to 18 to 49 year-old males or sports channels. They then review this list to determine which channels most successfully provide the measurable deliverables, such as high ratings in key demographic groups. In my experience, advertisers do not consider factors such as how long an otherwise high-performing network has been operating in determining whether to purchase advertising time.

7. These advertisers then typically allocate their finite advertising budgets among the channels that produce the highest ratings or other desired deliverables. Accordingly, advertisers generally buy lesser amounts of national advertising from channels that produce lower ratings or that are viewed in fewer households.

8. The precise sport carried on a particular channel is generally not determinative of advertising purchases unless (a) an advertiser is placing a sport-specific advertising campaign, in which case it may choose to advertise only on channels that carry that sport, or (b) the image of the sport is inconsistent with the product's brand, in which case the advertiser may disqualify certain sports channels. No advertiser, in my experience, has disqualified the NFL Network from consideration on the ground that football is unsuitable for association with its product brand.

9. Except in these narrow circumstances, most sports advertisers seek to purchase time from the sports networks that most effectively reach 18 to 49 year-old males, regardless of the specific sport or programming the network carries; that demographic is the key audience for virtually all sports networks.

NFL Network's Competitors

10. As a part of this process, advertisers often invite channels to provide information that may be relevant to their decision-making. For example, advertisers have asked

the NFL Network to compare its performance to the performance of certain competitors that are also near the top of advertisers' vetting lists. Advertisers usually ask the NFL Network to compare itself to other key national sports channels, including the ESPN family of channels, Versus, the Golf Channel, Fox Sports Net, and the recently-launched MLB Network operated by Major League Baseball. In my experience, advertisers commonly view these channels as the NFL Network's chief competitors for their business.

Advertising Sales

11. Advertisers – often through their media buyers – look to Nielsen Media Research ("Nielsen") subscriber numbers as an important indicator of a channel's ability to achieve targeted viewership. Nielsen's subscriber numbers (sometimes referred to as "available homes") are the industry-accepted standard on which advertisers rely in making decisions regarding advertising purchases, and the relevant inceptive metric used by advertisers in deciding whether to allocate national advertising expenditures to the NFL Network. Thus, the number of available homes reported by Nielsen can directly impact the NFL Network's ability to compete for national advertising dollars.

12. On a more individualized basis, advertisers additionally may choose to consider other quantitative or qualitative factors in making decisions regarding national advertising investments. Those factors might include, for example, the (a) number of "billable subscribers" to a channel, which represents the actual number of subscribers paying for the service; (b) attractiveness of the channel's programming; or (c) unique appeal of channel or content association with an advertiser's product.

13. With respect to programming, a single program (such as a regular season NFL game) with a massive audience is often more valuable to advertisers than multiple programs

(for example, live National Hockey League games or golf tournaments) that, in the aggregate, reach the same number of viewers. This is in part due to the duplication of viewers among the multiple programs.

14. Through a combination of subscribership approaching the 50 million subscriber mark and the exceptional appeal of its content to advertisers, the NFL Network has been able to compete for national advertising contracts. However, because most advertisers are concerned about distribution, I believe that the NFL Network would have greater opportunities to compete for advertising if it were more broadly distributed, including on Comcast's systems.

15. When the NFL Network sells advertising time, it charges advertisers on the basis of a specified cost per thousand viewers, a measure known as "CPM." As a result, the number of subscribers who can access the NFL Network directly impacts the price of advertising it sells.

16. Many advertisers discount the CPM rate that they are willing to pay based on the NFL Network's subscriber levels. Accordingly, if the NFL Network reaches fewer than an advertiser's "national network" target of approximately 50 to 60 million subscriber households, the advertiser often reduces the CPM that it is willing to pay. By extension, as distribution continues to decrease well below 50 million subscribers, the advertiser will often insist on further CPM discounts. Advertisers have differing methods of calculating the rate that they will pay for NFL Network advertising, but some type of discount based on nationwide penetration is common.

Effect of Comcast's Tiering

17. After Comcast dropped the NFL Network from its second-most widely penetrated level of digital service, known as "D2," and instead placed it on a premium sports tier,

the NFL Network very conspicuously experienced a significant reduction in its Comcast subscribership of above 80%.

18. As a result of this reduction, the NFL Network lost its ability to compete for many national advertising contracts. Through our efforts, we have been able to grow our overall advertising revenues, but our ability to do this has been impaired by Comcast's reduction of our subscriber base. To provide a specific example,

notified the NFL Network that it would not renew its long-term contract because of the decline in the NFL Network's subscribership. The business lost from alone accounted for

of the NFL Network's gross annual advertising revenues in 2007.

19. Other NFL Network advertisers, including and

, have excluded the NFL Network as a competitor for national advertising contracts because of its reduced nationwide distribution. Still other advertisers – , for example – have reduced advertising expenditures on the NFL Network due to its decreased penetration.

20. In addition, following Comcast's placement of the NFL Network on a premium sports tier, the Network has received less revenue for the advertising that it has been able to sell, even under existing contracts. This has been the result of the CPM discount applied by many advertisers based on the Network's reduced household penetration.

* * *

I declare under penalty of perjury that the foregoing written testimony is true and correct.

Executed on April 3, 2009.

RONALD H. FURMAN

D

REDACTED VERSION

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of NFL ENTERPRISES LLC, Complainant, vs. COMCAST CABLE COMMUNICATIONS, LLC, A Division of COMCAST CORPORATION Defendant.	MB Docket No. 08-214 File No. CSR-7876-P DIRECT TESTIMONY OF DR. HAL J. SINGER

I. SUMMARY OF TESTIMONY

1. I have been retained as an expert in this matter by NFL Enterprises LLC ("Enterprises"). I have been asked to address economic issues raised by the conduct of Comcast Cable Communications LLC ("Comcast") vis-à-vis Enterprises' national sports network, NFL Network, on the one hand, and Comcast's affiliated national sports networks, Versus and the Golf Channel, on the other. This introduction summarizes my principal conclusions.[1]

A. Comcast Discriminates Against NFL Network on the Basis of Affiliation

2. NFL Network, Versus, and the Golf Channel are similarly situated. All three are national sports networks. All three seek to appeal principally to the same demographic: men aged 24 to 49. The NFL Network and Versus compete directly for sports programming. For example, Versus attempted to purchase what has become the most valuable content on NFL Network, a package of 8 live NFL games ("the 8-game package"), with the

1. I previously summarized my opinions in my expert report, which was submitted to the Commission on March 6, 2009, on behalf of NFL Enterprises LLC ("Enterprises"). Report of Hal J. Singer, MB Docket No.08-214, File No. CSR-7876-O (March 6, 2009) [hereinafter *Singer Report*].

intent of making this 8-game package the cornerstone of Versus's growth strategy. Versus and NFL Network also competed for the rights to distribute Pac-10 college football games.

3. Comcast carries Versus and the Golf Channel on its analog Expanded Basic tier; it carries NFL Network, an independent national sports network, on its premium sports tier. Comcast's affiliated sports networks are received by approximately 22 million Comcast households; NFL Network is received in approximately 2.2 million Comcast households.[2] Comcast engages in this discriminatory treatment despite its admission that it would have given broader carriage to NFL Network had it been granted valuable rights in NFL programming to use for its own purposes.

4. Comcast makes a *general practice* of distinguishing between its affiliated sports networks and independent sports programmers. As a general rule, Comcast carries its affiliated national and regional sports programming networks on its analog Expanded Basic tier, while carrying sports networks that it does not own on its premium sports tier.

B. Comcast's Justifications for Its Discriminatory Conduct Do Not Withstand Scrutiny

5. Comcast has claimed that the price and relative popularity of NFL Network justify Comcast's refusal to carry NFL Network on the same tier—and at the same level of penetration—that Comcast carries its affiliated networks. These claims do not have merit.

1. Relative Popularity of the Networks

6. Comcast suggests that it carries NFL Network on a premium tier—while carrying its affiliated programmers on a more broadly distributed tier—because NFL Network is a niche offering with "limited marketplace appeal." Comcast contends that the NFL Network appeals only to a small number of "hard core NFL fans," while Versus and the Golf Channel are more

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2. Based on (1) my estimate of Comcast's Expanded Basic tier subscribership and (2) Comcast's NFL Network subscribership as reported by the NFL Network for November 2008.

popular.[3] This purported justification is demonstrably wrong. In response to Comcast's assertion, I analyzed the ratings of NFL Network compared to those of Versus and the Golf Channel. I found that NFL Network programming is much more popular than that offered by Comcast's national sports networks.

7. NFL Network receives substantially higher ratings than both Versus and the Golf Channel on a year-round basis. Its average total day rating is higher than that of either Versus or the Golf Channel. Its best quarter over the last two years received nearly double the ratings of the best quarter achieved by Versus and the Golf Channel over the same time period.

8. Similarly, NFL Network is much more popular during prime time than Comcast's affiliated sports networks. NFL Network's prime-time ratings were more than twice as popular as the Golf Channel's, and significantly higher than Versus's, from late 2006 to the end of 2008. As with the total day ratings, NFL Network's best prime-time quarter was far better than that achieved by either Versus or the Golf Channel.

9. Data for individual programs shown on the three networks confirm this analysis. Individual programs on NFL Network are much more popular than those shown on Versus or the Golf Channel—so much so that the top-ranked Versus or Golf Channel program would not even rank among the top thirty NFL Network programs.

10. NFL programming is extremely popular throughout the country. For example, NFL regular-season games are extremely popular outside the "home" markets of the two participating teams as well as inside those markets.

11. Moreover, NFL games are much more popular than NHL games, the premiere offering of Comcast's affiliate Versus. NFL games receive significantly higher absolute ratings

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3. Comcast Answer, June 20, 2008 at 12, ¶ 7; *id.* at 34, ¶ 53; *id.* at 35, ¶ 54.

than do NHL games, and this popularity extends to cities with and without league teams: the ratings of NHL games drop much more noticeably outside NHL cities than do the ratings of NFL games when comparing NFL cities to non-NFL cities. This fact further demonstrates the great nationwide popularity of NFL programming.

2. Price of the Networks

12. Comcast also argued in its Answer that putting NFL Network on its premium sports tier was justified by its desire to prevent its subscribers from having to pay for an allegedly expensive channel.[4]

13. That assertion is undermined by Comcast's admitted failure to reduce its prices to subscribers when it removed NFL Network from its more broadly distributed tier. It is also undermined by the fact that Comcast negotiated for and agreed to pay the NFL Network's price if Comcast secured other valuable NFL product (which it admits it was independently willing to purchase at market rates, so long as it could obtain the product in a way that uniquely benefited it).

14. In any event, Comcast has no legitimate competitive cost concerns. Its in-region competitors, particularly its chief rivals (DirecTV, Dish Network, Verizon, and AT&T), have all agreed to carry NFL Network on highly penetrated tiers at rates comparable to those negotiated by Comcast.

15. Moreover, the cost for Comcast to carry NFL Network on its Expanded Basic Tier is not excessive. This is confirmed by the prices that other multi-channel video programming distributors (MVPDs) voluntarily agreed to pay, in arm's-length market transactions, for precisely the same programming. My regression analysis of these prices shows that the fair

4. Comcast Answer at 12, ¶ 7; *id.* at 33-36, ¶¶ 53-55.

market value of such carriage in 2008 was a Net Effective Rate ("NER") of ; Comcast's contract with NFL Network actually provides for a somewhat lower rate. In other words, Comcast's contract with NFL Network would have permitted it to carry NFL Network on the Expanded Basic tier at *below* fair market value; therefore, the notion that Comcast was being asked to overpay for broad carriage of NFL Network is without merit.

3. Comcast's Conduct Refutes Its Claims of Low Popularity and High Price

16. Comcast's conduct is at odds with its claimed cost and popularity justifications for tiering NFL Network. Comcast attempted to secure the 8-game package for its Versus network because of the value it recognized that the 8-game package would bring to Versus. Comcast made the largest content bid in its history in an effort to secure this NFL programming, and Versus planned to impose a substantial surcharge on its carriers to reflect the value of this programming. These facts are at odds with Comcast's *post hoc* justifications for tiering NFL Network.

4. Comcast's Experts Offer No Reason for Not Finding Discrimination

17. In an effort to dismiss the evidence of affiliation-based discrimination by Comcast, Comcast's experts (Mr. Gerbrandt and Mr. Orszag) rely heavily on the fact that several of the nation's larger cable companies do not carry NFL Network. Their analysis is unpersuasive for many reasons. Among these are the fact that NFL Network has achieved significant penetration among MVPDs nationwide—including on major satellite and other non-cable operators ignored by Gerbrandt and Orszag; the fact that the customer preferences and market conditions faced by MVPDs operating in the same areas as Comcast are much more relevant than those faced by MVPDs operating in other regions (making the decisions of MVPDs such as DirecTV more relevant than those of the cable companies on which Gerbrandt and Orszag rely);

the evidence that vertically integrated cable operators coordinate their carriage decisions; and the fact that Comcast serves far more markets with NFL teams than do any of the cable companies to which its experts point. As explained below, other analyses put forward by Mr. Gerbrandt and Mr. Orszag, such as the novel "value proposition" test and the unfounded theory that all subscribers who would value NFL Network have already switched to DirecTV, have no support in fact or in economic analysis.

C. Comcast's Conduct Harms NFL Enterprises' Ability to Compete

18. Because Comcast, the largest MVPD in the nation, now excludes NFL Network from its Expanded Basic tier, NFL Network can reach only a fraction of the subscribers that Comcast provides to its affiliates Versus and the Golf Channel. This exclusionary conduct (which, as explained above, is also discriminatory) is anticompetitive: it prevents NFL Network from achieving economies of scale and it forecloses NFL Network from the most efficient distribution channel. Both of these circumstances raise NFL Network's costs and impede its ability to compete against Versus and the Golf Channel. As a result of Comcast's conduct, NFL Network has been impaired in its ability to secure advertising and licensing revenues and to compete for sports programming—some of which, as a result of NFL Network's impaired distribution, has gone to Versus.

19. Comcast's experts offer no true response to my explanation of the harms to NFL Network's ability to compete. Mr. Orszag suggests that NFL Network could expand its subscribership by lowering its prices to Comcast. This suggestion is inconsistent with the statutory standard (any victim of discriminatory demands could always capitulate, but this does not make the demands non-discriminatory or non-harmful to ability to compete); is inconsistent with the objective economic evidence that NFL Network is charging the appropriate price—as

shown by other major MVPDs' carriage of NFL Network; and is otherwise flawed, as explained in more detail below.

D. The Discriminatory and Exclusionary Tiering of NFL Network Also Harms Viewers and Advertisers

20. Section 616 and its implementing regulations focus on harm to the unaffiliated network's ability to compete. Nevertheless, in light of Congress' expressed concerns when enacting Section 616, the resulting harm to consumers bears mention.

21. Viewers are harmed by Comcast's discriminatory tiering of NFL Network in several ways. As a result of Comcast's discriminatory conduct, viewers must pay significantly higher prices to receive NFL Network on Comcast's premium sports tier, which means either (a) that they are forced to forgo programming that they enjoyed and valued (if they do not subscribe to the premium sports tier) or (b) that they are forced to spend more money to watch programming for which they had previously paid less (with the surplus transferred to Comcast).

22. Because of NFL Network's weakened competitive status, Versus and the Golf Channel (and other sports networks) have increased market power to charge higher licensing fees to MVPDs, with the result that viewers may ultimately pay more to watch rival sports programming.

23. Moreover, because NFL Network's advertising opportunities declined due to Comcast's tiering decision, it is forced to rely more on licensing fees, which will ultimately increase costs to viewers of NFL Network.

24. Comcast has also destroyed the option value of watching NFL Network, meaning that because viewers have access to NFL Network only if they pay a substantial fee, they may—because of lack of information—forgo that programming even though they might have developed a taste for it were NFL Network more broadly available.

25. Comcast's conduct also harms advertisers. Because NFL Network has a significantly reduced footprint and is weakened as a competitor of Versus and the Golf Channel, those channels are less constrained in their ability to charge higher rates to advertisers. Advertisers that remain with NFL Network face higher quality-adjusted prices to advertise on the network.

26. Content owners that provide programming to networks are also harmed by Comcast's discriminatory conduct. Impairing NFL Network's distribution has weakened its ability to compete vigorously for sports programming rights; if it were carried by Comcast on the Expanded Basic tier, as Comcast carries its affiliates Versus and the Golf Channel, NFL Network could enhance competition for content such as college football games.

E. Comcast Should Carry NFL Network on the Same Tier (Expanded Basic) on Which It Carries Its Affiliated National Sports Networks—Versus and the Golf Channel—at a Net Effective Rate Consistent with the Fair Market Value of Such Carriage

27. Had Comcast not taken its discriminatory action against NFL Network, it would have carried NFL Network on the Expanded Basic tier. It would have continued to pay a price consistent with the rates that other MVPDs that carry NFL Network agreed to pay; these rates reflect the fair-market value of carriage of NFL Network programming. In keeping with the FCC's prior guidance, I determined this price by using a regression method that analyzed NFL Network's largest distributors (accounting for the vast majority of its subscribers), taking into account numerous factors specific to each MVPD and its contract with NFL Network.

28. For 2008, the predicted Net Effective Rate ("NER")—that is, the objective estimate of fair market value—that Comcast would have paid (absent discrimination) is per subscriber per month, with a 95% confidence interval covering the range . The predicted NER increases to by 2012. As noted above,

this price analysis not only confirms the terms that should be ordered for remedial purposes; it also disproves Comcast's claims that NFL Network was seeking an excessive price for carriage.

29. Comcast's own conduct confirms the reliability of the objective estimate of fair market value provided by other MVPDs' agreed-to rates. *First*, in its affiliation agreement with NFL Network, Comcast agreed to

This price is within range of—but lower than—the fair market value determined by the regression, meaning that it (a) corroborates the regression analysis and (b) indicates that Comcast was able to use its bottleneck power to pressure NFL Network into agreeing to a below-market price. *Second*,

30. Despite having alleged that NFL Network seeks a price that is "excessive" (that is, above the "correct" price), neither Mr. Orszag nor Mr. Gerbrandt has come forward with any affirmative analysis of what the "correct" price is. Instead, they offer only erroneous critiques of the fair market value analysis that I performed. In reviewing Mr. Orszag's critique of my analysis, for instance, I noticed several instances in which he made basic errors in economics and in statistical analysis.[5] These errors—the most important of which I address below—fundamentally call into question any conclusion based on them.

5.

II. Qualifications

31. I am President of Empiris, LLC, an economics consulting firm based in Washington, D.C. My areas of economic expertise are antitrust, industrial organization, and regulation. I have applied my expertise to several regulated industries, including telecommunications, video programming, insurance, and health care.

32. I have published a book chapter in *Access Pricing: Theory, Practice and Empirical Evidence* (Justus Haucap and Ralf Dewenter eds., Elsevier Press 2005) and in *Handbook of Research in Trans-Atlantic Antitrust* (Philip Marsden, ed., Edward Elgar Publishing 2006). I am also the co-author of the book *Broadband in Europe: How Brussels Can Wire the Information Society* (Kluwer/Springer Press 2005).

33. I have published scholarly articles in several economics and legal journals, including *American Economic Review Papers and Proceedings*, *Berkeley Technology Law Review*, *Canadian Journal of Law and Technology*, *Federal Communications Law Journal*, *Harvard Journal of Law and Technology*, *Hastings Law Journal*, *Journal of Business and Finance*, *Journal of Competition Law and Economics*, *Journal of Financial Transformation*, *Journal of Industrial Economics*, *Journal of Insurance Regulation*, *Journal of Network Industries*, *Journal of Regulatory Economics*, *Journal of Telecommunications and High Tech*

Law, *Review of Network Economics*, *Telecommunications Policy Journal*, *Topics in Economics Analysis and Policy*, and *Yale Journal on Regulation*.

34. Two of my articles are of particular relevance to this proceeding: "The Competitive Effects of a Cable Television Operator's Refusal to Carry DSL Advertising," *Journal of Competition Law and Economics* (Vol. 2, No. 2, pp. 301-331, 2006); and "Vertical Foreclosure in Video Programming Markets: Implications for Cable Operators," *Review of Network Economics* (Vol. 6, 2007).

35. In regulatory proceedings, I have presented economic testimony in several forums, including the U.S. Federal Communications Commission, the U.S. Federal Trade Commission, the Antitrust Division of the U.S. Department of Justice, the U.S. National Highway Traffic and Safety Administration, the House of Commons of Canada, the Canadian Radio-television and Telecommunications Commission, and the U.S. Congressional Budget Office. My written testimony on the effect of telecom entry on cable television prices was cited by the Department of Justice in a November 2008 report entitled *Voice, Video and Broadband: The Changing Competitive Landscape and Its Impact on Consumers.*[6]

36. In addition to my work for NFL Network, I have served as an economic expert for MASN, which owns the television rights to live baseball games for the Baltimore Orioles and the Washington Nationals, in several carriage disputes. On June 2, 2008, the arbitrator in *TCR Sports Inc. v. Time Warner*, retired judge Daniel H. Margolis, ruled that Time Warner "did discriminate against MASN based on affiliation in not negotiating for carriage of MASN on an analog tier."[7]

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6. Department of Justice. Voice, Video and Broadband: The Changing Competitive Landscape and Its Impact on Consumers, Nov. 17, 2008, *available at* http://www.usdoj.gov/atr/public/press_releases/2008/239479.htm.

7. TCR Sports Broadcasting Holding, L.L.P, d/b/a Mid-Atlantic Sports Network v. Time Warner Cable Inc., Case No: 71-472-E-00697-07, June 2, 2008, at 22.

The arbitrator cited my analysis on behalf of MASN[8] in support of his decision that MASN's offer price "accurately reflects the fair market value of the rights to carry MASN in its North Carolina television territory."[9] In its October 30, 2008 *Order on Review* rejecting Time Warner's appeal of the arbitrator's decision, the FCC's Media Bureau cited my oral testimony during Phase II in support of the proposition that "the carriage decisions of four of the largest MVPDs operating in North Carolina—that serve the overwhelming majority of non-TWC subscribers to paid television service in North Carolina—are an appropriate reference point for assessing fair market value."[10] I have followed a comparable methodology in this case.

37. I also serve as MASN's economic expert in another carriage complaint that concerns Comcast's refusal to carry MASN in the Harrisburg DMA (Pennsylvania) and the Tri-Cities DMA (Virginia).[11] The FCC's Media Bureau cited my testimony when it referred both MASN's and NFL Network's carriage complaints against Comcast to an administrative law judge.[12]

38. In addition to these carriage disputes, I have served as a testifying expert in several litigation matters, including a report on behalf of the Joint Sports Claimants before the Copyright Royalty Judges involving the allocation of distant royalties paid by cable operators. My experience as a testifying expert in litigation is summarized in my CV, which is attached to this report. In addition to litigation, I have written expert testimony in regulatory proceedings and commissioned white papers for several firms and trade associations, including 1-800

8. *Id.* at 19, 19 n. 13, and 21.
9. *Id.* at 22.
10. Order on Review, In the Matter of TCR Sports Broadcasting Holding, L.L.P., Complainant v. Time Warner, Defendant, Oct. 30, 2008, ¶47, n.186 [hereinafter *Order on Review*].
11. In the Matter of TCR Sports Broadcasting Holding, L.L.P., Complainant v. Comcast Corporation, Defendant, Complaint, filed July 1, 2008.
12. Memorandum Opinion and Hearing Designation Order, File Nos. CSR-7876-P, CSR-8001-P, Oct. 10, 2008, n. 345, 347, 348, 349, 351, 352, 353, 363, 372, 375, 379, 388.

CONTACTS, Advanced Medical Device Manufacturers Association (AdvaMed), Allegheny Communications, AT&T, Bell Canada, BellSouth, Broadband Roundtable, Cellular Telephone Industry Association (CTIA), Coventry First, Fiber to the Home Council, General Motors, Harvest Partners, Internet Innovation Alliance, Medical Device Manufacturers Association (MDMA), National Association of Broadcasters (NAB), Qwest, SBC, TELUS, Verizon, and Walt Disney.

39. Before joining Empiris, I was president of Criterion Economics, an economic consulting firm based in Washington D.C. Prior to that, I worked as a senior economist at LECG, an economic consulting firm based in Emeryville, California. In addition, I have worked as an economist for the Securities and Exchange Commission and the Army Corps of Engineers, and I have taught microeconomics and international trade at the undergraduate level.

40. I earned M.A. and Ph.D. degrees in economics from the Johns Hopkins University and a B.S. *magna cum laude* in economics from Tulane University.

41. I have no financial stake in the outcome of this case. My hourly rate in this matter is $495.

42. To offer my opinions, I have reviewed voluminous documents and testimony from NFL Enterprises and Comcast, and I have conducted several analyses of the available data.

III. COMCAST'S DISCRIMINATORY CONDUCT IS ANTICOMPETITIVE

43. Comcast's conduct toward NFL Network is discriminatory and exclusionary because Comcast, while carrying its affiliated channels (Versus and the Golf Channel) on its Expanded Basic tier, excludes NFL Network from Comcast's Expanded Basic tier. There is no efficiency justification for such conduct, further indicating that the differential treatment arises from Comcast's affiliation with Versus and the Golf Channel and its non-affiliation with NFL Network. Furthermore, Comcast's discriminatory conduct impedes NFL Network's ability to

compete against Versus and the Golf Channel. According to economic theory, exclusionary conduct is anticompetitive if it forecloses rivals from the most efficient distribution channel[13] or it prevents rivals from achieving economies of scale.[14] The resulting anticompetitive effect leads to higher prices. Based on my review of the case material, I conclude that both theories of harm are applicable here.

44. Comcast's discriminatory and retaliatory conduct here is not unprecedented. In a case in which I served as economic expert, Comcast refused to carry MASN on its Expanded Basic tier after Major League Baseball awarded the television rights of the Washington Nationals to MASN and not to a Comcast-owned sports network. Such a refusal to deal was tantamount to demanding equity in the programming as a condition of carriage—a demand that is expressly prohibited by the Cable Act.[15] Pursuant to the Commission's approval of the Comcast-Adelphia merger, the Commission required that Comcast and MASN enter into binding arbitration. Rather than submit to arbitration, Comcast granted MASN access to its Expanded Basic tier.[16]

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13. *See* Thomas G. Krattenmaker & Stephen C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 YALE L. J. 209, 234-45 (1986) [hereinafter *Anticompetitive Exclusion*]; Einer Elhauge, *Defining Better Monopolization Standards*, 56 STANFORD L. REV. 253 (2003) [*Defining Better Monopolization Standards*].

14. *See* Stephen C. Salop & David T. Scheffman, *Raising Rivals' Costs*, 73 AM. ECON. REV. 267 (1983) [hereinafter *Raising Rivals' Costs*]; James E. Hodder & Yael A. Ilan, *Declining Prices and Optimality When Costs Follow an Experience Curve*, 7 MANAGERIAL & DECISION ECON. 229 (1986); Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 J. ECON. PERSP. 93 (1994); Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal—Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L. J. 659 (2001) [hereinafter *A General Analysis of Exclusionary Conduct*]; Michael Whinston, *Tying, Foreclosure and Exclusion*, 80 AM. ECON. REV. 837 (1990) [hereinafter *Tying, Foreclosure and Exclusion*].

15. When Comcast has succeeded in extracting equity as a condition of carriage, as was the case for the Philadelphia Flyers, 76ers, and Phillies, Comcast has exploited its market position by refusing to provide rival MVPDs access to its affiliated sports programming, thereby maintaining its market power in the distribution market. *See* Hal J. Singer & J. Gregory Sidak, *Vertical Foreclosure in Video Programming Markets: Implications for Cable Operators*, 6 REV. NETWORK ECON. (2007).

16. The Cable Act expressly prohibits an MVPD from using its downstream market power to discriminate against unaffiliated programming networks and requires the Commission to act in circumstances where a complainant demonstrates anticompetitive discrimination. 47 C.F.R § 76.1302(c).

A. Comcast Discriminates Against NFL Network on the Basis of Affiliation

45. Comcast discriminates on the basis of affiliation against NFL Network and other unaffiliated sports programmers.

This conduct is consistent with the behavior of a vertically integrated firm that seeks to maximize profits received in both the upstream and downstream market.[18]

46. Comcast carries its affiliated national and regional sports programming networks on its (analog) Expanded Basic tier. In contrast, Comcast generally carries sports networks that it does not own on its premium sports tier. The three exceptions are ESPN and ESPN2, which have considerable countervailing market power, and MASN, which received this placement as a result of the parties' settlement of a program carriage complaint. Table 1 illustrates Comcast's ownership-based disparate treatment of networks carried on its Washington, D.C. cable systems as of December 31, 2008, which is representative of Comcast's broader carriage patterns.[19]

17.

18. *Raising Rivals' Costs, supra*, at 165 (discussing the form of raising rivals' costs wherein "[u]pstream profits are sacrificed but downstream profits rise disproportionately.").

19.

Note that Table 1 does not include the recently launched MLB Network, which Comcast has carried on its D2 tier since January 1, 2009. Comcast owns a minority stake in MLB Network, which it apparently received in return for agreeing to provide MLB Network with better carriage terms (that is, for carriage on D2 rather than a less penetrated tier such as the Premium Sports Tier). *See* Richard Sandomir, *A Network to Satisfy the Appetite of Baseball-Hungry Fans*, N.Y. TIMES, Oct. 2, 2008, available at http://www.nytimes.com/2008/10/03/sports/baseball/03sandomir.html?_r=2&em ("Baseball is swapping one-third ownership of its channel with DirecTV, Comcast, Time Warner and Cox for wide distribution, thus avoiding the kind of ongoing distribution turf war that the NFL Network is having with Big Cable."). The apparent lesson here is that Comcast demands equity as a condition of avoiding carriage on a premium sports tier.

TABLE 1: COMCAST SPORTS TIERING IN WASHINGTON, D.C. BY AFFILIATION

Network	Channel Number	Affiliation	Tiering
VERSUS	**7**	**Comcast**	**Expanded Basic Tier**
ESPN	8	Disney, Hearst	Expanded Basic Tier
ESPN2	9	Disney, Hearst	Expanded Basic Tier
Comcast SportsNet	**10**	**Comcast**	**Expanded Basic Tier**
Golf Channel	**11**	**Comcast**	**Expanded Basic Tier**
MASN	42	Independent	Expanded Basic Tier
NFL Network*	180	Independent	Premium Sports Tier
BTN (Big Ten Network)	257	Independent	Premium Sports Tier
Horse Racing TV (HRTV)	259	Independent	Premium Sports Tier
TV Games Channel	260	Independent	Premium Sports Tier
Fox College Sports - Atlantic	262	News Corp.	Premium Sports Tier
Fox College Sports - Central	263	News Corp.	Premium Sports Tier
Fox College Sports - Pacific	264	News Corp.	Premium Sports Tier
Fox Soccer Channel	267	News Corp.	Premium Sports Tier
GOL TV	268	Independent	Premium Sports Tier
Speed Channel	271	News Corp.	Premium Sports Tier
NBA TV	273	Independent	Premium Sports Tier
College Sports TV	274	Viacom	Premium Sports Tier
NFL TV*	275	Independent	Premium Sports Tier
NHL Channel	276	Independent	Premium Sports Tier
Tennis Channel	277	Independent	Premium Sports Tier
NBA TV	749	Independent	Premium Sports Tier

Note: * "NFL TV" is the name provided by Comcast's Channel Lineup but appears to be a duplicate entry of NFL Network.
Source: Comcast Website – My Channel Lineup (using Zip Code 20006), *available at* http://www.comcast.com/Customers/Clu/ChannelLineup.ashx?print=1&CGID=5062.

B. Comcast's Exclusionary Conduct Cannot Be Justified as Efficient Based on Viewer Popularity

47. In this section, I analyze Nielsen viewing data to assess the relative popularity of NFL Network vis-à-vis Comcast-affiliated national sports networks. The purpose of this section is to determine whether Comcast's refusal to carry NFL Network on Comcast's Expanded Basic tier can reasonably be justified by considering popularity of programming as an efficiency defense.[20] It bears emphasis that, when assessing the same criterion of the discrimination standard in *TCR Sports v. Time Warner*, the Media Bureau concluded that "MASN's

20. The cost of carriage is another possible efficiency defense, but it provides no justification for the discrimination in this case.

programming was at least as popular as the sports programming distributed by News 14, *and thus comparable in terms of demand*."[21] This confirms that, in addition to informing potential efficiency defenses, ratings data play a role in the assessment of whether two networks are similarly situated. And based on my review of the ratings data, it is clear that NFL Network's programming "is at least as popular as the sports programming distributed by" Versus and Golf Network.

1. NFL Network Is More Popular Than Comcast-Affiliated Programming

48. Comcast's inferior treatment of its unaffiliated rival here cannot be justified by efficiency considerations because the affiliated networks that it places on its Expanded Basic tier are less desirable than NFL Network. This fact is best illustrated with ratings data. Nielsen is a widely used source of ratings data for U.S. cable networks. Nielsen provides two television ratings for each network for each month: (1) the "total day" rating and (2) the "prime time" rating. Table 2 presents the total day ratings for NFL Network and two Comcast-affiliated national sports networks, the Golf Channel and Versus (formerly the Outdoor Life Network, or "OLN," which changed its name to Versus in April of 2006[22]). Table 3 presents the equivalent "prime time" ratings.

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21. Order on Review, In the Matter of TCR Sports Broadcasting Holding, L.L.P., Complainant v. Time Warner, Defendant, Oct. 30, 2008, ¶ 29 (emphasis added) [hereinafter *Order on Review*].

22. *Outdoor Life Network to become vs.*, USA TODAY, Apr. 24, 2006, *available at* http://www.usatoday.com/life/television/news/2006-04-24-outdoor-life-network-name_x.htm.

TABLE 2: NIELSEN "TOTAL DAY" RATINGS, 2006Q4 TO 2008Q4

		NFL Network	Golf Channel	Versus
2006	Q4*	0.25	0.06	0.09
2007	Q1	0.12	0.11	0.09
	Q2	0.09	0.09	0.10
	Q3	0.17	0.09	0.11
	Q4	0.23	0.06	0.09
2008	Q1	0.13	0.13	0.11
	Q2	0.09	0.10	0.13
	Q3	0.18	0.07	0.10
	Q4	0.24	0.05	0.11
Average		**0.16**	**0.09**	**0.10**

Source: *National People Meter – Household Live and Same-Day Coverage Rating*, NIELSEN (2009) (Nov. 2006 to Dec. 2008).

Notes: The averages are based on the average of each month's ratings.
* Denotes data for November through December 2006 because NFL Network ratings for October 2006 were not available.

As Table 2 indicates, NFL Network receives substantially higher ratings than either Versus or the Golf Channel. Furthermore, NFL Network is more popular year-round than either Comcast-affiliated network; NFL Network has an average total day rating of 0.16 compared to Comcast-affiliated averages of 0.09 (Golf Channel) and 0.10 (Versus). It bears emphasis that the Nielsen ratings do not reflect only the popularity of the regular-season NFL games in the eight-game package, but instead represent the broad popularity of NFL Network. Specifically, Nielsen's total day ratings compare *average* ratings across the *entire day* and furthermore include months during which NFL Network did not air live regular-season NFL game programming. They compare *all* programming on NFL Network to *all* programming on the Comcast-affiliated networks.

49. The total-day ratings data also indicate that NFL Network's best quarter was significantly better (0.25 rating) than the best quarter of either Comcast-affiliated network (each of which received its highest rating at 0.13). Similarly, NFL Network's weakest quarters—