790

942. The criteria for selecting the sample stations in the Music Use Study varied from 1991-92 to 1998-99. Boyle, tr. 4944; PS Ex. 37-X.

943. None of the five stations that selected with certainty, based on fees generated, in 1991-92 was an educational station. Boyle, tr. 4799.

944. The only two Public Television stations included in the Music Use Study, both in 1998-99, had more extensive music usage, in general, than did commercial stations. This is not reflected in the weighted results because the Public Television stations generate significantly less royalty fees than the other sample stations. Boyle, tr. 4466-67.

945. The Music Use Study did not specifically include network affiliates as there was no attempt to balance the station types to reflect the distant station universe in the study. Boyle, tr. 4872-73; NAB Ex. 27-X.

946. Dr. Boyle did not perform any statistical analysis in advance of collecting data to determine whether the sample stations were representative of all stations carried on a distant basis. Boyle, tr. 4821.

947. In the ASCAP music credit context, duration of music does not matter for themes but it does for underscore. Boyle, tr. 4852.

948. If cue sheets are not provided for a program, that program is not counted in the Music Use Study. This can result in an inaccurate reflection of the amount of music actually performed on the measured station for that day. Boyle, tr. 4865-67.

949. KSHB, a station that is included in the Music Use Study, switched from an independent in 1991-92 to a network affiliate in 1998-99. As independents carry more royalty-compensable programs than do affiliates, there is a large difference between the sets of years in the amount of programs measured for this station. No adjustment was made for this change. NAB Ex. 27-X; Boyle, tr. 4870-72.

950. Use of the FCC composite week as a starting point for the days included in the sample meant no programs aired in January, February or May, appeared in the study. Boyle, tr. 4829-30.

951. Some sample days in the Music Use Study were picked from different weeks of the month as compared to their placement in the original FCC composite week. Boyle, tr. 4932-33; PS 36-X.

952. The seven sample days for each year in the Music Use Study include only dates from two months in the first half of a year, but dates from five months in the second half of the year. Boyle, tr. 4935.

953. The Music Use Study examined music in programs that are not compensable in this proceeding due to WGN's separate satellite broadcast feed. Boyle, tr. 4834.

954. When the PROs grant licenses to television stations for the performance of musical works, they do not negotiate with television program copyright owners. Boyle, tr. 4669-70.

955. Throughout the entire history of the royalty distribution proceedings, neither the Nielsen viewing measures nor the Bortz-type or other attitudinal measures has been applied to

music. Music is considered to be a program element running through all of the program types on the distant broadcast signals and thus its share has always been taken "off the top" in these proceedings. Boyle, tr. 4957-58.

Frank Krupit

956. The Music Claimants' Use Study compares the amount of music broadcast on a ten station sample for the 1991-1992 Period with the amount on a fifteen station sample in the 1998-1999 Period. During 28 particular days chosen from an adaptation of the long defunct FCC Composite Week. Program listings were obtained from TV Data Technologies ("TVData"), and matched to music cue sheets for the television program or episode to identify and to measure the duration of all musical works on the sampled stations. Krupit written direct, 2.

957. The ten stations selected for the 1991-92 sample include the five stations that generated the most total cable royalty fees in 1991 and 1992. Krupit written direct, 3.

958. In 1998-99 study years, Music Claimants expanded their study to include the top nine United States-based fee gen stations because WTBS, the largest fee generator in 1991-92, was no longer a distant signal. Nonetheless, these nine stations represented less than 60% of all fees gen, while the top five stations in 1991-92 represented nearly 80% of fees gen. Krupit written direct, 4-5.

959. The sample in the Music Use Study was intended to represent the most important stations, economically, in each set of years. Krupit, tr. 4298.

960. Outside of the top 9 stations in 1998-99 sample, the remaining stations generated a tiny percentage of fees generated. These remaining stations were designated, however, to represent nearly all the stations that generated nearly 40% of total 1998-99 fees generated. Krupit, tr. 4373.

961. Music cue sheets" identify each use of music on a program and list, among other information, the duration (in minutes and seconds) of all works performed. Program producers generally prepare cue sheets and provide them to PROs. Krupit written direct, 7; Krupit, tr. 4256.

962. The time sample in the Music Use Study is based upon a particular set of dates called the "FCC Composite Week" chosen by the FCC in 1983 to represent each of the weekdays, Sunday through Saturday, over the course of a year. The Music Use Study selected four sets of sample weeks (one each for 1991, 1992, 1998 and 1999) that sought to reflect the 1983Composite Week. Krupit, tr. 4236.

963. The Music Use Study relies on program data provided by TV Data that does not always provide detailed information on individual episodes, particularly for cartoons. Krupit, tr. 4254.

964. A "generic" cue sheet is supplied by program producers when the same music is aired every time the program is performed. An example of this common practice is the McNeil-Lehrer Report, which uses the same set of music in every show. Krupit, tr. 4262.

965. The PROs did not obtain cue sheets for 100 percent of the programs on their sample stations during the sample weeks. Krupit, tr. 4258.

966. The Music Use Study is based upon cue sheets for 77 percent of the programming in 1991-92 and 73 percent of the programming in 1998-99. Krupit, tr. 4275.

967. Neither the Music Use Study nor Mr. Krupit's observations provide information about relative music distributions among claimant categories. Krupit, tr. 4288.

968. The Music Claimants did not present evidence as to which or how many music radio stations are re-broadcast as distant signals. Krupit, tr. 4322.

969. Although the Music Use Study includes 35 JSC programs from 1998-99, it uses only 8 cue sheets from those 35 programs. Krupit, tr. 4334-35; JSC Ex. 32-X.

970. Cue sheets generally under-represent the amount of music performed during sports programs. While they might list theme music, they rarely report many recognizable feature songs that are played during the course of the game, at half time or other breaks, and during replays and highlights. Krupit, tr. 4354-55.

971. In the aggregate, the Music Use Study identified 43,920 minutes of music in 2,203 hours in 1991-92, and 65,324 minutes of music in 3,128 hours of programming in 1999-98. Krupit written direct, 9.

972. The unweighted average minutes of music per hour in the 1991-92 (19.9) was approximately one minute less than the 1998-99 average (20.9). Krupit, tr. 4397.

Jeffrey Lyons

973. *Beverly Hills 90210, Charmed, Dawson's Creek, Felicity, Buffy the Vampire Slayer* and *Ally McBeal* are examples of series that contain popular music. Lyons written direct,

15. Many of these programs advertise the music of featured artists prior to the closing credits at the end of the show. Lyons written direct, 16.

974. Use of popular music on television programs benefits musicians who market their music through programs, and often guest star. A recent example is Vonda Shepard, who appeared on *Ally McBeal*, as the lead singer in the house band for the local bar frequented by the main characters. Ms. Shepard's continuing role propelled her to music fame, landing her at the top of the pop charts. Lyons written direct, 15.

975. Public television makes use of music in many of the same ways as it is used in commercial programming. Lyons written direct, 17.

976. Music plays an important role at live sports events. For example, rock anthems are constantly played during players introduction and throughout the games at NCAA, MLB, NHL, and NBA games. Cheerleaders, dance troupes, and the omnipresent marching bands at college games rely on music. The epitome of music's prevalence at sports event is the Super Bowl, which includes music concerts, the pre- and post-game as well as during half time. Lyons written direct, 18-19; tr. 4169.

977. Besides theme music used for station newscasts, music is often used as the background for stories. Lyons written direct, 20.

978. Music is used in every program genre: sports, news programs, movies, PTV and series. Lyons, tr. 4166-67, 4175.

Seth Salzman

979. Users pay an annual fee to obtain separate bulk licenses from ASCAP, BMI and SESAC (Performing Rights Organizations or "PROs") that gives users the right to perform publicly all of the copyrighted musical compositions in the PROs' repertories, and the repertories of their foreign affiliates. With these rights of unlimited access, users are free to use as much or as little music in the Music Claimants' repertories as they wish. Saltzman written direct, 4.

980. The PROs represent the composers of the musical works, i.e., those who create the notes and lyrics, but not the performing artists. Saltzman, tr. 3975.

981. PROs rely on cue sheets from users to provide information about what composers to pay for the music performed and how the music was used. Saltzman, tr. 3916.

982. PROs convert and store cue sheets, which may be received in electronic or paper format, in an electronic database. Saltzman, tr. 3918-19.

983. ASCAP calculates royalties to its members by converting the use and duration of music listed on cue sheets into a "Music credits." Saltzman, tr. 3944-45.

984. BMI and SESAC employ similar methodologies for calculating royalties to their members, and rely upon the same core data as ASCAP. Saltzman, tr. 3945-46.

985. Theme music, according to ASCAP's practices, is credited per use, not on a durational basis. Saltzman, tr. 4048. Both news programming and sports programming use theme music throughout their programs. Saltzman written direct, 11

986. Music played at different times of the day accrue different levels of credit. For instance, music performed between 7 p.m. and 12:59 a.m. get 100 percent of the credit, while music performed in other day parts gets lower credit. Saltzman, tr. 4052.

987. ASCAP's methodology does not weight music by quality. Saltzman, tr. 4066-67.

988. Some songs on movie soundtracks do not actually appear in the movie, itself. Saltzman, tr. 3955-56.

989. The age of a particular song within the PROs' repertoires or of the programs in which music is performed have no import in the PROs' calculation of royalties. Saltzman, tr. 3970-71.

W.G. "Snuffy" Walden

990. Although composers create music for a variety of television shows such as dramas, sitcoms, news, news magazines, and documentaries, Walden, tr. 4110-11, networks direct producers to use popular music that appeals to the 18-49 demographic. Walden, tr. 4114-15.

991. There is definite ratings pressure in television, and show business in general, to appeal to a younger audiences, Walden, tr. 4106, because ratings success determines whether a show remains on the air or is taken off. Walden, tr. 4113.

PROGRAM SUPPLIERS' PROPOSED CONCLUSIONS OF LAW

I. PROCEDURAL HISTORY

Each year cable systems submit royalties to the Copyright Office for the privilege of retransmitting over-the-air broadcast signals to their subscribers. These royalties are, in turn, distributed to copyright owners whose works were included in a distant retransmission of an over-the-air broadcast signal and who timely filed claims for royalties with the Copyright Office. As the copyright owners were unable to negotiate a settlement as to the division of the 1998-99 royalty funds, the Library of Congress convened a CARP to determine the distribution of those funds under 17 U.S.C. § 111(d)(4)(B), by publishing a Notice seeking comment as to the existence of controversies for the distribution of 1998 cable royalties. 65 Fed. Reg. 54077 (September 6, 2000). The parties reported both Phase I and Phase II controversies and filed their Notices of Intent to Participate. In response to a Notice seeking comments as to the existence of controversies for the distribution of 1999 cable royalties, 66 Fed. Reg. 50219 (October 2, 2001), the parties reported Phase I and Phase II controversies as well and filed their Notices of Intent to Participate.

The Library consolidated the distribution of the 1998 and 1999 cable royalties into a single proceeding before a single CARP. Order, Docket No. 2001-8 CARP CD 98-99 (February 20, 2002). Two of the eight parties that filed Notices of Intent to Participate in this consolidated Phase I distribution proceeding, National Public Radio and the Devotionals, have settled. The parties that remain are the JSC, Music, Program Suppliers, Canadians, NAB and PTV.

These parties filed written direct cases on December 2, 2002 setting forth their requested distribution percentages, and the Library conducted discovery on the written direct cases under

37 C.F.R. § 251.45, commencing on December 6, 2002 and ending on March 31, 2003, pursuant to a deadline set by the Copyright Office's March 20, 2003 Order.

The arbitrators selected for this proceeding, in accordance with Sec. 251.6 of the CARP rules, are: The Honorable Curtis von Kann (Chairperson); The Honorable Jeffrey Gulin; and The Honorable Michael Young. Together, they comprise the "Panel" or "CARP".

Opening statements and the presentation and cross-examination of the parties Direct Cases began on April 24, 2003. Several motions from the parties for the modification of written direct testimonies were made and granted, along with the issuance of other Panel Orders. These Orders and documents in compliance thereto were made part of the official record in this proceeding.

The parties filed their written rebuttal cases on June 20, 2003. Presentation of rebuttal testimony and cross-examination was conducted from July 7 to July 18, 2003.

A July 18, 2003 Panel Order requires the parties to file their proposed findings of fact and conclusions of law on August 20, 2003, with replies due on September 5, 2003. Program Suppliers Proposed Findings of Fact and Conclusions of Law are hereby submitted in compliance with that Order.

II. THE DISTRIBUTION CRITERIA ESTABLISHED IN PRIOR CASES HAVE CONTINUING VALIDITY UNDER THE STATUTORY PLAN.

While Program Suppliers and the other claimants have previously addressed the scope and shape of the Panel's authority to allocate royalty funds, it is useful to review the origin of the criteria used by the CRT, and later CARP in past distribution proceedings.

The Tribunal adopted harm, benefit and marketplace value as the primary criteria[2] for guiding its royalty allocations. *E.g., 1983 Final Determination*, 51 Fed. Reg. 12792, 12793 (1986). Those criteria were not created by the Tribunal, but were adopted from the legislative history of the royalty plan in 17 U.S.C. § 111. Congress identified the harm to owners and benefit to cable systems associated with importation of distant signals as justifying the payment of royalties for the distant carriage of non-network programming:

> [T]he transmission of distant non-network programming by cable systems causes damage to the copyright owner by distributing the program in an area beyond which it has been licensed. Such retransmission adversely affects the ability of the copyright owner to exploit the work in the distant market. It is also of direct benefit to the cable system by enhancing its ability to attract subscribers and increase revenues.

H.Rep.No. 1476, 94th Cong. 2d Sess. 90 (1976). The marketplace value criterion finds its support in "Congress' evident intent to have the Tribunal operate as a substitute for direct negotiations (which were thought to be impractical) among cable operators and copyright owners, [*id.*] at 89." *Christian Broadcasting Network v. CRT*, 720 F.2d 1295, 1306 (D.C. Cir. 1983).

In the 1989 distribution proceeding, the CRT stated that its goal in "allocating the fund among various program types, is to 'simulate market valuation.'" 57 Fed. Reg. 1528 (April 27, 1992). In addition, in the 1990-92 CARP decision, the Panel concluded that "market value is the only logical and legal touchstone." 1990-92 CARP Report at 23. The 1990-92 CARP also believed that the benefit and harm analysis would be subsumed in determining marketplace value

[2] The Tribunal identified time and quality as secondary criteria, but neither ever played an important role.

III. SIMULATING A MARKETPLACE FOR DISTANT SIGNAL PROGRAMMING REQUIRES DETERMINING THE APPROPRIATE COMPARABLE MARKET.

The first step in simulating a free market is determining how a "free" (that is, unburdened with the compulsory license) market for distant signal programming would look and work. The standard for agencies or courts faced with simulating market results for regulated entities has been the comparable market (or comparable earnings) test. *See, e.g., FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944)(applying comparable earnings test for regulated rate of return analysis).

For a comparable markets analysis to have probative value, comparable services in an operating free market must be used as the benchmark for services offered in the regulated market. *E.g., Youngstown Sheet & Tube Co. v. United States*, 295 U.S. 476, 480 (1935). Where complete comparability cannot be fully achieved, allowances should be made for the dissimilarities. *Louisville & N. R. Co. v. United States*, 238 U.S. 1, 15-16 (1915). Determining comparability is a fact-intensive task that depends on the particular circumstances of the business or practice being analyzed. Comparability must be based on the characteristics germane to the matter at issue. Once comparability has been established, an agency or court may apply the market-based conditions from the surrogate company's operations as an objective means of simulating how a regulated company would respond in similar circumstances. *See Indiana Municipal Power Agency v. FERC*, 56 F.3d 247, 252-53 (D.C.Cir. 1995)(applying market price test to coal purchase).

A. Basic Cable Networks Provide Comparable Service To Distant Signals.

In the instant case, simulating a free market requires finding free marketplace programming services comparable to those made available by distant signals. Basic cable networks are the obvious choice because they offer comparable programming to that on distant

signals, Green written direct, 14-15, and are, in many cases, offered on the same tiers by cable operators. Many witnesses agreed that the basic cable network market offers a model for how distant signal transactions would likely be conducted in a free market. *See, e.g.* Gruen written direct 5, 10; Fuller written direct, 18-19; Trautman written direct, 4.

It cannot be seriously argued that the cable network marketplace does not provide appropriate guidance as to how a free distant signal marketplace would operate. Cable networks and distant signals are comparable in several important characteristics. Both license individual programs from copyright owners and package them into complete channels that are then retransmitted in their entirety by cable systems. Rosston, tr. 2930. The programming offered by cable networks and distant signals is similar in that both offer a mixture of original and off-network programs that often include movies, series, sports, news, documentaries, devotional programs. *See, e.g.*, Fuller written direct, 13-15, (PBS "look-alikes"). Both cable networks and distant signals include advertising within their programming. Ducey, tr. 8833-34. Indeed, as the 1990-92 CARP recognized:

> This simulated market looks a great deal like the cable network market, including, most significantly, the fact that cable systems purchase not merely a program, but an entire signal, such as ESPN.

1990-92 CARP Report at 23.

Cable networks and distant signals depend heavily on advertising revenues. Cable networks obtain 55% of their revenues from advertising, Trautman, tr. 374, with most of the remainder made up from license fees revenue. *Id.* Because broadcasters of distant signals do not command license fees, they obtain all their revenues from advertising. Cable networks can and do offer local ad "avails" in programming to cable systems, Trautman, tr. 370, and, while distant signals cannot offer ad avails to cable operators under the compulsory license, there is no reason to think they would be precluded from doing so in a free market. Ducey, tr. 8829-30.

Furthermore, because local advertising from cable networks generates little revenue for cable operators, nothing suggests that the unavailability of local ad avails materially alters cable operator decisions about which distant signals to carry. Trautman, tr. 377.

Looking at cable networks and distant signals from a cable operator's standpoint, both are offered on basic or expanded basic tiers. Kessler written direct, 7; Trautman, tr. 210-11. As such, both form a part of a package of channels that are offered to subscribers for a single monthly rate. *Id.* Many cable networks offer on the same tier niche programming (The Weather Channel, C-SPAN) or programming of a single genre (ESPN, CNN) designed to appeal to targeted audience segments, and distant signals, which offer an array of programming types intended to appeal to broad audiences. Ducey, tr. 8835, 1964-65. In light of the precedent as well as the shared characteristics between cable networks and distant signals, the cable network marketplace is the appropriate market to turn to for guidance concerning how a free distant signal marketplace would work.

B. A Free Distant Signal Market Would Not Be Subject To Restrictions That Apply To The Compulsory License.

Because basic cable networks are comparable to distant signals, how the basic cable network market operates provides insight as to how programming would be valued in a free distant signal market. The primary characteristics of such a market would be the same as those that currently exist in the cable network market. Program purchase decision would involve negotiation between a copyright owner as seller and a distant signal as buyer. While the legislative history of Section 111 suggests a different pattern, real world experience demonstrate that cable operators want to purchase entire channels of programming, rather than purchase individual programs from which they would build a channel.

Several signs point to this result. First, cable systems do very little programming on their own. Egan, tr. 1402-03. They have neither the desire, the resources nor the expertise to undertake programming duties. Second, as the cable industry has developed, cable networks have assembled entire channels of programming by purchasing individual programs and packaging them into channels for license by cable operators. Carey written direct, 5. Likewise, broadcasters currently program distant signals, albeit for their local markets. Trautman, tr. 494. It is unlikely broadcasters would relinquish that control in a free market.

Rather than direct purchases by cable operators of individual programs (as Congress expected), the most likely free market scenario would be an expansion of the current basic cable network market to include distant signals. WTBS's conversion from a distant signal to a cable network has followed precisely that path and demonstrates how a distant signal would operate in a free marketplace. Ducey, tr. 1821. It is likely that broadcasters would purchase individual programs and continue to package them as channels, but with an eye toward licensing cable system operators as well as one toward broadcast to their local audience, just as cable networks do. In fact, that is what TBS and WGN currently do. Were the compulsory license suddenly abolished, the current cable network market would subsume distant signal transactions, instead of cable systems beginning to purchase individual programs to create channels that would replace distant signals.

There is no reason to think that a free distant signal market would be restricted in any way. A major reason for adopting the restrictive license was Congress' expectation of very high transaction costs in a free marketplace: "it would be impractical and unduly burdensome to require *every* cable system to negotiate with *every* copyright owner whose work was retransmitted by a cable system." H.Rep. No. 1476, *supra*, at 89 (emphasis added).

The congressional expectation of individual program negotiations between cable systems and copyright owners has not been, nor is it likely ever to be, realized. Cable networks operate effectively as middlemen, obtaining the necessary licenses from copyright owners for national or regional retransmission of programs to cable systems around the country. That efficiency would easily be applied to distant signals should they be allowed to bargain in a free market and would minimize the transactional costs to individual cable systems and individual copyright owners for distant retransmission of programs. In sum, the cable network market has simply grown to be a functioning market for license of programming in a way Congress did not envision in the mid-1970s when Section 111 was enacted.

Finally, the experience and success of cable networks in creating and distributing a wide variety of programming channels demonstrates that free market conditions can operate efficiently to offer a wide variety of programs for subscribers. In view of these factors, were Congress to eliminate the compulsory license, the resulting free distant signal market would likely operate with no greater restriction than is currently placed on the cable network market. In fact, it is virtually certain that the distant signal marketplace would closely resemble the current cable network marketplace.

C. What Factors Would Guide Program Purchase Decisions In A Distant Signal Market?

The Panel is to simulate a free distant signal market for the sale of programming. The first characteristic of such a market would be that in making their program purchase decisions, distant signals would consider both their local and distant market needs. The role of advertising revenues would continue to play a very large role in those decisions. Advertising revenues account for about 55% of cable network revenues. Trautman, tr. 374. In a free market, distant signals would be expected to receive comparable shares of their revenues from advertising.

Distant signals, as broadcasters, present a somewhat different line-up of programming from what cable networks offer. Distant signals offer many different types of programs on a single station. Although some cable networks offer a variety of programming, such as TBS, USA and TNT, many cable networks are narrowcasters, offering a single genre of programming: *e.g.*, The Weather Channel, weather; CNN, news; ESPN, sports; The Cartoon Network, cartoons. *See* Wilson, tr. 3034. (description of networks' programming).

There is no reason to think distant signals would change their broadcasting role, particularly since they would still be seeking to reach local audiences. Consequently, they would still seek to purchase programs that have broad appeal to large numbers of viewers throughout the country. *See* Sieber, 1990-92 written direct, 5 (main objective of research is "to get more people to watch more of [WTBS's] programming."). Indeed, after conversion, TBS concentrated more heavily on popular series and movies. Ducey, tr. 1820. Unlike a cable network that may appeal to only a narrow segment of subscribers, distant signals offer programs with wide appeal that are intended to capture large amounts of viewing. Large amounts of viewing are necessary to sustain the advertising revenues on which distant signals rely.

Distant signals and cable networks have relied on, and in a free market would continue to rely on, ratings and subscriber/viewer preferences to make programming choices. Sieber, 1990-92 written testimony, 3-8. Preferences are often determined by asking subscribers what they want to watch and then comparing those preferences with the ratings to determine what subscribers actually watch. For WTBS (now TBS), which provides an obvious model of how distant signals would operate in a free market, audience research "was the foundation on which programming decisions were made." *Id.* at 21. Ratings are the bedrock of that research because

they indicate "to what extent and how subscribers use" programming. *Id.* Ratings also confirm (or deny) whether subscribers' stated preferences are translated into behavior.

In a free distant signal marketplace, cable operators would choose the signals that provide what their subscribers want to view. Cable operators would undoubtedly choose signals providing highly rated programming. That cable operators would behave this way is confirmed by how cable operators behave in the current cable network market where they pay higher license fees, on average, for higher rated cable networks. Gruen written direct, 10-12. Cable operators would likely be willing to pay more for highly rated distant signals precisely the same way they currently pay for higher rated cable networks in a free market. Gruen written rebuttal, 20 (TBS license fees increased three- or four-fold after conversion).

IV. THE NIELSEN VIEWING STUDIES PROVIDE THE PANEL WITH THE BEST EVIDENCE OF MARKETPLACE VALUE.

Because a free market for distant signal programming did not exist in 1998-99, the parties have presented three major studies -- Nielsen Viewing Studies presented by Program Suppliers, the NAB Regression Model presented by the NAB, and the Bortz Study presented by JSC -- that address how to determine what the marketplace value of different program categories would be. The Nielsen Viewing Studies are based on actual behavior of cable subscribers, the NAB Regression Model is a theoretical construct, and the Bortz Study is an attitudinal study of operators' opinions of what the hypothetical value of programming categories might be.

Putting aside the results for the moment, the different approaches reflect parties' views on what would be an important determinant of value in a free market. Supporters of the Bortz Study claim that opinions about how cable operators might act with real money should control, the NAB Model focuses on how royalties vary, while Program Suppliers believe that how people actually behaved demonstrates what is valued in the market. The general consensus among the testifying economists is that evidence of market behavior is generally preferred and is deemed more persuasive than survey results, *e.g.*, Johnson tr., 3699, 3725, Gruen tr., 7669. Crandall, 7. Furthermore, as demonstrated below, the NAB Regression Model does not address the right question.

Of these three studies, only the Nielsen Viewing Studies present data of actual program popularity that is relevant to the decisionmaking of the Panel in this proceeding. Both the NAB Regression Model and the Bortz Study are less reliable for a variety of reasons and should be given substantially less weight by the Panel. Accordingly, the Nielsen Viewing Studies results, as modified below, should serve as the anchor for the awards.

The major criticism leveled at the Nielsen Viewing Studies – that what subscribers watch is not directly related to value of the programming to cable operators in attracting and retaining subscribers – has been shown to be false. Despite the fact that opposing claimants can parade a bevy of well-prepared witnesses to parrot that cable operators do not make programming decisions based on ratings, common-sense and the evidence of their actual behavior demonstrates otherwise. Most cable operators purchase Nielsen ratings information. Lindstrom, tr. 7185-86. Cable systems operators systematically pay higher license fees for higher rated cable networks than for lower rated cable networks, Gruen written direct, 10-12, and there is a direct correlation between license fees and ratings. Nothing suggests that cable operators would behave materially differently in a free distant signal marketplace. In fact, as the discussion above indicates, there is a wealth of evidence that leads to the conclusion that they would behave in precisely the same way.

A. The Nielsen Viewing Studies.

Nielsen shows what the cable subscriber watches. In other words, Nielsen measures how subscribers use the programming made available on distant signals, and use is the critical issue in the realm of exploitation of copyrighted works. Programming that is most used (viewed) has a higher marketplace value than little used programming. Alexander tr., 2284-85. But use alone does not constitute all the value in programming. Viewing data that Nielsen provides coupled with additional publicly available data explains, refines, and corroborates the results reported by Nielsen and affords the Panel additional information from which values can be ascribed.

For example, viewing by some is more valuable than viewing by others. The most desirable viewers are those in the 18-49 age group. Gruen written direct, 13; Carey written direct, 4; Green written direct, 13; Winkelman, tr. 6281; Ducey, tr. 1767, 1957 (18-34), tr. 8800

(25-54). The Nielsen results present viewing for all demographics, including the 18-49 demographic group.

In the past proceedings, avidity of viewing has been given weight. 1990-92 CARP Report at 112. Viewers that are more avid are considered more valuable than less avid viewers. Program Suppliers provide an analysis that quantifies and gives effect to "avidity" of viewing. The antipodes of avidity are JSC, whose viewing numbers must be adjusted upward because of the high avidity, and PTV, whose viewing must be adjusted downward because of low avidity. Not surprisingly, PTV and NAB, which also has lower avidity, attempted to obfuscate the simple point of the avidity analysis by claiming that it should have employed weighting and minute measurements of program time, not those supplied by Nielsen. These assertions, even if they were correct, cannot overcome other record evidence establishing that certain programming categories have higher levels of viewer avidity than others. As prior decisions have held that such distinctions serve as a useful and appropriate adjustment to the Nielsen viewing data in allocating shares, the objective approach taken by Program Suppliers provides an objective method to quantify those distinctions.

B. The NAB Regression Model.

The NAB Regression Model and accompanying analysis attempts to predict the distribution of 1998-99 royalty payments based on variables plugged into a regression equation. As noted by Drs. Gruen and Frankel (Program Suppliers), Dr. Caffee (Canadians) and Crandall (JSC), NAB's regression analysis is wholly unreliable due to numerous statistical and economic modeling problems, which lead to a wholesale failure in the model's usefulness as a tool for allocating royalty shares. Furthermore, because of Dr. Rosston's reliance on marginal value, instead of average value, in computing total value from the NAB Regression Model, his results

understate the value of all categories, but Program Suppliers suffer the most. Given these serious flaws, the NAB Regression Model cannot provide a reliable framework for royalty distribution.

C. The Bortz Study.

Finally, the Bortz Study of cable operators again asks cable operators to assign valuations from a constant sum of 100 to categories of distant signal programming based on ten to fifteen minute telephone interviews with cable executives. Trautman, tr. 215-217. The Bortz Study does not measure actual cable operator behavior but relies, instead, on cable operators' attitudes or opinions about the value of programming. Actual evidence of cable operator program purchasing behavior in the comparable cable network marketplace has been presented to the Panel. While cable operators' expenditures are high for Sports-centric cable-networks, they are not as high vis-à-vis non-sports programming as reported by Bortz. In addition, actual cable operator expenditures on cable networks that focus on series and movies are not as low relative to other programming as the Bortz study suggests.

In sum, Nielsen viewing data in the desirable demographic of 18-49, adjusted by avidity, are the most reliable methodology upon which to rest the awards in this proceeding. Such an approach follows real world experience of how the industry operates, and, in particular, how the cable network market operates.

V. MARKETPLACE VALUE CAN BE DETERMINED BY LOOKING TO CABLE OPERATOR AND SUBSCRIBER BEHAVIOR.

Program Suppliers presented to the Panel, data of actual cable subscriber behavior and of cable operator behavior. The Nielsen Viewing Studies and the license fee analysis presented by Dr. Gruen demonstrate that subscribers and operators value Program Suppliers' programming far above any other program category. This evidence, grounded in actual behavior, offers important and reliable information about how to determine the marketplace value of the Phase I program categories simulated in a free market.

A. The Nielsen Study Measures How Subscribers Use Distant Signal Programming.

People subscribe to cable to obtain programming that they want to watch. Valenti written direct, 9; Thompson written rebuttal, 1-2. Ultimately, this fundamental fact drives the cable business. Subscribers will only subscribe as long as they receive programs that are attractive to them. Cable operators, who have more program choices than channel space, select programming that their subscribers watch the most. *See* Ducey, tr. 1681-83. Distant signals and cable networks, both of whom rely heavily on advertising revenues and compete for placement on the cable systems roster, seek programming that will attract the most viewers.

Nielsen viewing data are sought and used by virtually all players in the television (cable and broadcast) industry as well as by national and local advertisers (or their agencies), by television stations, and by many cable systems (including multiple system operators), who either purchase the reports directly or who receive ratings data from a variety of publications, and by at least 50 cable networks. Lindstrom tr., 7185-86. They are also used by the claimants in this proceeding. Kessler written direct, 21; tr. 6421.

The Nielsen ratings provide a uniform, objective means for measuring interest and use among the programming choices that were available to distant cable subscribers. Valenti written direct at 4; Alexander, tr. 2356-58; Thompson, tr. 8176; Carey written direct, 2-3. Programs' market value is measured by their ability to attract viewers: those that attract more viewers are more valuable than those that do not. Gruen written direct, 5, 10; Carey written direct, 3-4.

If a free market existed for distant signal programming, Nielsen ratings would play a large and dominant role in negotiations between distant signals and the copyright owners, between distant signals and cable operators, and between distant signals and advertisers. This is already true for cable networks and broadcast stations. *See* Gruen, tr. 7589; Carey, tr. 7029; Alexander, tr. 2278, 2282, 2284. Thus, Nielsen distant viewing data have an important role to play in simulating a free market for royalty distribution, a fact recognized by the CRT and CARPs in the past. *See e.g.* 1990-92 CARP Report at 44.

B. Viewing in the 18-49 Age Group Should be Afforded More Weight than Household Viewing.

All viewing is not equal. This is a stark reality in the cable and broadcast world. Gruen written direct, 13-16; Carey written direct, 3. Certain demographics are perceived as more valuable than others and thus programs that attract those demographics are more valuable. Advertisers try to reach a certain audience that their research shows buys more of their products or is more likely to change brands or be influenced by the advertiser's message. The favored demographic for advertisers is universally expressed as 18-49 year-olds. Gruen, tr. 7541; Carey, tr. 6848. That demographic has been adopted by the television industry as well. *Id.*; Green written direct, 4.

Cable system operators have demographic interests similar to those of advertisers. The 18-49 demographic is the most likely group to buy the new ancillary and digital services offered

by cable systems. Gruen written direct, 16-22. Cable operator license fee spending closely tracks advertiser spending,[3] in that cable operators allocate license fee dollars in a higher proportion for cable networks with programming that is likely to attract 18-49 viewers. Gruen written direct, 22-25. This factor supports a conclusion that cable operators value the 18-49 demographic more highly than other demographics. *Id.* *See* also Carey written direct, 4.

As described by different witnesses (Gruen written direct, 18; Ducey written rebuttal, 3-4), cable operators had an interest in 1998-99 in generating additional fee income from ancillary services, such as internet cable modem connections, pay per view television, digital tiers of service and local telephony, that are used largely by the 18-49 age demographic. Gruen written direct, 16-22; PS Ex. 5-RX. As a result, cable operators had a particular interest in basic cable programming, including distant signal programs, that appeals to that demographic. *Id.* In 1998-99, when cable was under intense competitive pressure from Direct Broadcast Satellite (DBS) providers, *id.*, cable used such programming as a platform to appeal to the 18-49 demographic in the hope that they would become or remain cable subscribers who would choose to subscribe to ancillary services.

Dr. Gruen's analysis was corroborated by the Beta Research Survey of the cable subscriber population. Ducey, tr. 8921. This survey, submitted by NAB witness Dr. Ducey, reported that 79% of cable subscribers interested in high speed internet access were in the 18-49 age group. Ducey written rebuttal, 5; NAB Ex. 16-R; PS Ex. 7-RX at 43; PS Ex. 8-RX. According to the same study, 72% of cable subscribers extremely, very or fairly interested in

[3] Dr. Gruen's analysis was criticized by PTV statistician Dr. Fairley as having a statistically insignificant relationship. This does not diminish the significance of Dr. Gruen's finding. Dr. Fairley's criticism establishes that 18-49 viewing is highly correlated with household viewing, a point made by Dr. Gruen (written direct, 13). Dr. Fairley's testimony on this illustrates the fallacy of PTV's argument that looking at 18-49 viewing "ignores" those over 50 and under 18. Even if true, the high correlation between 18-49 viewing and household viewing means that 18-49 viewing will largely mirror household viewing, which includes under 18 and over 50. *See* Note 4, *infra*.

satellite dish service programming services are within the 18-49 age group. Ducey, tr. 8935; PS Ex. 7-RX at 38; PS Ex. 8-RX. That Survey also showed that 68% of the Beta Study subscribers who would definitely or probably subscribe to a digital tier of cable fall in the 18-49 demographic group. Ducey, tr. 8934; PS Ex. 7-RX at 33; PS Ex. 8-RX. Accordingly, NAB's submitted study confirms the importance of the 18-49 demographic to cable operators during the relevant time period.

As a result, viewing for the 18-49 demographic should be used in allocating relative value among program categories because it is more valuable than other demographics.[4] The Nielsen data presented in this proceeding separately calculated 18-49 viewing from viewing for other demographics.

C. Viewing Defines Value in all Aspects of the Television Industry and Would Define Value in a Distant Signal Marketplace.

The importance of viewing was recognized in past distribution proceedings as the starting point for the allocation analysis. *See 1983 Cable Royalty Distribution Final Determination*, 51 Fed. Reg. 12,792 (1986). Distant signal viewing offers an objective, empirical measure of how subscribers actually used different program types. Kessler written direct, 20-21; Valenti written direct at 8. Program Suppliers have never contended, however, that the Nielsen viewing data alone are the sole measures to be applied in valuing distant signal programming. Program Suppliers have supplemented the Nielsen results in this and earlier cases with considerable corroborating evidence and with additional analyses that refine and distill the Nielsen results.

[4] Some claimants have complained that emphasizing the 18-49 demographic "ignores" other demographic groups. It does nothing of the kind. Focusing on 18-49 viewing simply weights the viewing toward that demographic and does not ignore other age groups – their viewing is simply afforded less weight – as it is in real-life in the television industry. As was noted by a number of witnesses, there is a close correlation between 18-49 viewing and household viewing. In other words, programming that is highly rated in the 18-49 demographic is also highly rated in all households. Gruen written direct, 13; Johnson tr., 9165. The under 18 and over 49 are not therefore "ignored."

Here, in response to prior criticism, the Nielsen data were separated into demographic groups to provide information on an individual, as well as on a household, basis.

Substantial weight should be placed on the Nielsen 18-49 results for two principal reasons. First, the Nielsen results measure actual viewer behavior based on the actual distant signal choices available to subscribers in the most important demographic. Second, in a simulated free market for distant signals, the Nielsen 18-49 data would be given significant and controlling weight in determining value, just as they are now in the television and cable network markets. Green written direct, 13; Carey written direct, 4-5.

As Professors Carey and Thompson put it appropriately, "ratings are the currency of our business" and the "coin of the realm." Carey, tr. 6835; Thompson written direct, 11. Ratings are the standard against which the value of different programs can be uniformly analyzed and are the best measure today of program value. Valenti written direct, 8. While other factors and opinions about value are brought into programming negotiations, it is doubtful that any other factor plays as important and constant a role as ratings do. In a free market, distant signal programming would be bought and sold on the basis of ratings just as programming on cable networks is today.

D. The Nielsen Viewing Studies Accurately Measure Distant Viewing.

Although the Nielsen Viewing Studies ultimately rest on the same Nielsen meter household sample that is used for all national ratings produced by Nielsen, the data was specially tailored to fit the needs of royalty distribution. Lindstrom written direct, 3-4; tr. 7177-78. The two major components in this process are the determination of distant viewing on each sample station and the categorization of programs to match the Phase I categories on which allocations are made. Kessler written direct, 13, 21-22.

The Nielsen Viewing Studies were based on statistically valid samples. Based on a station listing provided by CDC for 1998 and 1999, Nielsen ranked stations based on the number of subscribers that received the stations as distant signals. To create each year's sample, each year's listing of distant stations and corresponding subscribers was divided into two groups – the 50 top-ranked stations and all other stations. The top 50 stations were selected with certainty (meaning, they were automatically included in the sample) and the remainder of the stations were systematically sub-sampled. Lindstrom written direct, 4-5. The top 50 stations in the sample for 1998 and 1999 account for a substantial proportion of viewing minutes and subscribers. Therefore, variations in the remainder of the sample would not have a significant impact on study results. Lindstrom, tr. 7335-40. With regard to the remaining stations in the sample for each year (129 for 1998 and 130 for 1999), the viewing minutes were weighted (*i.e*, multiplied by an approximate value) to estimate the amount of viewing for additional stations not included in the sample. Lindstrom, tr. 7218-19, 7224-26, 7230.

Nielsen measures viewing throughout the country without regard to whether the viewing is from a local or distant broadcast. Because only programs retransmitted on a distant signal basis are compensable under the compulsory license, it was necessary to isolate for each Nielsen sample station the areas of the country that are considered "distant." *Id.* at 21-22.

Program Suppliers witness, Marsha Kessler, undertook this analysis. Kessler, tr. 6351. Ms. Kessler identified, for each sample station, all counties that are considered local for copyright royalty purposes. Nielsen was then instructed to eliminate each station's viewing from those local counties from consideration, thus assuring that viewing from only the counties distant to each station would be measured. *Id.* Viewing to substituted programming appearing on WGN

as a result of syndication exclusivity rules was also eliminated as was viewing to network programs. Lindstrom written direct, 15; Kessler, tr. 6565, 9487-88.

The process for determining local counties follows extinct and arcane FCC rules that applied to cable systems in 1976 with different applications for different sized markets, for different types of stations and for different measures of a station's over-the-air coverage. Ms. Kessler used a logical progression of examining each applicable variation of the FCC's rules to each sample station. *See generally* PS Exs. 10-14.

Although Ms. Kessler did not perform all the categorization of programs, she provided the definitions used by Nielsen in that categorization. Kessler written direct, 24. Those definitions were developed based on Tribunal rulings over the years. In addition to the program definitions, Nielsen was provided with a list of the locally-produced programs as reported in television station claimants' royalty claims. *Id.* at 26. Nielsen followed those definitions in assigning each program on the sample stations to one of the Phase I program categories. Lindstrom written direct, 5; PS Exs. 19, 21. In addition, Ms. Kessler personally reviewed the WGN program categorization to assure substituted programs were not counted. Kessler written direct, 26.

The Nielsen meter study measures information on a constant basis (every 2.7 seconds) throughout the year, so instead of getting information at a single point in time, new information is continually being analyzed. Lindstrom written direct, 13-14. Nielsen collected over 84 million data entries for analysis for the two-year period of 1998-99. *Id.* As a result, changes in viewing that occurs at any time, whether because a viewer clicks through the remote to see what's on at a given minute, or because of external factors, as might be the case during the war coverage or especially significant news events, are reported.

The Nielsen data offer the only comprehensive, objective picture of what distant subscribers actually watched during the years at issue. They also offer a picture of what programs were broadcast by distant signals during that time and to which claimant category in this proceeding the programs belong. While the programs viewed may not be those that the Panel or others would personally select, it is, in the end, the distant viewers' selections that determine programming value, and viewing measures those selections. Thompson written direct, 20.

E. What The Viewing Results Show.

The Nielsen viewing studies show the following viewing by claimant category for the years at issue.

1998 Nielsen Viewing Minutes

	18-49	%	Household	%
NAB	404,616	9.8	1,206,060	14.4
Program Suppliers	2,954,860	71.3	4,938,811	58.9
Devotionals	32,028	.8	54,690	0.7
JSC	367,057	8.9	756,547	9.0
Other	6,257	.2	7,455	.1
PTV	379,020	9.1	1,420,995	16.9
Total	4,143,838	100	8,384,558	100

1999 Nielsen Viewing Minutes

	18-49	%	Household	%
NAB	627,934	13.1	1,317,093	15.0
Program Suppliers	3,245,875	67.9	5,360,138	61.0
Devotionals	36,919	.8	82,016	.9
JSC	241,086	5.0	693,566	7.9
Other	2,801	.1	6,123	.1
PTV	625,056	13.1	1,321,547	15.1
Total	4,779,671	100.0	8,780,483	100.0

As the two tables demonstrate, the vast majority of viewing to distant signals is to Program Suppliers programs.

Program Suppliers asked ITProcessing, a data processing company, to perform a custom analysis for 1998 and 1999 isolating the viewing of stations that trigger the 3.75% royalties. Kessler written rebuttal, 4. The results of the custom analysis were as follows:

1998 Nielsen Viewing Minutes
3.75% Stations

	18-49	%	Household	%
NAB	264,763	9.08	816,473	15.33
Program Suppliers	2,291,465	78.62	3,777,067	70.91
Devotionals	12,881	0.44	28,029	0.53
JSC	339,441	11.65	698,042	13.11
Other	6,008	0.21	6,671	0.13
PTV	0	0.00	0	0.00
Total	2,914,528	100.00	5,326,282	100.00

1999 Nielsen Viewing Minutes
3.75% Stations

	18-49	%	Household	%
NAB	459,683	17.35	986,765	18.83
Program Suppliers	1,961,139	74.02	3,653,542	69.73
Devotionals	10,369	0.39	18,943	0.36
JSC	215,678	8.14	576,181	11.00
Other	2,641	.10	4,290	0.08
PTV	0	0.00	0	0.00
Total	2,649,509	100.00	5,239,722	100.00

The results of the 3.75% signal analysis again demonstrates that Program Suppliers programming commands far and away the vast majority of viewing shares.

F. Dr. Gruen's avidity analysis refines the viewing numbers.

The reported viewing shares tell only part of the story. Dr. Gruen engaged in a simple mathematical exercise to show avidity based on the relationship between availability of programming and the viewing to that programming. Dr. Gruen's analysis sought to quantify a point made in prior proceedings – that viewers have a greater avidity for some programs than for other programs. Dr. Gruen's exercise assumed that parity exists where viewing and availability matched (1.0). If viewing exceeds availability (greater than 1.0), that shows higher avidity for a program category.

Criticism leveled at Dr. Gruen's analysis argued that the quarter hours identified by Nielsen were not weighted, and, as a result, the relationship identified by Dr. Gruen overstated the ratio for programming carried on signals that are widely carried. *See* Ducey rebuttal, 1-10. Dr. Gruen was also criticized for developing a ratio comparing minutes to quarter hours.[5] As demonstrated below, these criticisms are meaningless.

Despite these criticisms, no party offered any cogent rationale to dispute the underlying point that more heavily viewed programming is valued more highly than less heavily viewed programs. Much of the criticism urged a substitution of a subjective, and unquantifiable viewer's "connection to the program," a kind of a touchy-feely avidity, in place of Dr. Gruen's objective approach. *See* Fuller written rebuttal, 3-5.

Subjective views of the existence and extent of avidity do not provide a solid basis on which to quantify avidity. Criticism based on such subjective notions does nothing except interject uncertainty into a fairly straightforward empirical analysis. It is a relatively simple exercise to analyze program availability and viewing to determine if there is a relationship

[5] This criticism led to the recalculations by Dr. Gruen under the "Stewart Methodology." Gruen written rebuttal, 36-46.

between the two that sheds light on the issue of value that is important for royalty allocation purposes. Expressing this in numerical terms that can be applied to viewing for all categories adds a new, useful dimension to royalty distribution.

For example, Sports programming routinely receives 5% - 10% of the distant signal viewing, yet its royalty is substantially higher due, in part, to claimed avidity. Dr. Gruen's approach provides a means to quantify this. Adjusting Sports' viewing share by the avidity relationship offers an objective means of incorporating Sports' high popularity among its viewers. On the other side, PTV's viewing is not as high as would be expected based on the availability of programming, and thus its viewing shares should be adjusted downward in the same manner to incorporate this fact.

Other record evidence from a variety of sources and claimants supports Dr. Gruen's basic premise that viewer "avidity," affects program categories in different ways. Program Suppliers present another calculation below in response to the criticisms regarding weighting. This further calculation corroborated Dr. Gruen's findings.

In the place of quarter hours reported for each program category by Nielsen, we substituted the available program minutes for each programming category as reported in NAB Exhibit 10, the program time study compiled by NAB witness, Dr. Fratrik ("Fratrik Study"). Because the Fratrik Study program minutes are weighted, Rosston written direct, 13; tr. 2923, substituting them for quarter hours means the Nielsen viewing minutes are matched to program minutes (not quarter hours), and the minutes are weighted by subscribers who receive each distant signal. Using minutes also obviates the need to pick a parity point and do a mid-point adjustment to viewing. Instead, shares can be calculated directly. Substituting the NAB data on program minutes for Nielsen quarter hours results in the following relationships.

1998 Basic Fund

Full Year Viewing Per Program for 18-49 Demographic: 1998

Category	Viewing Minutes	Number of Minutes [6]	Viewing Minutes Per Minute
Program Suppliers	2,954,860	91,544,041	0.032
Local	404,616	21,286,611	0.019
PBS	379,020	32,053,770	0.012
Sports	367,057	5,699,777	0.064
Devotional	32,028	5,031,910	0.006

See PS Ex. 20, Rosston written direct, 23.

If all viewing was in the same proportion to the availability of programming, all of the results of the equation would be basically the same. Since all viewing does not occur in the same proportion to availability, the results are not the same.

What the ratio demonstrates is that in 1998 the average Sports program was 3½ times more popular (more avidly viewed) than the average Local program, which was 1½ times more popular than the average PTV program. The results are similar but less dramatic for 1999.

1999 Basic Fund

Full Year Viewing Per Program for 18-49 Demographic: 1999

Category	Viewing Minutes	Number of Minutes	Viewing Minutes Per Minute
Program Suppliers	3,245,875	91,544,041	0.035
Local	627,934	21,286,611	0.029
PBS	625,056	32,053,770	0.020
Sports	241,086	5,699,777	0.042
Devotional	36,919	5,031,910	0.007

See PS Ex. 22; Rosston written direct, 23.

[6] The Fratrik program minutes are taken from Rosston written direct at 23. The minutes are expressed in the aggregate for both 1998 and 1999 so ½ of the total is used for each year. Because of this aggregation of years, using the Fratrik time measure is somewhat less precise on a year by year basis than what was calculated by Dr. Gruen.

These simple calculations establish another means of quantifying the relationship between the availability of programming and its viewing, from which objective adjustments can be made to the viewing data in response to prior rulings that more intensely watched programming is more valuable than less intensely watched programming. Gruen written direct, 38-39. Applying this principle to the 18-49 viewing shares for the claimant groups for the two years results in the following adjustments to the Nielsen reported viewing shares.

Adjusted Viewing Per Program Using Full Avidity Adjustment, 1998

Category	Adjustment Factor	Adjusted 1998 18-49 Viewing Minutes	Share
Program Suppliers	0.032	95,377	72.6
Local	0.019	7,691	5.9
PBS	0.012	4,482	3.4
Sports	0.064	23,638	18.0
Devotional	0.006	204	0.2

Adjusted Viewing Per Program Using Full Avidity Adjustment, 1999

Category	Adjustment Factor	Adjusted 1999 18-49 Viewing Minutes	Share
Program Suppliers	0.035	115,089	73.6
Local	0.029	18,523	11.9
PBS	0.020	12,189	7.8
Sports	0.042	10,197	6.5
Devotional	0.007	271	0.2

The same analysis can be utilized to adjust the viewing study results for the 3.75% fund.

Full Year 3.75 Viewing Per Program for 18-49 Demographic: 1998

Category	Viewing Minutes	Number of Minutes	Viewing Minutes Per Minute
Program Suppliers	2,291,465	91,544,041	0.025
Local	264,763	21,286,611	0.012
Sports	339,411	5,699,777	0.060
Devotional	12,881	5,031,910	0.003

See PS Ex. 4R; Rosston written direct, 23.

Full Year 3.75 Viewing Per Program for 18-49 Demographic: 1999

Category	Viewing Minutes	Number of Minutes	Viewing Minutes Per Minute
Program Suppliers	1,961,139	91,544,041	0.021
Local	459,683	21,286,611	0.022
Sports	215,678	5,699,777	0.038
Devotional	10,369	5,031,910	0.002

See PS Ex. 4R; Rosston written direct, 23.

Applying the ratio of Viewing Minutes per available minutes shows the following 3.75% shares adjusted for avidity:

Adjusted 3.75 Viewing Per Program Using Full Avidity Adjustment, 1998

Category	Adjustment Factor	Adjusted 1998 18-49 Viewing Minutes	Share
Program Suppliers	0.025	57,358	70.9
Local	0.012	3,293	4.1
Sports	0.060	20,211	25.0
Devotional	0.003	33	0.0

Adjusted 3.75 Viewing Per Program Using Full Avidity Adjustment, 1999

Category	Adjustment Factor	Adjusted 1998 18-49 Viewing Minutes	Share
Program Suppliers	0.021	42,013	69.9
Local	0.022	9,927	16.5
Sports	0.038	8,161	13.6
Devotional	0.002	21	0.0

The overall results of the calculations are an expression of "ratings" that take into account both the availability of programming and the viewing of that programming.

G. The Nielsen Results, as Adjusted, Demonstrate the Marketplace value of the Claimant Categories.

Nielsen data are widely used by television stations, cable networks and PBS, all of whom obtain Nielsen data on a daily basis. Lindstrom, 7185-86; Thompson written direct, 13; Wilson, tr. 3080. Viewing data supply the link between the programmer and the end user. Carey written direct, 3. This link is necessary to determine whether expectations about programming value has been corroborated by actual behavior. *Id.*; Alexander, tr. 2357-58. If a program does not perform in the sense of attracting viewers, it will be replaced by one that will. Valenti written direct, 8; Alexander, tr. 2357-58.

Viewing data may not always be the sole determinant of program value. Stations and cable networks may wish, for example, to develop a certain identity by offering a particular type of programming. They may have an open time slot that requires a specific program to fit with the rest of their programming. Cost constraints or other factors can also play a role. But it is unlikely that those factors will winnow available program purchase choices to a single program. Rather, ratings will still play the dominant role in the final decision of which program to license. Carey written direct, 7.

Distant viewing data address marketplace value by showing the extent to which distant signal programming is used (watched) beyond the market of license. Because programs are syndicated on a market-by-market basis, distant importation of a program into a market will directly reduce the program's value in that market to the syndicator. Green written direct, 16; Valenti written direct, 6-7. Viewing to a program in a distant market benefits the cable system by offering subscribers a program that otherwise was not available and that they are interested in watching. Finally, the marketplace value is reflected in the extent of viewing: programs with greater viewing are more valuable than programs with less viewing. Valenti written direct, 8.

The 1998-1999 Nielsen data confirm that syndicated programming was overwhelmingly the most valuable distant signal programming. This is consistent with WTBS's use and interpretation of the ratings data to make its program purchasing and scheduling decisions prior to its conversion to a cable network and it is no less true today:

> By all these measures, syndicated programming is far and away the most valuable programming in making TBS the most watched basic cable network in the country. From my perspective, the most watched means the most valuable. Because syndicated programming generates the most viewing, it is the most valuable program category on TBS.

Sieber 1990-92 written direct, 21. Because WTBS operated most closely to how a free market distant signal would operate, how it determined value in the distant signal marketplace should be given considerable weight.

VI. CABLE OPERATOR BEHAVIOR DEMONSTRATES THAT HIGHER RATED PROGRAMMING HAS THE GREATEST VALUE IN THE CABLE NETWORK MARKETPLACE.

Evidence of actual behavior is superior to evidence of hypothetical behavior. The predictive value of opinion surveys is inherently limited because respondents do not commit themselves financially to their responses, as they do at the time of a purchase. It follows that the results of opinion research should not be given more weight than actual behavior of the survey respondents. Ducey, tr. 8938.

Program Suppliers analyzed actual cable operator license fee payments in the cable network market and found that cable system operators pay more for higher rated cable networks than for lower rated cable networks. There is no reason to think that cable operators would behave differently with respect to distant signals.[7] Cable operators do not value distant signals per se; they value the programming that appears on the signals. In considering whether to add (or to drop) a distant signal, an operator will assess how the change will affect the value of the programming it offers to subscribers. Carey written direct, 7-8.

Dr. Gruen analyzed all 32 cable networks for which there was published information regarding both ratings and license fees for 1998-99. Gruen written direct, 11; tr. 7697-98. Dr. Gruen then stratified the 32 networks in three tiers, highest-rated, mid-rated, and low-rated, based on total day and prime time ratings. Gruen written direct, 11-12, 41-46.

[7] Some have tried to argue that cable networks are different from distant signals because operators can insert local advertising on networks. However, local advertising generates a minimal revenues for cable operators and often the time cannot be sold at all – leading to the insertion of promotional messages. *See* Carey, tr. 6861. Obviously, the decision to carry a particular signal is driven by what the subscribers want and do watch, not by the ability of the operator to sell an ad or two per hour of programming. As Mr. Valenti testified in the 1990-92 proceeding, the fact that cable systems were not able to advertise on distant signals does not diminish the importance of Nielsen numbers to a cable operator: "So he pays out good hard-earned money to bring in distant signals, not because he thinks the advertising is important or not, but because he believes that what the advertising supports on that distant signal will be a magnet to the people who pay him money to subscribe to his cable [system]." 1990-92, tr. 2755. In other words, whether an operator can advertise or not, he/she will be interested in bringing in programs that most people find attractive. Nielsen viewing results show what those programs are.

Dr. Gruen then analyzed the license fees paid for each of the 32 cable networks and found that cable operators pay more, on average, for higher ratings than for lower ratings. The actual results found by Dr. Gruen were

License Fees and Total Day Ratings

	Total Day Ratings			*License Fees Per HH*		
Category	*1998*	*1999*	*Avg.*	*1998*	*1999*	*Avg.*
Top 11 Rated Networks	0.92	0.93	0.93	3.46	3.77	3.61
Middle 11 Rated Networks	0.44	0.45	0.44	1.31	1.36	1.34
Bottom 10 Rated Networks	0.23	0.26	0.24	0.75	0.85	0.80

Gruen written direct, 12.

This empirical, objective evidence of real-life, real-world decisionmaking by cable operators confirms that higher rated programming has a higher marketplace value in the most analogous marketplace. Cable operators pay for ratings the same way broadcasters do and the same way advertisers do. Carey written direct, 10, 25. Accordingly, Nielsen viewing data provide the best evidence of the marketplace value of the categories of programming.

VII. PROGRAM SUPPLIERS' NON-QUANTITATIVE EVIDENCE CORROBORATES THE HIGH MARKETPLACE VALUE OF SYNDICATED MOVIES AND SERIES.

The marketplace value measurement in the Nielsen Viewing Studies is corroborated by Dr. Gruen's analysis of cable operator behavior. Program Suppliers also introduced further evidence of the high value that would be placed on syndicated series and movies in a distant signal free market. The evidence showed syndicated programming offers a wide variety of programs designed to appeal to large market segments and to niche audiences. The testimony also established the continuing appeal and value of classic syndicated programming as well as of first-run syndicated shows. Finally, with live testimony and by incorporating testimony from the previously litigated proceeding, Program Suppliers offered the views of industry professionals as to what tools they used to evaluate programming choices.

A. An Overview of Syndicated Programming.

Program Suppliers presented a number of witnesses, in particular, Jack Valenti, Dr. Robert Thompson and Howard Green who provided an overview of the syndicated programming category from a variety of perspectives. The testimony traversed not only the scope of programming within the syndicated program category, but the context in which programs are affected by and affect the distant signal marketplace. All these considerations indicate a high marketplace value for syndicated programs.

Program Suppliers programs are not limited to one subject or genre, but cover the entire gamut of storytelling, entertainment, news, information, documentary, cultural and a host of other subjects. Syndicated programs appeal to just about everybody's taste, from niche programming to those with mass popular appeal. One of its greatest attractions is the vast spectrum of availability and diversity. As Mr. Valenti testified, examples of program supplier

programming include: "such well-known sitcoms such as *Friends*, *Seinfeld*, *Cheers* and *Roseanne*, and dramas such as *NYPD Blue* and *E.R.*"; and "such first-run syndicated programming like *Oprah*: science fiction such as the many *Star Trek* series; children's programs such as *Bill Nye: The Science Guy* and *Mighty Morphin Power Rangers*; cartoons like *Pokemon*; syndicated sports such as *The George Michael Sports Machine*; *This Week in Baseball*, *Road to the Superbowl* and various wrestling programs; news magazines such as *ET* [Entertainment Tonight] and *Inside Edition*; and game shows such as *Jeopardy*." Valenti written direct, 4. The Program Suppliers category also includes popular feature films shown on television, including the classics like "*Gone With the Wind*, *Lawrence of Arabia* and *Casablanca*." *Id.*; Kessler written rebuttal, 4-6.

The broad spectrum means that syndicated programming is valued on distant signals and cable networks for both its mass appeal and its niche programs. When a cable operator looks for channels that are most capable of bringing in subscribers, syndicated programs play a large role because they offer enough diversity to program an assortment of channels.

Some cable networks, like the Cartoon Network or the Sci-Fi Channel, are carried to fill particular niches, but cable operators bring in distant signals because programming on the signal will help it achieve the goal of attracting and retaining subscribers. Syndicated programming does just that, as is evidenced by the fact that it is by far the most widely carried programming and it is by far the most widely viewed. Kessler, tr. 6418.

Syndicated programming has such value because of the quality that goes into its production and because successful syndicated programs have withstood the test of time. Successful syndicated programming depends on a blend of imagination, talent and money that can bring to life a story idea in a way that makes viewers want to watch. Whether a series was

originally developed for broadcast by a network or as a first-run syndicated offering, production costs are very high. Green written direct, 6-7. Additionally, the upfront costs of producing theatrical feature films is also very high as are promotional and advertising costs associated with its release.

Despite the high upfront costs of producing high-quality series, most series never survive long enough to move to syndication. Valenti, tr. 6217. The programs that do survive, however, have a proven track record for attracting audiences which is reflected in Nielsen ratings and which makes them highly valuable in syndication. Carey written direct, 2-3.

B. The Program Owner/Syndicator Perspective.

Program Suppliers presented witnesses with first-hand knowledge and experience of how syndication works and how it is affected by distant signal importation. These witnesses -- Messrs. Valenti, Winkelman and Green – offered testimony applicable to the range of Program Suppliers members, from small companies to large studio syndicators about the syndication of programming, and how program value is measured in free market conditions.

Syndication refers to the licensing of programs on a market-by-market basis. Valenti written direct, 3. Syndication first began in 1947-48, primarily with movies. The syndication market grew as more and more independent stations became operational. Because independent stations do not have access to network programs, they had a need to obtain programs from other sources, primarily off-network series. Green, tr. 6623. Syndication for a long time was done on a straight cash basis which means that a station pays a license fee directly to the syndicator for the programming. Green written direct, 11.

The syndication process is similar to other negotiations. The distributor/syndicator seeks to maximize the revenues from the distribution of programming. In straight cash deals, the

licensing fees depend largely on the potential audience for the program which, in turn, depends on the day part in which the program will be used and the station's reach in the market. Green, written direct 13; tr. 6644. The negotiations revolve around ratings, which measure potential audiences, and the stations bear the risk that the program will be successful. Green, tr. 6644. Carey written direct, 2-3. The stations receive the right to broadcast a program for a number of runs over the licensing period. *See* Green written direct, 7.

In the mid-1980s, first-run and barter syndication began to become more important. This change was fostered by the spread of large commercial satellite dishes, which allowed the delivery of programs electronically with advertisements integrated into them. Green, tr. 6726. The ability to integrate commercials made barter syndication feasible. Barter syndication means a syndicator negotiates with a station about the amount of advertising time that each will retain in a program. Green written direct, 11. Generally, the ad avails are split in favor of the station, with the syndicator retaining the remainder. *Id.* A syndicator will market the retained ad avails to national advertisers; the sales of the advertising represents the only revenues received by the syndicator under barter. *Id.*

Barter syndication places the risk of failure entirely on the syndicator. Green written direct, 12. To make barter work, it is necessary to license at station reaching at least 70% of television households. *Id.* Green, tr. 6717. It is also necessary to sell the largest markets because advertisers are focused on the largest markets. Carey, tr. 6945-49. Barter also requires that the same episode of a series be offered in the same day part throughout the country so that the national advertising spots can be delivered to the audience in that day part. Green written direct, 11.

Distant signal importation adversely affects the ability to syndicate programs. Mr. Green explained how the distant signal importation diminished the revenues that could be obtained from the local market because the viewers who watch on distant signals are lost to the local ratings from which the syndicator is compensated. Green, tr. 6696.

In sum, the syndicators offered the Panel a concrete view of how the syndication market works, what factors are important in setting the market price, how syndicated programming fits in the market, and what harm they have suffered from distant signals. This evidence, along with Program Suppliers' evidence of actual syndication transactions in the relevant time period, provides the Panel with further corroborating evidence of the value of Program Suppliers programming apart from Nielsen Viewing Studies.

C. Actual, Real-Life Syndication Sales show the Value of Program Suppliers Programming.

While the program supplier undertakes substantial financial risks in developing any program, be it network, first-run or theatrical production, only programs that are successful in the syndication marketplace will allow a supplier to recoup those costs. While most programs fail before becoming successful in syndication, the successful few command large license fees. These fees show the substantial marketplace value of syndicated series and movies in the relevant time period. For example, the nine popular network series that entered the syndication market in 1995-99 commanded an average license fee per episode of nearly $2.3 million and, in aggregate, sold for $3.425 billion. Gruen written rebuttal, 20. Clearly, these series were popular on network and continued that success in syndication during 1998-1999.

Similarly, the 33 cable network syndication transactions that closed during this period, *id.* at 21, received an average license fee of $442,000 per episode and aggregate license fees of $1.842 billion. Of particular note is the fact that *Seinfeld* episodes that sold into the cable

network market generated $1 million per episode, with other popular programs such as *E.R.* and *The Practice* garnering $800,000 and $825,000, respectively per episode. *Id.*

Prior panels did not have available such compelling, real world marketplace evidence of the actual marketplace value of syndicated programming. This evidence establishes that syndicated programming, besides being the most popular and most-watched programming, also commands enormous license fees in a free and open marketplace. In the aggregate, the identified programs were valued at the sum of $5.3 *billion* in the syndication marketplace in the 1995-99 time period. Gruen written rebuttal, 22. Such evidence is consistent with the view that Program Suppliers should receive the largest royalty allocation.

D. The Buyer's Perspective.

Addressing the syndication marketplace from the standpoint of the buyer were Carl Carey, a long-time station executive and professor, and, by designation, the 1990-92 written testimony and oral transcript sections of the testimony of Robert Seiber, which has been referenced by several claimants in this proceeding. At the time of his prior testimony, Mr. Seiber was the director of research for WTBS.

WTBS was by far the most widely carried distant signal until its conversion to a cable network in 1998. It reached that position by becoming the only overt "active" superstation, that is, it sought out and capitalized on opportunities offered by the distant signal marketplace as it existed. Prior to its conversion to a cable network, WTBS had been considered and treated in the cable industry as if it were another cable network. In simulating how a distant signal free marketplace would operate, the Panel should look to the experience of WTBS for concrete, real-life evidence of how the distant signal market would work.

Mr. Sieber, who began in 1978 as Director of Marketing for WTBS and then for many years was Vice President of Research for Turner Broadcasting Company, presented the research tools "that were used from the time [Mr. Sieber] created them for [WTBS] through today to make program purchasing and scheduling decisions." Sieber, 1990-92 written direct, 21. In a free marketplace, distant signals would make, as WTBS had done, programming decisions for their channels, and then sell the entire package of programs to cable operators. The fact that cable operators nearly unanimously chose to carry WTBS as a distant signal demonstrates that cable operators affirmed and adopted those decisions. In fact, the carriage of TBS as a cable network is slightly higher than as a distant signal (95% to 97%), and the percentage of syndicated programs available on TBS as a cable network is actually greater now than it was as a distant signal. Ducey, tr. 1818.

Ratings played an important role in the growth of WTBS as a distant signal. In 1980, Mr. Sieber worked with Nielsen to develop ratings for WTBS. Sieber, 1990-92 tr. 3749. Ratings were used by WTBS to purchase programs, by advertisers to negotiate the price of time on those programs, and by cable operators to decide which cable networks to carry. Sieber, 1990-92 tr. 3747. Viewing information is widely available throughout the cable industry. Sieber, 1990-92 tr. 3750-51. One reason for the widespread use of ratings is that "cable operators are very familiar now with the national ratings for all of these cable services and that's the level of expectation for their own market. . . [that] the service will provide the same, at least as high ratings as they see in these reports." Sieber, 1990-92 tr. 3751-52; *see also* 1990-92 tr. 4160-61 (abundance of ratings data on regional stations).

WTBS became a leader in cable audience research to develop the information necessary for the station to be successful as a distant signal. Sieber, 1990-92 tr. 3767. Ratings are

important because they tell programmers to what extent and how subscribers use programming. *See* Sieber, 1990-92 tr. 4167 (ratings "are evidence of people - what people are actually doing, exactly."). Audience development depends on viewing data to set goals and to determine if those goals have been met. Sieber, 1990-92 tr. 3769. Attitudinal surveys of subscribers help determine subscribers' preferences so that adjustments can be made to fit those preferences, but whether subscribers support those preferences can only be seen from viewing data. Sieber, 1990-92 tr. 3767. If faced with a conflict between Attitudinal Survey results and Nielsen Ratings, WTBS "follow[ed] Nielsen information almost exclusively." Sieber, 1990-92 tr. 4166; *see id.* 3757-68 (many start-up networks fail because of low ratings).

The higher rated cable networks are also the most widely carried. Sieber 1990-92 written direct, 8-10. Current data demonstrates that not only is there a direct correlation between ratings and license fees paid to cable networks, but also there is a correlation between the ratings for cable networks and the extent of their carriage, with the highest rated cable networks being the most widely carried.

Top 11 Cable Networks Ranked By Total Day Ratings 1999	Rank by Number of Households Receiving Service – 1999
1. Nickelodeon	8
2. TBS	1
3. Cartoon	25
4. USA	4
5. TNT	5 (tie)
6. Lifetime	12
7. A&E	10
8. ESPN	5 (tie)
9. CNN	3
10. Discovery	2
11. Family	9

Gruen written direct, 41; PTV Ex. 30-X.[8]

WTBS's attitudinal and viewing data show that "viewers want high quality. They want a wide variety of programming and very important today and we see this not just in this kind of study, but even more so in the last few years, they want programming suitable for the whole family." Sieber, 1990-92 tr. 3771. WTBS relied heavily on syndicated programming to satisfy those preferences. Sieber, 1990-92 tr. 3772. Programs that were developed a long time ago, such as *Andy Griffith*, offer the qualities that make them suitable for watching by the whole family, which is a reason why those programs retain their value. Sieber, 1990-92 tr. 4179-80.

WTBS throughout the 1990-98 period carried a very large proportion of syndicated programming, which as Dr. Ducey stated, increased after TBS's conversion. Ducey, tr. 1818.

Claimants have interpreted WTBS research in a way that favors their programming. Program Suppliers do not dispute that other programs, besides syndicated programs, can be described by these attributes, but other program categories do not have the high level of viewing on which WTBS ultimately relied.

> So my point is, and as we look at these attributes from this study, having programs or having a network that scores well in some of these attributes will not guarantee that the program will be watched heavily or the network will be watched heavily. And in the end, that is the most important element of everything that I do in my business, is to develop an audience, and we do that by getting people to watch more times and when they watch to get them to watch longer periods of times, that intensity that we talked about.

Sieber, 1990-92 tr. 4172-73.

Finally, the facts surrounding WTBS's conversion demonstrates that its programming was vastly undervalued under the compulsory license scheme. TBS's license fees substantially exceed the royalties paid to carry WTBS as a distant signal. Gruen written rebuttal, 18.

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[8] The correlation is actually closer than the chart suggests. One of the networks in the top 11 ranked by number of households is C-SPAN (no. 7). Further, Cartoon Network was launched much later than all other cable networks in the top ten, *See* PTV Ex. 30-X, and thus has not had time to build its subscriber base.

Program Suppliers also presented the testimony of Carl Carey, the former general manager of such large network affiliates as WCBS and WNBC in New York City and KNBC in Los Angeles. Professor Carey, who now teaches television station management at Syracuse University, provided the perspective of the large network affiliate programming purchaser. As Professor Cary described,

> Nielsen is the currency of the broadcast and cable industry in that everyone uses it. It is a constant benchmark against which all types of programs are compared, and it gives one the idea of a program's inherent value. During the 20 years that I operated various television stations and spent million of dollars to acquire programs, I used Nielsen data in a number of different ways. When I brought an entirely new Program, never before seen, I used Nielsen information to predict its potential in a particular time period
>
> .....
>
> When I purchased syndicated programs, the program evaluation process I followed was typical of the industry. The process would usually be as follows:
>
> I would first use Nielsen data to analyze the time period to see what the levels might be for overall viewing with particular attention given to the 18-49 audience. Next, I would look at Nielsen to analyze competitive programs and see their demographic appeal. I would then look at the success of similar programs to form a basis for an estimate or forecast of an audience for the new Program. Finally, I would use Nielsen to estimate the possible appeal to the 18-49 demographic group, since this is the one that advertisers wish to reach. Eventually, I would purchase those programs that demonstrated the most potential for attracting the valued demographic group and becoming profitable. These programs were virtually all syndicated programs.

Carey written direct, 6-7. *See also* Alexander, tr. 2278.

Clearly, viewing information controls the purchase decision. A distant signal free market would be no different, as evidenced by the cable network market experience where ratings are key. Nielsen viewing defines the value assigned to all programming and therefore defines the value of the programming categories in this proceeding.

E. The Cultural Importance of Program Suppliers Programming.

Program Suppliers programming is the most popular programming available on distant signals, watched more than any other category of programming, and commands billions of dollars in the syndication marketplace. In addition, the popularity of both new and older syndicated programs is seen in their widespread appeal to viewers who only have seen them in syndication. As Professor Robert Thompson, director of the Center for the Study of Popular Television at Syracuse University testified, programs played daily in syndication do not lose their "popularity, [rather, syndication] has actually served to enhance it." Thompson written direct, 7.

The syndicated series has reached a position in our culture that is virtually unmatched as a popular art form. It has become the medium of our culture, and has assumed a dominant role in our society. This is shown, first and foremost, by their Nielsen ratings. In Professor Thompson's words, "ratings are the coin of the realm.... If one wants to measure the commercial value of television programming, one must measure it by the only currency recognized by the industry: the Nielsen Ratings." *Id.* at 11-12.

Second, syndicated series and movies have infiltrated our popular culture and have pervaded our daily lives on a routine basis.

> The penetration of entertainment television serves as a way to confirm what the ratings reveal: that series television is enjoyed by an audience so large that it becomes part of the cultural fabric of the nation. Catch phrases, theme songs, characters: they are established when shows run on the networks, and they become ingrained when the shows continue in syndication and re-runs. *Id.* at 14.

Third, academic writings and current course offerings at major universities show that popular television has such an impact on society that it has now become part of mainstream academic study and teachings. No other television category comes close to syndicated series television in the field of television studies. *Id.* at 16. Finally, the media attention heaped on

syndicated series and movies further demonstrates their importance in our society. In essence, syndicated programming's popularity and wide viewing leads the media to pay attention to it as a subject that has widespread and continuing appeal. *Id.* at 18-19.

Professor Thompson concludes that syndicated programming provides cultural glue because it is what people watch most.

> These shows may not be the most valuable to an English teacher or an aesthetician, but they are to an accountant. The audiences of these shows, as indicated by ratings and cultural evidence, are what define their value in the television industry.

Id. at 20.

Professor Thompson's testimony corroborates what the empirical evidence demonstrates: the overwhelming popularity of syndicated programming throughout the country and centrality in our popular culture demonstrate its value.

VIII. CONCLUSIONS AS TO PROGRAM SUPPLIERS.

Based on the evidence related to the comparable cable network free market, cable operator purchase behavior, cable subscriber viewing behavior, the vast array of syndicated programming, the working of the syndication marketplace including the amounts paid in that marketplace for syndicated programming, and the tools used by TBS, broadcast stations, and cable networks to achieve their success, Program Suppliers have demonstrated that the syndicated program category should receive 72% of the Basic Fund for both the 1998 and 1999 royalty years, 78.5% of the 3.75 Fund, and 97.7% of the Syndex Fund.

IX. THE PANEL CANNOT RELY ON NAB'S REGRESSION ANALYSIS TO ALLOCATE ROYALTIES BECAUSE IT IS INVALID BOTH AS A STATISTICAL MODEL AND AN ECONOMIC MODEL.[9]

To accomplish its stated purpose, a regression analysis must not only have statistical validity and reliability, but also must be properly specified. The NAB Regression Model does not accomplish its purpose of predicting royalties because Programming Minutes, which it touts as the principal group of explanatory variables, explain very little of the variations in royalties. In addition, the NAB Regression Model is not fully specified because it fails to recognize variation in subscribers as a significant explanatory variable. Finally, the NAB Regression is an invalid statistical model because it relies on the results of a statistically unsound study of program minutes. In addition, on a more fundamental level, the NAB Regression Model also fails as a valid economic model for royalty distribution purposes. It ignores the fundamental objective of this proceeding - - to replicate what marketplace valuation of programs to cable operators would be in a free market. Instead, the Model focuses on how royalties changed in 1998-99, a non-market factor, as the valuation measure.

As more fully discussed below, the statistical and economic modeling flaws in the NAB Regression Model are so demonstrably severe that the resulting implied royalty shares are wholly unreliable for distribution purposes.

A. The NAB Regression Model Is An Invalid Statistical Model.

1. A regression model must be properly specified.

A regression analysis seeks to determine the relationship, if any, between independent or right hand side variables (the explanatory variables) and a dependent variable. Rosston, tr. 2683-84. Economists use regression analyses to explain the separate impact of a variable or a group of

[9] The phrase "NAB's regression analysis" refers to the NAB Regression Model itself and all of the analysis that flow from it.

variables on the dependent variable. Rosston written direct, 5. The proper choice of explanatory variables (specification) is necessary to rely on the results of a regression model. Rosston, tr. 2720. Because coefficients derived from independent variables provide information about the dependent variable, a model can explain the dependent variable only to the extent that the included independent variables cause a significant effect on the dependent variable. In short, a properly specified regression model must include all of the variables that are appropriate factors in explaining the basic regression assumptions. Rosston, tr. 2720, 2786-87; Frankel, tr. 9430. Specification error may occur when a model is not set up the way it should be. Rosston, tr. 2711.

In the NAB Regression Model, royalties are the dependent variable. The independent variables consist of (1) the minutes of programming for each programming category ("Programming Minutes") and (2) all other factors ("Control Factors")[10] that affect royalties paid by cable systems. Rosston written direct, 7, 9-11. In effect, the Model sets up an equation where royalties are a function of the Programming Minutes and the Control Factors. Rosston, tr. 2611. Dr. Rosston did not differentiate between Programming Minutes and Control Factors in explaining variations in royalty payments across cable systems, but assumed Programming Minutes were the key factor. Gruen written rebuttal, 4.

2. The NAB Regression Model does a poor job of predicting royalties because it places undue reliance on Programming Minutes variables which explain very little of the variation in royalties.

The stated purpose of NAB's regression analysis is to predict variations in royalties. NAB's regression analysis relies on the Programming Minutes for the various program categories as the principal group of explanatory variables. Frankel written rebuttal, 3. The coefficients associated with each category's Programming Minutes are used to calculate the

[10] The purpose of a control factor in a regression analysis is to control for other factors that might affect the dependent variable. Rosston, tr. 2735.

implied share of royalties for the claimants. Dr. Rosston did not perform commonly used statistical tests to determine what impact Programming Minutes, as compared to the impact of the Control Factors, had on royalty payments. When such tests are done, they show Programming Minutes having almost minimal explanatory power for royalty variations.

a. Dr. Rosston has no basis for using program minutes as the key group of variables.

Dr. Rosston described the purpose of his analysis as seeking "to understand the relative values of the programming components that make up distant signal programming." Rosston written direct, 7. He concluded that to accomplish this task, "the simplest approach" was to examine the impact of the different types of Programming Minutes on royalties in a regression model. In other words, Dr. Rosston theorized (erroneously) that variations in royalties would be largely reflective of the different types of programming carried on distant signals. This ignores, among other things, that cable operators pay royalties based on gross receipts and station carriage, and different types of stations have different DSE values.

Dr. Rosston offers no cogent reason for using Programming Minutes as the key group of variables and their associated coefficients as the basis for allocating royalties. Dr. Rosston states that the choice of Programming Minutes is sound because "it is based on the actual purchases" of distant signal programming available in 1998 and 1999. That contention is incorrect. To analyze what he describes as "actual purchases," Dr. Rosston should have done a separate analysis for each of the four accounting periods in the 1998-99 period. Instead, Dr. Rosston combines the Programming Minutes for all four accounting periods and uses an average in the NAB Regression Model. Averaging muffles the effects of what was actually paid in each period as well as what programming was actually carried.

Further, Dr. Rosston testified that average Programming Minutes were "reasonably related" to what cable operators were showing (presumably, content) which, in turn, related to consumers' decision to subscribe and the cable operators' pricing decisions. Rosston, tr. 2721. His assertion in this regard is, at best, empty because his model does not examine separately either the number of subscribers or the monthly subscriber rates, but lumps them in the Control Factors. When pressed further about his choice of variables, his principal rationale for using Program Minutes was not his review of pertinent texts or economic models, but prior objections to the use of viewing minutes in another regression analysis in another proceeding. Rosston, tr. 2722-23.

Dr. Rosston also lacks the experience necessary to judge the propriety of making Programming Minutes the key variables in a regression model purporting to calculate the implied shares of royalties. By his own admission, except for a handful of projects with, at most, tangential connections to the cable world, Dr. Rosston has no experience with how program choices are made by cable systems; has no experience with program valuation; has no experience studying cable subscriber or cable operator attitudes; and has no experience studying cable subscriber conduct. Rosston, tr. 2723-31.

Indeed, nothing in the record shows that he independently concluded that Programming Minutes were the key group of variables for use in the NAB Regression Model.

b. Programming Minutes explain little or none of the variations in royalty payments.

In regression analysis, the R-squared value indicates the extent to which an independent variable, or group of independent variables, explains the dependent variable. Frankel written rebuttal, 8. As stated, the NAB Regression Model utilizes two groups of independent variables

to explain variations in royalty payments: Programming Minutes and all other variables, collectively referred to as Control Factors. Frankel written rebuttal, 8.

Dr. Rosston did not bother to separate the individual impact Programming Minutes had as compared to the impact of Control Factors in explaining royalty variation. Rosston, tr. 2778. Aside from failing to follow what is standard procedure in statistics, this omission ignores his own claim that the model would "separate out the individual impacts of several factors [independent variables] on a key [dependent] variable." Rosston written direct, 5. Program Suppliers' witness, Dr. Frankel, undertook an analysis to separate the impact of each of the individual variables. This separation analysis showed that while the R-squared value for all the independent variables collectively used in the NAB Regression Model explain about 70% of the variations in royalty payments, the R-squared value for Programming Minutes alone shows it explains very little of the variations in royalty payments. Frankel written rebuttal, 9-10.

Dr. Frankel followed two statistical methods for determining the explanatory power of each independent variable (or group of variables) used in NAB's Regression Model. First, he recalculated the regression using only the particular variable to be isolated ("Single Equation Test"). Frankel written rebuttal, 9. Second, he ran the regression equation using all variables except the variable (or group of variables) to be isolated and compared that to the result that includes all variables. The difference in the resulting R-squared values shows the explanatory power of the isolated variable ("Dual Equation Test"). Frankel written rebuttal, 9. The Single Equation Test (with only the Programming Minutes variables included), for cable systems with positive DSE levels, produced an R-squared value of 0.0183; meaning only 1.8% of the variation in royalties is explained by Programming Minutes in the NAB Regression Model. Frankel written rebuttal, 9.

Using the Dual Equation Test for those same cable systems, the Control Factors (i.e., the non-program minutes variables) produced a R-squared value of 0.6883; meaning the Control Factors explain 68.83% of the variations in royalties. That result was then compared to the value in the full equation, an R-squared value of .7024, to determine that the Programming Minutes R-squared value is 1.41% (0.7024 - 0.6883 = 0.0141). Frankel written rebuttal, 9-10.

Dr. Frankel's results were similar for cable systems with DSE values of 1.0 or more.[11] Under the single Equation Test, the model produced a Programming Minutes R-squared value of 1.51%. Under the Dual Equation Test, the Control-Factors-only regression produced a R-squared value of 68.78% (effectively attributing 1.31% of the variations in royalties to Programming Minutes). Frankel written rebuttal, 10. When Dr. Rosston lumped together Programming Minutes and the Control Factors to come up with an overall R-squared value of .7024, he assumed most of it was due to Programming Minutes. When that assumption was tested, however, using generally accepted statistical techniques, it was found to be false. Programming Minutes explained very little of the variation in royalties; rather, the Control Factors were largely the cause of the variations.

Based on these R-squared results, Programming Minutes have a very low explanatory power, and thus, they cannot be the basis for royalty variation nor for allocating royalties.

3. The Highly Volatile Nature Of The Coefficients Associated With The Program Minutes Make The NAB Regression Model Results Unreliable.

When a regression model is properly specified (so that the explanatory variables explain the effect), one would not expect the regression coefficients to vary significantly with any

[11] Dr. Rosston performed regression analyses for two group of cable systems: (1) those with positive DSE value and (2) those with DSE values of 1.0 or more. Dr. Frankel replicated this approach.

changes in the non-key variables. Frankel written rebuttal, 11. Fragile and unstable regression coefficients offend sound statistical practice. Frankel written rebuttal, 16.

The Programming Minutes coefficients form the basis for Dr. Rosston's calculation of the shares of royalties for the different program categories. Thus, it seemed logical to test the sensitivity of the coefficients based on Programming Minutes which Dr. Rosston claims are key, to changes in the constitution of Control Factors, which he claims are not key. The NAB Regression Model fails miserably when examined in light of these standard statistical precepts.

Dr. Frankel undertook a sensitivity analysis by running six different regressions holding Programming Minutes constant, but varying the combination of variables constituting Control Factors. Frankel written rebuttal, Table 1, 13-15. Dr. Frankel's sensitivity analysis shows that changing the combination of Control Factors while holding the Programming Minutes constant causes dramatic shifts in coefficients that lead to absurdly variant royalty shares. For example, Variation 1 as reported in Table 1 of Dr. Frankel's written rebuttal testimony, shows only three of the five claimants should receive an allocation of royalties. Indeed, under that scenario, neither NAB nor PBS would receive any royalties. Under Variation 2, one claimant - JSC - would receive the entire share of royalties. Under Variations 4 and 5, only two claimants - NAB and PBS - would receive royalties. These results demonstrate further the invalidity of the NAB's Model as showing how royalties should be allocated. As Dr. Frankel observed:

> Relying on [NAB's] coefficients . . . which then become the input to producing the implied shares of royalties is something that is not scientifically appropriate. These coefficients have a great deal of fragility. By adding seemingly unrelated, or even a partially related variable, one can substantially change the final conclusions. *That means that the model is fraught with a lot of danger.*

Frankel, tr. 9466 (emphasis added).

This point is further emphasized in his written testimony:

> [T]he volatile nature of the programming minutes coefficients makes Dr. Rosston's regression very unreliable and the resulting implied shares of royalties unacceptable. The apparent fragility and instability of the coefficients suggest very strongly that from the standpoint of sound statistical practice, the use of these coefficients to inform the distribution of royalties is inappropriate.

Frankel written rebuttal, 16.

Exposure of these weaknesses demonstrates that the Panel cannot rely on the NAB Regression Model, and its resulting allocation of shares, as a guide for royalty distribution.

4. NAB's Regression Analysis Relies on a Flawed Time Study.

The NAB Regression analysis relies on Programming Minutes data compiled by NAB witness, Dr. Fratrik ("Fratrik Study"). Rosston written direct, 16. Reliance on the Fratrik Study is fatal because program time does not measure value, and because the study itself is flawed in form and execution.

a. Programming Minutes is an improper measurement of value.

An examination of previous decisions and the actual marketplace shows that program time is not a good measure of value. The 1978 distribution decision explicitly considered program time to be a secondary consideration. 45 Fed. Reg. 63,026 at 63,035. In fact, "in comparison to all other factors used in arriving at the final allocation for each category of claimants, [the time-related consideration factor] was given very limited weight by the Tribunal." *Id.* at 63036.

In the real marketplace, the amount of Programming Minutes is of little importance because not all minutes have equal value in the television industry. Programs having the same number of minutes will likely have different market valuations because such considerations as day-part, anticipated audience, and demographic appeal influence the value of a program. For example, a 30-minute program broadcast in prime time is most likely to be more valuable than a

30-minute program broadcast in the dead of night due to the larger potential audience watching television in prime time. Alexander, tr. 2287-91. Measuring only the minutes of broadcast captures none of these valuation factors. It follows that a study based on program time does not provide useful information about the comparative value of different programming.[12]

b. The Fratrik Study is flawed because the study uses an invalid sample.

> A probability sample is a sample selected in such a way that gives each element in the population a known, calculable, non-zero probability of selection. A random (without replacement) sample is a probability sample that is selected in such a way that gives each element in the population an equal probability of selection and gives all possible subsets of elements of a given population an equal probability of selection.

Frankel written rebuttal, 16.

The goal of sampling is to produce a representative sample of the population being studied. Fratrik, tr. 2437. A study's results can be projected to the population only if the sample is representative. With random sampling, each member of the population has an equal chance of being selected. Fratrik, tr. 2438. Moreover, a random sample will produce an unbiased estimation of the population means, proportions and totals. Frankel written rebuttal, 17; tr. 9354. While the Fratrik Study purports to offer a representative sample of the days in each year studied, Dr. Fratrik did not select days on a random basis.

A party that claims that a sample is a probability sample must demonstrate explicitly "how the selection process produces the required known and calculable probabilities of selection." Frankel written rebuttal, 17; tr. 9356. The Fratrik Study fails to follow this

[12] For this reason, time-based studies have been consistently rejected in past royalty distribution proceedings. *See* 1979 Cable Royalty Determination, 47 Fed. Reg. 9879, 9900, n.488 ("The substance of NAB's claim, stripped of its patina of sophistication, is time alone.")

commonly accepted statistical principle. Although Dr. Fratrik explains the sample selection process, he fails to explain how that process leads to calculating the probabilities of selection.

To create his study sample, Dr. Fratrik sought to include the different days of the week on a proportionate basis. To do this, he used two-month increments from which he selected dates to represent each day of the week. For example, he picked from the January – February 1992 increment, a Monday, a Tuesday, a Wednesday, a Thursday, a Friday, a Saturday, and a Sunday. This results in 42 days selected (6 two-month periods x 7 days of the week) for each of the three years (1992, 1998, 1999) being analyzed. For each two-month increment across 1998 and 1999, Dr. Fratrik alternated the weekday selection, so that if in 1998, he selected three days (Tuesday, Thursday, and Saturday) from January, and four days (Monday, Wednesday, Friday, and Sunday) from February, he would reverse that selection process for the February 1999 selection. Consequently, the sample selected 84 days (12 two-month increments x 7 days of the week) across these two years. NAB Ex. 10, 6-7.

The Fratrik sample selection method is not a commonly used method of probability sampling. Frankel written rebuttal, 17. To have a probability sample, one must be able to "calculate and literally reproduce the process to draw the sample." Frankel, tr. 9356. Generally, random sample selection is done by picking every nth selection from the population (for example, picking every 5th person in a class of 50). Of course, where to start the selection process and what skip interval to use are determined according to recognized statistical techniques. JSC Ex. 1 at 47. Here, as noted, a particular order of selection was followed with pre-determined parameters. Further, in the 1998-99 selection, Dr. Fratrik reversed the months in which certain days were selected within the two contiguous months limitation. In other words, if

he selected a Monday in January 1998, the Monday selection for January-February 1999 would be selected from February. This further restricted the dates that could be chosen.

A probability sample or a complete census is required to produce reliable results that can be projected to the whole population. A census measures all the days of the year, as was done in the Nielsen Viewing Study, to provide reliable results. In contrast, there is no statistical basis for assuming the results of the Fratrik program time study[13] are representative or that its results are reliable.

The Fratrik Study sample most resembles a purposive sample where the characteristics of the resulting sample are pre-determined. A purposive sample, however, is not a probability sample. Frankel written rebuttal, 17. Here, the days chosen to represent programming in entire years were chosen purposefully. A Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday were separately selected for January-February 1992; for March-April, 1992; for May-June 1992, and so forth. NAB Ex. 10, 6-7. This selection had two predetermined characteristics - - including all days of the week and using two-month increments - - that would not be present in a random sample selection for an entire year. Fratrik, tr. 2437-38, 2446-48, 2453-56. In the Fratrik Study, not every day in a year had an equal chance for selection, making this a non-random sample. Moreover, if as it appears, the sample is a purposive sample, the sample similarly would not be a probability sample. Frankel written rebuttal, 17.

c. The Fratrik Study weighting methodology is inappropriate.

One must also question the propriety of weighting program minutes by subscribers to provide a purported measure of distant programming valuation. In addition to not being an expert in statistics, Dr. Fratrik also has no experience with measuring the value of programming

[13] One measurable effect of not using a probability sample is the over-representation of holidays, as is evident in the Fratrik Study sample. Fratrik, tr. 2468-70.

on distant signals. Fratrik, tr. 2188. In fact, when questioned about the reason for weighting program minutes by subscribers, Dr. Fratrik gave no reason for doing so other than his intuition. Fratrik, tr. 2482-84. Without experience in the industry, the reasonableness of Dr. Fratrik's intuition on this point is questionable.

Basing conclusions on subscriber-weighted program time, equates value with availability even though availability does not indicate consumption, or use, by subscribers. Ducey, tr. 1756. Finally, subscriber-weighting ignores factors, such as the must-carry rules, that can artificially increase the number of subscribers receiving some distant signals beyond what cable operators would voluntarily choose to offer. The Fratrik Study weighting makes no allowances for these effects

d. The Fratrik Study flaws affect the NAB Regression Model.

The effects of the subscriber-weighting system on the program data and the unreliability due to the non-probability sample are magnified because the NAB Regression Model uses the Programming Minutes in two ways. First, the program minutes data are included in the NAB Regression Model to derive the various Programming Minutes coefficients. PS Ex. 2-R.[14] They are used a second time when the coefficients are multiplied by the minutes. Rosston written direct, 23. As Dr. Rosston conceded, if the Fratrik Study failed as a representative study of available programming during the 1998-99 period, such a defect absolutely would have an impact on the NAB Model. Rosston, tr. 2689. Because the Fratrik Study is flawed, the NAB regression analysis is also flawed.

[14] The NAB regression analysis only used weighted program minutes from systems with positive DSEs, however.

B. The NAB Regression Model is a Flawed Economic Model.

1. The NAB Regression Analysis Does Not Simulate the Marketplace.

This proceeding is intended to allocate royalties based on a simulated free market. The NAB Regression Model does not address this task, but focuses on how *actual* program minutes and other *actual* variables affected royalty payments actually made by cable operators in 1998-1999. That is, it addresses what occurred in a regulated market, not what would be expected in a free market. While the allocation of statutorily-prescribed royalties may be an interesting exercise, it is irrelevant to the task of allocating royalties based on a simulated free marketplace.

NAB's regression analysis attempts to assess the "relative value of the different programming carried on distant signals." Rosston written direct, 5, by analyzing the royalties paid by cable systems.[15] Rosston written direct, 7, 11. Dr. Rosston's regression equation purports to represent how royalties change as a result of marginal change in Programming Minutes variables. Rosston written direct, 8.

It is evident from its stated purpose that NAB's regression equation was designed to and could measure value only within the existing royalty scheme. "Value" in the context of this regression means the extent to which the identified variables affect variations in royalty payments. That definition of value is not one that can be used for distribution purposes because it fails to invoke what programming would be worth in a simulated free market analysis:

> The Panel is not charged with explaining the variations in royalty payments. Instead, it is supposed to simulate the market value of programs as if compulsory licensing did not exist. The royalty rates were established by Congress and not determined in the marketplace. The model provides no evidence to address [the proper] issue because it does not measure nor even address the market value of different categories of programming on distant

[15] Dr. Rosston does not use the actual royalties paid in any of the 1998-99 accounting periods, but employs an average of the payments over all four periods. He does the same for Programming Minutes.

> signals. At best, the model can only explain the allocation of non-market-determined royalty payments.

Gruen written rebuttal, 4.

The question NAB seems to be asking is, "What factors within the compulsory license scheme during the 1998-99 period affected the royalties actually paid by cable systems?" This question and the required response is necessarily confined to the royalty payment scheme that existed in 1998-99, and not to value of programming in a simulated free market analysis. Consequently, NAB's regression has no place in the Panel's deliberations, and should be disregarded.

2. The NAB Regression Analysis Contains Errors That Makes Its Conclusions Unusable for the Purpose of Allocating Royalties.

a. The NAB Regression Model contains specification errors.

Even assuming that the question asked by NAB's regression analysis is the right one, it is misspecified as to what drives royalties. It assumes variations in royalties are largely due to variations in Programming Minutes, but such variations have little or nothing to do with royalties. Further, it ignores the Number of Subscribers variable, which is the principal determinant of royalty variation, but which nonetheless offers little insight as to how royalties should be allocated to program categories.

Royalty payments are a function of the gross receipts from cable service tiers containing broadcast stations, and the DSE value assigned the type of distant signal (*i.e.*, Network Affiliate, Independent or Educational). Kessler written direct, 13-19. Gross receipts are a function of the number of subscribers and the monthly fees charged the subscribers for the applicable tiers. As "[a]cross cable systems, there is far more variation in subscriber count than in the number of DSEs or monthly fees," it follows that subscribers account for most of the variations in royalty payments. Gruen written rebuttal, 5.

NAB's regression analysis ignores this reality as the primary explanatory variable to its model, and, instead, claims Programming Minutes drives royalty variations. Programming Minutes explain, however, only in the range of 1.5% of the variation in royalty payments. Frankel written rebuttal, 9-10. Although Programming Minutes play a demonstrably incidental role in the determination of royalties, NAB chose those coefficients as the basis for calculating the implied shares. In contrast, the Control Factors, which include the Number of Subscribers, are by far the principal determinant of the variation in royalty payments. Gruen written rebuttal, 6. As noted, they account for about 68% of the variation in royalties. Despite their importance to royalty payments, the Control Factors are not useful to the task of allocating royalties to program categories because they have no direct connection to program categories.

In sum, NAB's regression analysis suffers from specification error because it assumes Programming Minutes, which have an insignificant effect, are the most important variables, and it ignores subscriber counts, which while important to royalty variations, are not a useful factor for allocating royalties among program categories.

b. NAB's Regression Analysis suffers from interpretational error.

NAB's conclusions suffer from interpretational error because Dr. Rosston misinterprets the value concept represented by the results of the NAB Regression Model. To illustrate this error properly, three value concepts are pertinent: marginal or incremental value, average value, and total value:

> Marginal or incremental value is the value of the last unit. Average value is the value of the 'typical' unit, giving equal weight to all units, not just the last unit. It can be calculated by dividing total value by the number of units. Total value is the cumulative value of all units. It can be calculated by multiplying average value by the number of units.

Gruen written rebuttal, 7. Marginal value would equate to average value only if the value of all units are the same. Gruen written rebuttal, 7. Because beyond a certain point, each additional

unit adds incrementally less to total value in general, the average value of all units would be substantially higher than the marginal value of the last unit. Rosston, tr. 2795; Gruen written rebuttal, 7.

The NAB Regression Model measures the marginal or incremental value of the independent variables. The coefficient for each independent variable in NAB's Regression Model measures the contribution of the marginal value of the last unit of each category's Programming Minutes to the value of the dependent variable (royalties), holding everything else constant. Gruen written rebuttal, 7. For example, the coefficient associated with Minutes of Commercial TV Programming (*i.e.*, NAB Programming) is .152. Rosston written direct, 19. This means that the last *additional* minute of NAB programming on distant signals would contribute $0.152 (15 cents) in royalties, all else equal. Similarly, the coefficient for the Number of Subscribers variables, which is .765, indicates that the last subscriber would contribute approximately 77 cents in royalties, holding everything else equal. Gruen written rebuttal, 7.

While Dr. Rosston recognizes that the coefficients represent the value of the incremental or marginal unit, he misuses them as representative of average value when calculating the purported total value for each programming category. To determine total value, Dr. Rosston multiplies each category's coefficient by its total Programming Minutes. Rosston written direct, 23.[16] As total value equals average value multiplied by units, his calculation puts the coefficients in the place of the average value with the Programming Minutes as the number of units. This calculation would be correct only if the coefficient for each program category, which represents

[16] Although basic economics and Dr. Rosston's own written testimony confirm that he is calculating total value for each programming category, Dr. Rosston disclaimed this position when questioned about it on stand. Rosston, tr. 2808-2810. Instead, he claimed that what he calculated was relative value.

its marginal value, is the same as the category's average value. Gruen written rebuttal, 8. That, however, is not the case.

NAB presented no evidence to show that the incremental or marginal value for each program category is the same as its average value. In fact, for each programming category, the average value of all programming minutes would be substantially higher than the marginal value of the last programming minute. Because the coefficient (marginal value) for each programming category is substantially lower than the category's average value, the product of the coefficient multiplied by the Programming Minutes for each category as computed by Dr. Rosston necessarily undervalues the total value of that category. Gruen written rebuttal, 8-10.

This assumption not only violates a fundamental economic principle of diminishing marginal utility but also leads to absurd results. If, as his results indicate, sports has the highest coefficient value, cable operators would choose to carry only sports because that would produce, under his calculations, the highest total value, for the available units of Programming Minutes. Cable systems do not behave this way in the real world:

> The reason such behavior is not exhibited in the real world is that homeowners, television station managers, and cable system operators receive diminishing marginal utility from adding another unit of the same product to what they already have. This reality is a key factor in their decision-making process.

Gruen written rebuttal, 10. Because Dr. Rosston's calculation does not reflect real world decisions, it is invalid as a means of showing how programming would be valued.

Further, using the coefficients to compute total value also makes comparisons among categories practically impossible. Program Suppliers Programming Minutes are approximately three times that of PTV, more than four times that of NAB, 16 times that of JSC, 18 times that of the Devotionals and nearly 30 times that of Canadians. As a result, Program Suppliers' total value calculation suffers the greatest degree of understatement because the difference between its

marginal and average values would be the largest of all categories. Gruen written rebuttal, 10-11.

c. NAB's regression analysis does not fully utilize the regression results.

NAB's regression analysis suffers from calculation error in that Dr. Rosston failed to fully utilize all the results of the regression equation to calculate royalty values. The NAB Regression Model uses Programming Minutes and Control Factors as independent variables, but in calculating royalty shares, Dr. Rosston used only the regression coefficients for Programming Minutes and ignored those for Control Factors. Three of the regression coefficients for Control Factors – Subscribers, Indicator for Special 3.75 Royalty Rate and Indicator for Partially Distant Signal – are statistically significant. Rosston written direct, 19; Gruen written rebuttal, 14.

Moreover, NAB's calculations failed to calculate royalty shares for Canadians and Devotionals based on their regression results. The coefficients for the Programming Minutes associated with Devotionals and Canadian were negative, but in his royalty calculation, Dr. Rosston arbitrarily assigned zero values to these categories. Dr. Rosston not only failed to explain what his negative coefficient values meant, but also failed to explain the basis for assigning zero royalties to Canadians and Devotionals without making any adjustment to the regression results. Indeed, by assigning these zero values, Dr. Rosston substituted preferred results for the NAB Regression Model's actual results.

In any event, when the statistically significant Control Factors coefficients are included in the royalty share calculations, the resulting shares do not vary much by category, (although Canadians and Devotionals would have a positive valuation). Using the statistically significant Control Factor coefficients in the calculation further highlights the relatively insignificant role that Programming Minutes plays in royalty variation. Gruen written rebuttal, 12-13. In addition,

it demonstrates that Dr. Rosston could have, but did not, fully utilize all results of the NAB Regression Model, presumably because a fully-utilized NAB Regression Model would offer no useful information in how to allocate among program categories.

C. NAB' S Share Must be Adjusted Downward No Matter Which Study is Adopted to Determine Royalty Shares for the Parties.

As demonstrated above, the NAB's regression analysis is an unreliable methodology upon which to base the royalty awards. The testimony of NAB witness, Marcellus Alexander, is replete with evidence not only that NAB's programming has lesser value than what is indicated by NAB's regression analysis and the Nielsen Viewing Studies, but also evidence that the value of NAB's programming has declined markedly since 1992. The record shows that news, which represents a substantial portion of NAB's programming, is recycled, repeated, and shared in sequential telecasts on the same station. Moreover, during the period between 1992 and 1998-99, the increased number of news sources, including regional cable news networks, 24-hour basic cable network, and the internet reduced subscriber interest in obtaining local news from distant signals. Consequently, even assuming that NAB's regression analysis was not plagued with severe problems and that its implied shares were acceptable, the NAB Regression Model does not capture the reduced value of NAB's programs. While the avidity adjustment to Nielsen viewing numbers offers a means to account for some of the decline in value, further downward adjustment to NAB's share is needed to reflect fully the admitted reduced value of NAB's programs.

NAB's programs are largely alike, repetitive, and recycled. NAB Exhibit 9 provides listings of programming for two network affiliates: WJZ in 1998 and KYW in 1999. The local programs on the listing are representative of NAB programming on network affiliates during the

1998-99 period.[17] Alexander, tr. 2311-12. A review of the program titles demonstrates that eight of the 11 local programs identified on each station's list are newscasts. In addition, both stations aired 5:30 a.m. half-hour newscasts followed by hour-long newscasts at 6:00 a.m. Both stations aired newscasts at noon as well as at 5:00 p.m., 6:00 p.m. and 11:00 p.m. Indeed, the large number of newscasts in the program listings further corroborates the fact that the substantial majority of the programming claimed by NAB is local news. This belies NAB's claim, Alexander written rebuttal, 2, that it offers diverse programming.

Moreover, portions of these seriatim newscasts were repeated or recycled. For example, stations repeated portions of the late night (11:00 p.m.) newscasts during the next day's early morning newscast. Alexander, tr. 2314-15. Segments of the first morning newscast (at 5:30 a.m.), typically, were also repeated during the subsequent morning newscasts. Carey written direct, 8.

In addition to using their own recycled news, stations also received and used, within their newscasts, shared news from other sources. Those additional sources of shared news included news segments that had aired on other stations; news from national and regional news services such as CNN; and portions of news which had aired on affiliated networks. Alexander, tr. 2306-08; Carey, tr. 6866-68.

The local news faced increased competition between 1992 and the 1998-99 period. Mr. Alexander testified that the emergence of new regional cable news networks created another local news option for viewers and affected the level of interest in and viewing levels for local news from distant signals. Alexander, tr. 2323-27. These regional news networks competed with distant signals for news viewership both within the local market and within the region.

[17] The overwhelming majority of NAB's programs aired on network affiliate stations. NAB Ex. 46-RX.

Alexander, tr. 2328. Furthermore, basic cable news networks, such as, CNN, MSNBC and CNBC and specialty channels such as the Weather Channel, also competed increasingly with news on distant signals between 1992 and 1998-99. Alexander, tr. 2330-31. The internet also provided a source of news by providing instant access to news as events happened, instead of at the next scheduled newscast on a distant signal. Alexander, tr. 2336-38. The emergence of regional sports networks between 1992 and 1998-99 similarly created competition for station-produced sports programming and sports segments within news programs. Alexander, tr. 2351.

Mr. Alexander conceded that the competition posed by the increased availability of news from other sources was responsible for about a 5% - 10% drop in the viewing levels for news programs on KYW and WJZ. Alexander, tr. 2388. Although Mr. Alexander did not provide any estimate of the extent to which competition affected viewing levels for other broadcast stations, he conceded that, in general, other broadcast stations experienced declines in viewership similar to KYW and WJZ. *Id.*

Increased competition for delivery of news was real and significant between 1992 and 1998-1999, with the Internet and 24-hour basic cable, and regional cable news networks offering almost instantaneous news. It is logical that local news on distant signals would not return the same value to its viewers as it had in earlier years. When news breaks at 9:30 p.m., viewers can go to 24-hour services or online instantly. They no longer have to wait for the 11:00 p.m. news program on a distant signal to find out what happened.

The value of NAB's recycled, repeated and shared news programs on distant signals was greatly diminished by increased competition in 1998-99. Accordingly, whatever objective numbers result for NAB must be adjusted downward. Program Suppliers believe the appropriate

X. PUBLIC TELEVISION SHOULD RECEIVE THE FEES PAID BY CABLE OPERATORS TO CARRY PTV STATIONS AND NO MORE.

At various times in the proceeding it has been difficult to determine the precise position of the PTV claimants regarding the appropriate basis for its royalty distribution, other than that its share should rise dramatically. PTV has asserted that the Panel should (1) look to the Bortz Survey, and adjust it upward, Fairley, tr. 10380-81, (2) not look to Bortz because it is unreliable, Johnson, tr. 9125, (3) engage in an analysis of subscriber instances, with subscriber instances valued the same for PTV as for commercial television (PTV's asserted "parity"), Johnson, tr. 9175, (4) follow a time analysis, Johnson, tr. 9175 and (5) look to relative shares of viewing, Johnson, tr. 9177, after PTV determined that PTV's viewing shares as reported by Nielsen were sufficiently high. PTV's diverse assertions in this proceeding copies its approach in several past proceedings, where it has advanced numerous theories in an effort to obtain an increased share. *See* Johnson, tr. 9174-75.

PTV's claim relies on the notion that PTV is similar to other types of programming carried on a distant basis and can be valued similarly. PTV differs markedly from the other Phase I program categories as exemplified by PTV's charter, which is to "educate and enlighten" by broadcasting the type of programming that is not commercially viable. Even one of PTV's slogan's highlights that PTV is different from commercial television: "If we don't do it, who will?" PTV Ex. 6. There is a simple economic reason why others will not "do it" – PTV programming would not succeed in a free market. Because of this unassailable fact. PTV programming has a marketplace value that is dramatically lower than other program categories.

The facts are striking. As a distant signal, PTV is rarely carried and not highly valued by cable operators; rather, some of its distant carriage is due to legislation that forces certain cable operators to carry it on a distant basis. On the other hand, PTV stations are widely available as

local signals. These facts, viewed objectively, lead to a conclusion that there is no parity between PTV and Program Suppliers or Sports programming, and likely no parity between PTV and local NAB programming. PTV must be treated separately from these categories in a manner substantially similar to Canadian claimants. In sum, PTV's distribution should equal no more than the fees generated by distant carriage of PTV stations.

A. Quality Is Not An Appropriate Criterion On Which To Base An Award.

PTV devotes a great deal of its direct testimony discussing the quality of its programming. Wilson written direct, 26-27; Fuller written direct, 17. However, this subjective criterion cannot be appropriately used to base an award of the royalty funds. Further, no evidence suggests that PTV programming is of any greater "quality" than other categories of programming. *See, e.g.,* Green written direct, 16 (discussing substantial quality of production for series and movies). Indeed, syndicators seek to offer quality programs that abstract large numbers of viewers. Finally, the CRT rejected the quality as a criterion for determining royalty distribution. 57 Fed. Reg. at 15303.

> Quality has been a secondary criterion in the Tribunal's allocation decisions since the first proceeding. Evidence on quality has been received, but ultimately no distribution decision has been made on quality. The reason should be clear. It is a subjective evaluation with serious First Amendment implications.
>
> ********
>
> In this proceeding and in future proceedings, quality will no longer be a criterion in the Tribunal's distribution because of its conflict with the First Amendment.

1990-92 CARP Report, at 20 (quoting 1989 CRT Report).

As a result, PTV's discussion of the quality of its programming is irrelevant for purposes of royalty distribution, and would not outweigh the objective evidence that PTV is retransmitted to a small number of cable subscribers despite its low cost, is watched relatively little, and has

suffered audience erosion due to higher priced "look-alike" cable networks that provide subscribers with what they want.

B. PTV's Relatively Low Carriage Reflects Its Relatively Low Value.

PTV is carried on a distant basis by only 23% of Form 3 cable systems. Fuller, tr. 3312. As demonstrated below, many of these systems are required to carry a distant PTV signal by the must-carry rules. The 23% of cable systems carrying PTV serve only about 10% of the cable subscribers nationwide, meaning, cable operators representing nearly 90% of cable subscribers choose not to carry PTV on a distant basis. *Id.* Those percentages stand in stark contrast to the virtually unanimous choice of cable systems to carry distant signals with syndicated series and movies. This demonstrates the lack of parity between distant PTV programming and syndicated series and movies. Carriage of the local PTV stations is considered sufficient by the vast majority of cable operators for purposes of their subscribers. PTV's claimed parity of program value is specifically contradicted by this empirical evidence of the lack of distant signal carriage of PTV.

C. Cable Operators Assign Low Values To PTV, Further Confirming That PTV Programming Is Not Highly Valued.

The lack of parity is evident from the Bortz Survey of cable operators. Cable operators routinely assign PTV relatively low values, consistent with the low amounts paid by cable operators to carry PTV programming. The attitudes of cable operators is demonstrated by JSC Exhibit 56-RX, which demonstrates that Bortz respondents value PTV in nearly the exact same percentage as the percentage of royalty fees attributable to the carriage of PTV paid by those systems. *Id.* Specifically, for 1998, PTV royalties as a percentage of total royalties paid by Bortz respondents was 12.5%, then reported value for distant PTV was 12.2%, a 97.0% correlation. For 1999, the results are similar, with PTV as a percentage of royalties calculated at

13.2% and the responding cable operator value reported to be 14.1%.[18] Again, a very close correlation. *See* JSC Ex. 56-RX. These exhibits confirm that PTV is valued at about what the cable operators pay to carry it. Accordingly, under the Bortz methodology, PTV should receive the amount of fees generated by its distant carriage.

D. Must Carry Legislation Inflates The Amount Of PTV Carriage.

Subscriber instances for PTV and instances of carriage grew slightly since the 1990-92 proceeding. Johnson written direct at 10, 13. While it is impossible to determine precisely, it is likely that this growth has been fueled, in large part, by 1992 must-carry legislation that requires certain cable operators to carry PTV on a distant basis. Two items in evidence lead to the conclusion that the increase in PTV carriage results from the reinstatement of the must-carry rules.

Statements made in PTV testimony before congressional committees clearly and unequivocally demonstrate that absent the mandate of the must-carry rules, cable operators had little interest in carrying distant PTV stations. *See* JSC 57-RX, (June 27, 1991 testimony of Henry P. Becton, Jr., President and General Manager, WGBH Educational Foundation, the nation's largest public broadcasting outlet on behalf of the "Public Television Claimants.") Mr. Becton endorsed the then-pending must-carry rules, citing numerous examples of cable system operators that chose to drop PTV from their systems. "At one point in 1983, close to one hundred public television stations found themselves dropped by cable operators." *Id.* at 3. Indeed, without must-carry legislation, Public Television recognized that cable system operators would simply refuse to carry PTV.

[18] These results also exclude those respondent operators that assigned PTV zero value even though their systems carried PTV on a distant basis.

- Since the elimination of must-carry rules, cable systems have operated under the threat of must carry legislation or FCC rules, as well as industry warnings to be good actors.

- Market incentives will prompt cable operators to drop public television stations in an unregulated environment or one in which there is no fear of pending regulation. As commercial enterprises, cable systems lack the incentives to carry programming that does not attract sufficient dollars or audience. Public television, in fulfilling its mandate to serve those audiences not served by commercial enterprises, carries precisely the programming that cable systems find economically unattractive.

Id. at Attachment 1. Cable operators' lack of interest in distant PTV signifies a lack of value, as acknowledged in PTV testimony that its programming is "economically unattractive." *Id.*

A second indication that distant PTV growth is fueled by must carry rules relates to the marked increase in the number of partially distant PTV signals between 1992 and 1998-99. Must-carry rules apply in situations where a cable system has fewer than 36 channels and no local PTV signal. This often occurs where a PTV station is local to some subscribers on the system, but is distant for other subscribers who live outside the "local" area of the PTV station. In those cases, the PTV station can require that it be retransmitted to those non-local subscribers under must carry rules. When that happens, the cable system will report that the PTV signal is "partially distant", *i.e.*, local to some subscribers, but distant to others.

JSC Ex 24-X shows the system configuration for cable systems carrying distant PTV signals in 1992, 1997, 1998, and 1999. Partially distant PTV carriage dramatically increased over that period. In 1992-2, 97 cable systems carried at least one PTV signal on a partially distant basis. That number increased to 155 in 1998-2 and to 161 in 1999-2, increases of 60% and 66%, respectively.

Accordingly, PTV's testimony before Congress and the empirical data demonstrate that PTV's increased carriage is due to congressional protections afforded the economically unattractive PTV, not a marketplace determination that PTV distant carriage has value.

E. PTV's Nielsen Viewing Shares Are Overstated And Must Be Adjusted To Account For PTV's Lack Of Avidity.

Due to the lack of subscriber interest in PTV programming relative to other types of programming, PTV shares are subject to a significant avidity adjustment. Viewer avidity for distant PTV is the lowest of the four Phase I claimant categories examined. This low avidity further confirms that PTV is available in a greater proportion than interest in carrying or viewing it. When the avidity adjustment is made to the viewing results, PTV's viewing in 1998 is nearly identical to the amount paid for the carriage of PTV stations, and slightly higher for 1999.

Accordingly, raw viewing data overstates the appropriate PTV share. When adjusted for low avidity, PTV's viewing share, along with the evidence derived from the Bortz Study and a wealth of other objective evidence, support an award to PTV of no more than the amount paid to carry it.

F. The Fees Paid To Carry PTV Can Be Identified And Are The Appropriate Award To PTV.

Because PTV and the Canadian distant signals occupy an entire signal, the fees paid for PTV and Canadian distant carriage can be readily determined. The same is not true for any other claimant category. As demonstrated in the testimony of Program Suppliers witness Jonda Martin and Canadian witness David Bennett, actual royalties paid to carry PTV can be determined. In Exhibit CDN-R-1-C, Mr. Bennett shows that the following amounts were paid by cable system operators for the carriage of PTV under the compulsory license.

Educational Fees – All fees except minimum fees.

1998-1	1998-2	1999-1	1999-2
1,250,643	1,337,503	1,379,184	1,401,169

Thus, PTV's award should be no more than $2,587,936 for 1998 and $2,780,353 for 1999. Those amounts represent 3.35% and 3.41% of all fees without regard to any minimum fees for the years 1998 and 1999.[19] That is the appropriate award to PTV. To the extent it is determined that PTV should also participate in a distribution of minimum fee payments, PTV should participate in the same percentages.

G. The Evidence Of Marketplace Value Submitted By All Phase I Claimants Precludes An Award To PTV In Excess Of The Fees Paid for PTV.

As the foregoing should make clear, the evidence supports an award for PTV of fees paid to carry PTV. A corollary, but no less important point, is that the record evidence effectively precludes an award to PTV of any amount greater than fees paid for its carriage. The point is simple to illustrate: if PTV receives more than the fees paid for its carriage, it receives some portion of the fees paid for distant carriage of other programming. That specific result requires a finding that another category of programming is less valuable than the fees paid for its carriage.[20] No record evidence supports such a finding. Conversely, evidence supports the opposite conclusion.

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[19] 2,587,936 ÷ 77,148,906 = 3.35%; 2,780,353 ÷ 81,456,044 = 3.41%. These calculations are based on all distant fees. If we exclude the 3.75% and Syndex fees identified in exhibits CDN-4-B for 1998 and 1999 and express the percentages simply as a percentage of the basic fund, the percentage amounts increase to 3.82% for 1998 and 3.90% for 1999.

[20] Indeed , PTV may argue that the relative value of its programming is greater than the relative value of another program category – *e.g.* that it was worth three times the fee paid and local television was worth only two times the fee paid. Such an argument would be wholly specious in that there is a wealth of record evidence to support a finding that PTV is not valued any higher than the royalty fees paid to carry it. PTV's witness Leland Johnson effectively precludes PTV from claiming fees in excess of what was paid for PTV carriage by advocating "parity" with other program categories or something slightly less. Johnson written direct, 16. Other evidence (such as Mr. Becton's congressional testimony) suggests that other categories of programming have a relatively higher *marketplace* value than PTV. This would support reducing PTV's award to some amount less than the amount paid for its carriage.

For example, the instances of distant subscribers to PTV is barely 10% of all Form 3 cable subscribers. If PTV added value above the cost to carry it, the subscriber instances would be expected to be higher. Comparatively speaking, independent stations generate 88.64% of all royalty fees, while PTV stations generate only 3.3%, a ratio of 27 to 1. The 27 to 1 relationship occurs despite the fact that independent signal is four times as costly as a PTV station to the cable operators by virtue of the 1.0 DSE applicable to independents as opposed to a 0.25 DSE for PTV. Martin written direct, 9. Independent signals, the majority of which broadcast a heavy slate of Program Suppliers content, are markedly more valuable than PTV.

Also, after its conversion to a cable network, TBS programming commanded cable network license fees approximately three or four times greater than was paid for its carriage as a distant signal. WTBS's value under the compulsory license was based on its 1.0 DSE, already four times PTV's DSE value. Accordingly, a measure of actual marketplace value for TBS's syndicated programming would be an amount of at least 12 times and as much as 16 times the PTV royalty fee.[21] As the vast majority of TBS's programming is syndicated series and movies, this shows their high value in a free market.

No award in excess of the fees paid for carriage of PTV can be diverted from fees paid to retransmit Program Suppliers programming because PTV programming is relatively less valuable. Therefore, an award greater than fees paid for carriage would be arbitrary and unsupported.

[21] Three or four times 1.0 DSE = 3.0 to 4.0. PTV = .25 DSE. Therefore, the marketplace valued the programming appearing on TBS at 3/.25(12) to 4/.25(16) times the programming appearing on a PTV signal.

H. Dr. Fairley's Adjustments To The Bortz Study Shares And Underlying Analysis Are Meaningless And Unwarranted.

Dr. Fairley's testimony on behalf of PTV attempts to construct a theory under which PTV can receive more than fees paid for carriage of PTV stations without showing PTV programming is more valuable than another claimant category. This is an impossible task. Accordingly, Dr. Fairley's theory provides no support for a PTV award above the fees paid for PTV stations. In any event, numerous theoretical and analytical problems with Dr. Fairley's testimony render it useless.

1. The so-called WGN Adjustment advocated by Dr. Fairley is not supported by record evidence.

Program Suppliers do not support use of the Bortz Study results as an appropriate basis for a distribution. However, Program Suppliers must address the misguided downward adjustment proposed by Dr. Fairley to Program Suppliers' share under the Bortz Study. Dr. Fairley proposes to reduce the Program Suppliers' Bortz Study share purportedly because he believes that the Bortz respondents did not account for substituted, and thus non-compensable, programs on WGN. This is nonsense and Dr. Fairley mixes separate methodologies that have no logical or real world connection to conjure up a reduction for Program Suppliers.

Dr. Fairley's flawed and unsupported syllogism posits: 1) that Bortz respondents do not know how long-standing Syndex rules work to preclude distant retransmissions of certain programs on WGN; 2) that if cable operators were made aware of these allegedly unknown facts during the survey, their opinion of the value of compensable series and movies on WGN would change; and 3) that such change would be manifested as a straight line reduction in the reported value for syndicated series and movies corresponding to the time-based study of how much programming was substituted on WGN.

Significantly, no record evidence supports any of Dr. Fairley's assumptions. First, no evidence shows the Bortz respondents were unaware of the syndication exclusivity rules, which have been in place since 1991 or that they were unaware of WGN's highly publicized and long-standing practice of substituting for Syndex protected programs. Second, there is not a shred of evidence to support the assumption that any Bortz respondent needed to or would have changed his or her opinion of the value of the syndicated series or movies categories in the unlikely event they had been unaware of WGN's practice, as Dr. Fairley admitted. Fairley, tr. 9989. Finally, even assuming PTV could establish evidence supporting Dr. Fairley's first two assumptions, nothing in the record supports the claim that all Bortz respondents would employ the same time-based analysis to reduce their valuation responses for WGN syndicated series and movies that Dr. Fairley used to make his unwarranted adjustment.[22] Fairley, tr. 9944. To presume they would is rank speculation. Dr. Fairley also mixes apples and oranges by attempting to use time, an empirical measure, to adjust for a cable operators' subjective opinions of value.[23] The reality is that WGN's program substitution is long-standing and well known, (e.g., TV Guide lists the substituted programs in distant markets)[24] making it highly likely Bortz respondents were aware of it when they gave their valuation responses. *See* PTV Ex. 13-X; PTV Ex. 14-X.

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[22] Dr. Fairley also failed to engage in a similar analysis regarding Sports and devotional programming, categories where Syndex or sports exclusivity rules also apply and where the evidence shows there was also program substitution. This gives further support to the notion that Dr. Fairley's adjustments are unwarranted as incomplete and not consistently applied.

[23] Another example of Dr. Fairley's inconsistency is his failure to adjust PTV's shares downward based on the fact that PTV stations, on average, do not broadcast 24 hours per day, but only for 20 hours. This amounts to approximately 17% of the PTV broadcast day that is not compensable. Had Dr. Fairley consistently applied his flawed theories, he would have also reduced the PTV Bortz reported valuation by 17%.

[24] In addition, cable royalty rates were established on the basis that a certain percentage of programming on distant signals would be blacked out because of the Syndex (and sports exclusivity) rules. *See* 17 U.S.C. §801(b)(2)(C).

In sum, there is simply no basis on which to conclude that Dr. Fairley's approach is an appropriate way, either factually or methodologically, to adjust the Bortz Study results. Accordingly, the adjustments to Program Suppliers' Bortz Study shares advocated by Dr. Fairley are unsupported and cannot be used.

2. PTV goes up when there is no retransmission even though Program Suppliers go down.

Ignoring the lack of consistency with his WGN adjustment to Program Suppliers shares, Dr. Fairley advocates an upward adjustment to PTV shares for cases where the cable operator chooses not to retransmit a distant PTV signal. Fairley, tr. 9930-31. The inconsistency is highlighted by this comparison. On one hand, Dr. Fairley would reduce Program Suppliers' share for WGN even though cable operators must pay a full 1.0 DSE royalty rate for WGN with the substituted programs. Yet, on the other hand, Dr. Fairley would increase PTV's share based on stations that are not carried and for which cable operators pay absolutely no royalties. Apparently, non-retransmission of a distant PTV signal has value to a cable operator that requires an increase in the Bortz share, whereas non-retransmission of a particular Program Supplier's program requires a straight-line, time based reduction to the Bortz share. Even if these could be reconciled, Congress foreclosed Dr. Fairley's PTV adjustment by providing that royalties are to be distributed based on the value of the programming *retransmitted*. *See* House Report No. 94-1476 at 98.

> The copyright owners entitled to participate in the distribution of the royalty fees paid by cable systems under the compulsory license as specified in Section 111(d)(4). Consistent with the Committee's view that copyright royalty fees should be made only for the *retransmission* of distant non-network programming, the claimants were limited to (1) copyright owners whose works were included in a *secondary transmission made by a cable system*.... (emphasis added)

Attempting to increase PTV's value based a surmised value for non-retransmission is obviously inappropriate, and should not be allowed.

3. Dr. Fairley's "PTV only" Adjustment is not Supported by the Record.

Finally, Dr. Fairley advocated an adjustment to the PTV Bortz share to take into account the cable systems that carried only PTV on a distant basis but were excluded from participation in the Bortz Survey. As noted above, PTV cannot receive any more than is paid for its carriage based on the evidence existing in this record. To the extent that Dr. Fairley's assigned shares of 80 or 100% to the Bortz PTV-only respondents increases PTV's award to an amount above the actual fees paid for PTV carriage, it is unwarranted and unsupported by the record.

XI. MUSIC CLAIMANTS SHARE OF CABLE ROYALTIES SHOULD BE NO MORE THAN 2.33% OF ALL FUNDS.

A. The Music Claimants Have Not Presented Sufficient Evidence to Justify an Increase to their Share of the Award.

Music Claimants seek to increase their share of royalties from 4.5% to 5.0%, Boyle written rebuttal, 2, on the basis of a Music Use Study and testimony about the quality of music on television. While music remains an element in distantly retransmitted programming, the amount and manner of its use has not changed such that an increase in the Music Claimants' share is justified. Conversely, it is likely that the prior years awards actually overstated the marketplace value of Music and current marketplace evidence demonstrates that Music's share should be no more than 2.3% of the royalty funds.

1. The Music Use Study does not support an increase in share.

The Panel cannot base any findings on the Music Use Study because it is too flawed in form and execution to be used reliably. The Music Use Study compares the amount of time that music occupies in programming, as measured by Music Claimants, during 1991-92 and 1998-99. Rather than measuring all distant signals for all days of the years or picking a representative sample of days and stations, Music Claimants selected a few stations and days on the basis of so-called "economic importance," as being representative of the entire universe. However, the two sample selections have numerous flaws that make the study unrepresentative of the distant signal universe.

a. The Music Use Study uses unreliable sampling methods, which prohibit projection of study results to the entire universe of distant signal programming

Music Claimants rely upon an extrapolation of a 1983 FCC Composite week to select their sample days. Krupit, tr. 4236. The FCC data was not designed for that purpose. Boyle, tr.

4917. This is shown by its under-representation of the months in the first half in a year and over-representation of months in the second half. Krupit written direct, 6. Further, Music Claimants purportedly selected dates that correspond to the FCC's selection, many dates did not match the FCC's process.[25] Boyle, tr. 4927-33. Thus, even assuming the FCC used a valid means to select dates randomly, Music did not replicate that process, so that its sample cannot be considered to be a random sample.

Music Claimants also base their selection of sample stations on erroneous and inconsistent criteria. Ten stations were selected for the 1991-92 sample, including the top five fee gen stations, along with five other stations to represent all remaining distant signals, which were chosen based on a threshold fee gen royalty criterion. Krupit written direct, 3. The selection was based on "economic importance," a nebulous term coined by Music without any statistical underpinning. Boyle, tr. 4494, 4792-94, 4936-37. Further, Music used total fees generated, not distant fees generated, in its selection process. Boyle, tr. 4941. The difference between distant and total fees gen in 1998-99 was substantial, and could have affected the selection process. In any event, the lack of representativeness in the 1991-92 selected sample is shown by the absence of any non-commercial educational stations. That absence could have artificially lowered the reported time music occupied on programming in 1991-92 because the two PTV stations included in the 1998-99 selection had higher amounts of music than did the commercial stations. Boyle, tr. 4466-67; Music Ex. 39 (*see*, WLIW and WNET); Boyle, tr. 4799.

[25] For example, the Sunday date chosen by Music falls a week earlier than the Sunday date picked by the FCC; likewise for the Monday.

Furthermore, the "economic importance" sample selection criterion is not applied consistently in the two periods. WTBS, although having minimal fees gen in 1998-99, was included in the 1998-99 Music Use Study. Krupit written direct, 5. Second, the 1998-99 sample selected four more stations with certainty besides the five included in the 1991-92 selection. *Id.* In contrast, Music kept the same five stations used in 1991-92 to represent the remaining distant signals in 1998-99, even though those stations no longer met the threshold fees gen criterion. Boyle, tr. 4790-94; PS Ex. 37-X.

Third, one station, KSHB, switched from an independent station, which had 100% compensable programming in 1991-92, to a network affiliate, with 25% of compensable programming in 1998-99. No adjustment was made to reflect the impact of this station's change in programming or contribution to the royalty pool. Boyle, tr. 4870, 4872; NAB Ex. 27-X.

Without proper sample selection, the Music Use Study lacks reliability and representativeness. Unless a representative sample is used, a study's results cannot be projected to the universe. Fratrik, tr. 2437. Representative sampling also creates an unbiased estimation of facts about the universe studied. Frankel, tr. 9353. Music Claimants' samples were selected in a way that prevents them from providing unbiased results. This lack of reliability precludes use of the Study here.

b. The Music Use Study relies on inaccurate data, which fails to measure programming content on entire broadcast days for the years studied.

The Music Study relies on cue sheets that are inadequate, and includes non-compensable programs. Cue sheets report how much music is played during a program. Krupit written direct, 7; Krupit, tr. 4256. If cue sheets did not exist for a program broadcast by one of the sample stations, that program was not counted in the Music Use Study. Boyle, tr. 4865-66. Because

Music Claimants had cue sheets for only 77% of the programming in 1991-92 and 73% in 1998-99, no data was included for the unmatched programming. Boyle written direct, 15. As the excluded programs were not spread evenly among all program categories, their absence skews the results.

Sports and news programs were much more likely not to have cue sheets. Krupit, tr. 4354-55. For example, only 8 cue sheets were reported for 35 sports programs that were available in 1998-99. Krupit, tr. 4334-35; JSC Ex. 32-X. The same is true for news. Krupit, tr. 4304-05. Conversely, producers of syndicated series, specials, and movies generally comply with the self-reporting cue sheet system. Krupit, tr. 4394. Consequently, in the cue sheets used to calculate music time over-represent syndicated programs vis-à-vis their proportionate share of reported programs. The Study also improperly includes WGN programming that is not covered by the compulsory license. Boyle, tr. 4834-35. Thus, the recording and tabulating of music play time in the Study is unlikely to reflect accurately actual music use on compensable distant signal programming.

c. The Music Use Study uses a flawed weighting system that does not reflect the actual subject matter of this proceeding.

The Music Use Study improperly weights the minutes of music by percent of total fees generated, rather than by distant fees generated. Weighting by total fees generated did not account for the increase in minimum fee paying systems in 1998-99. Boyle, tr. 4569-72. Weighting also compresses the large variations in music use, ranging from 11.47 minutes to 26.27 minutes per hour from station to station and between days. Boyle, tr. 4471-72; Music Ex. 39. In any event, even with all these flaws, the unweighted average minutes of music use per hour in 1998-99 is only one minute more than average minutes for 1991-92. Krupit, tr. 4396.

2. Attestations about Music Quality do Not Support an Increase in Share.

Music witnesses seem to suggest that it was only a recent trend to use popular songs on television. Lyons written direct, 8-11; Walden written direct, 9. This is hardly the case, but even if it was true, that would not show use of music increased to justify an increase in Music's royalty share. Moreover, Music Claimants, themselves, do not ascribe increased market values to music based on a quality factor. Saltzman, tr. 4066-67. Accordingly, there are no grounds on which to increase Music's award based on supposed higher quality music in 1998-99.

B. Evidence of Actual Marketplace Transactions Supports A Reduction in Music's Share.

Dr. George Schink, a JSC witness, provided evidence of the amounts paid to license music in the commercial television and cable network marketplaces. According to Dr. Schink, the Music Claimants received $228 million in music license fees for the year 1998, the last year for which the data were available. This represented 2.33% of the amount the commercial television industry spent for broadcast rights. Schink written rebuttal, 15. Adding other programming expenses[26] to the broadcast rights fees drops Music's percentage paid to 1.49%. *Id.* at 16. The comparable figures for 1980 were 3.3% and 2.03%. *Id.* Accordingly, music license fees as percentages of program expenses and broadcast rights have declined in the period 1980-1998. Music's share of distant signal royalties should not be any higher than its share of license fees in the actual broadcast commercial television industry.

Dr. Schink also compared the music licensing fees paid by cable networks with the other programming costs of cable networks. Based on industry data, Dr. Schink estimated that music license fees across all programming types in the cable network marketplace to be 2.07% of total programming expenses for 1998 and 1999. Schink written rebuttal, 20. Accordingly, evidence

[26] Payments for talent on sports and news shows.

from analogous relevant markets establishes that the appropriate share for the Music Claimants falls between 2.0% and 2.33%.

C. The Music Claimants' Share Should be Taken "off the top."

Differentially requisitioning Music Claimants' share from claimant groups cannot be done because there is no reliable empirical evidence that would support such a differentiation. Neither the Music Use Study nor the Music Claimant witnesses provide reliable information about the relative music use among claimant categories. Krupit, tr. 4288; Boyle written direct, 3; Boyle, tr. 4958-59. In addition, differential payments is "not the way the marketplace works." Boyle, tr. 4959. In the marketplace, ASCAP, BMI, and SESAC grant blanket licenses that allow broadcasters to select and to use as much or as little music from the PROs' libraries as they chose. Saltzman written direct, 4. A blanket license obviates the need to seek individual licenses and insulates broadcasters against infringement suits. Boyle, tr. 4743-44. All these rights have value over and above the value to music alone.

Music Claimants employ a much more sophisticated allocation system than the Music Use Study to allocate their royalties. ASCAP, in allocating royalties to copyright holders, uses a complex formula that differentiates the type of music and day part in the calculation. Saltzman, tr. 3945. The type of music (theme vs. non-theme, background) is factored into the valuation because, for example, theme music can be used to "brand" a sport team's telecasts or a local new program. Gruen written rebuttal, 32.

Taking Music Claimants' share "off the top," before allocating shares to the remaining claimants, as has been done in every distribution proceeding, remains appropriate. Gruen written rebuttal, 32. This approach effectively charges each program category a proportionate share of

music. Gruen written rebuttal, 33. Consequently, Program Suppliers, as the largest claimant, will pay more for music taken "off the top," in actual dollars than other claimants. *Id.*

XII. THE CANADIAN CLAIMANTS SHOULD BE AWARDED FEES PAID TO CARRY CANADIAN SIGNALS DISCOUNTED BY THE VALUES OF THE NON-CANADIAN PROGRAMMING RETRANSMITTED ON THOSE SIGNALS.

A. The Analysis of the Canadian Share Should Start From the Point of Fees Paid for Carriage.

Canadian claimants seek an award that gives them the fees generated for the carriage of Canadian distant signals adjusted to reflect the value of Canadian programming contained on those signals. Program Suppliers agree that the appropriate starting point for determining the Canadians' award is the fees generated for Canadian signals. Looking to the fees paid by cable operators for Canadian signals, gives effect to the cable operators' actual behavior, which is the preferred method for determining marketplace value. Johnson, tr., 3745; Fairley, tr. 10524; Gruen, tr. 7553. Since Canadian signals (just like PTV signals) relate to an entire program category, fees generated for their carriage can be readily isolated. There is no reason, based on the record, to treat PTV and the Canadians any differently on this point.

B. Calculating the Correct Amount of Fees Paid to Carry Canadian Signals.

In his rebuttal testimony, Mr. Bennett offered an approach for determining the minimum and maximum fees generated by the carriage of distant Canadian signals. Bennett written rebuttal, 1-4. As CDC's fees gen allocation fell within his minimum and maximum, Mr. Bennett concluded it "is the most reasonable method of determining the total amount of Base Rate Royalties paid for the carriage of [Canadian] distant signals." Bennett written rebuttal, 5. The CDC data identified in Ex. CDN-R-1-C, specifically the column "All Fees Except Minimum Fees," appear to establish that the amount of fees generated as a result of distant Canadian signals is 3.35% of the Basic fund in 1998 and 3.67% of the Basic fund in 1999. The percentages applicable in the 3.75% fund are .25% in 1998 and .63% in 1999.

C. The Fees Paid To Carry Canadian Signals Must Be Adjusted for the Value of the Non-Canadian Programming On Those Signals.

The Canadians claim only for the Canadian content programming on Canadian distant signals. Non-Canadian programming on Canadian signals consists of Program Suppliers' and Sports' programming. The Canadians seek 70% of the fees generated for Canadian content based on the results of two analyses. First, the Canadians rely on a cable operator survey conducted by Drs. Ringold and Ford ("Ringold-Ford Study"), even though the survey shows that cable operators valued the Canadian content on the Canadian signals at 59% in 1998 and 58% in 1999. Ringold written direct, 4, 13. Second, the Canadian Claimants rely on the results of a Canadian content analysis performed by Mr. Bennett, Ex. CDN-4-C, that shows the Canadian content on Canadian signals to be 80%. Averaging the two studies results in the 70% claimed.

Mr. Bennett's study provides no basis on which to grant an award to the Canadian Claimants. That study is nothing more than a simple time analysis, and it provides no useful information about the relative marketplace value to be ascribed to the Canadian programming. As has been recognized from the beginning of the distribution proceedings, program time is an insufficient valuation metric upon which to base an award. 1978 Cable Royalty Distribution Proceeding, 45 Fed. Reg. 63026 at 63035-36 (Sept. 23, 1980). Accordingly, the Canadian time analysis should not be afforded any weight by the Panel.

The Ringold-Ford Study of cable operator attitudes suffers from the same defects that prior Panels have criticized in similar attitudinal surveys. *See generally* Ringold, tr. 5800 *et. seq.* (questions about veracity of results). For example, the study assumes U.S. cable respondents had full knowledge of which programs on Canadian signals are Canadian content and which are U.S. produced. Such an assumption is unreasonable and results in an over-valuation of Canadian content.

During Dr. Ringold's testimony, numerous examples of specific survey response indicated that the respondent either did not understand the questions asked or did not care about the responses. *See, e.g.* Ringold, tr. 5873-5904; and Exhibits PS 41-X through 60-X. Of note, some respondents placed very high values on programming categories that had zero or minimal amount of broadcast during the year. *See* e.g. Ringold, tr. 5838-5846 (30% valuation for Sports where respondent's station carried zero Sports programming).

No attempt was made to determine if a respondent was familiar with the Canadian signals, or their programming. In fact, respondents were not even asked if they had viewed the programming on the Canadian signal in the last year. Ringold, tr. 5793. Further, the respondents answering for the French-Canadian language signals were not asked if they spoke French. Ringold, tr. 5794. Given these clear problems with the survey responses, the survey results cannot be taken at face value.

A useful relationship can be gleaned, however, from a comparison of the content analysis performed by Mr. Bennett with the survey results. Given the fact that 80% of Canadian signal programming was Canadian content, for it to be valued on par with U.S. programming, the value figures should be in the 80% range. Such is not the case, especially when the systems generating the greatest amount in royalties are examined. In the cases of CBET, CBUT and CKSH, the U.S. programming content ranged from 9% to 20% on the signals, but the survey respondents valued the U.S. content programming on those signals at 34%-54% of the total value. Ringold, tr. 5552. These three signals account for 83% of all total fees generated for Canadian with over 70% Canadian content, and 72% of all fees gen for all Canadian signals. Accordingly, the U.S. cable operator retransmitting these Canadian signals gives much greater value to the U.S. content, and because of that, it is clear that the value ascribed to the U.S. programming is what drives the

decision to import the signal. This fact plus the problems inherent in the survey require that the overall share for Canadian content as reported in the survey be adjusted downward by at least 25%, which results in a Canadian value component of 44.25% of 1998 Canadian fees generated and 43.5% in 1999. After adjustment, the Canadian awards as percentages of the basic and 3.75% funds are:

1998		1999	
Basic	3.75	Basic	3.75
1.47%	.11%	1.56%	.27%

****

Based upon the record evidence, Program Suppliers submit that they are entitled to shares of the 1998-99 royalty fund as follows: 72% of the basic fund, 78.5% of the 3.75 fund and 97.67% of the Syndex fund.

Respectfully submitted,

STINSON MORRISON HECKER LLP

Michael E. Tucci
Gregory O. Olaniran
Robert L. Eskay, Jr.
Sarah K. Johnson
1150 18th Street, NW, Suite 800
Washington, DC 20036
(202) 785-9100

Attorneys for
PROGRAM SUPPLIERS

CERTIFICATE OF SERVICE

I, Gregory O. Olaniran, hereby certify that I have caused a copy of the foregoing document in Docket No. 2001-8 CARP CD 98-99 to be served via hand-delivery or Federal Express as indicated below, this 20th day of August 2003, to the following:

ASCAP
Carol A. Witschel
Stefan M. Mentzer
White & Case
1155 Avenue of the Americas
New York, NY 10036-2787
One (1) copy via Federal Express

Samuel Mosenkis
ASCAP
One Lincoln Plaza
New York, NY 10023
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Drinker Biddle & Reath LLP
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Washington, DC 20005
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SESAC
John C. Beiter
Loeb & Loeb
45 Music Square West
Nashville, TN 37203
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Public Television Claimants
Timothy C. Hester
Ronald G. Dove, Jr.
Russell Jessee
Covington & Burling
1201 Pennsylvania Avenue, NW
Washington, DC 20044-7566
Two (2) copies via hand delivery

Canadian Claimants
L. Kendall Satterfield
Finkelstein, Thompson & Loughran
1055 Thomas Jefferson Street, NW, Suite 601
Washington, DC 20007
Two (2) copies via hand delivery

Joint Sports Claimants
Robert Alan Garrett
James Cooper
Christopher Winters
Michele T. Dunlop
Arnold & Porter
555 Twelfth Street, NW
Washington, DC 20004-1206
Two (2) copies via hand delivery

National Association of Broadcasters
John I. Stewart, Jr.
Parul Desai
Michael Lazarus
Crowell & Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004
Two (2) copies via hand delivery

Gregory O. Olaniran